

53rd
AIIMS
ANNUAL REPORT

2008–2009



All India Institute of Medical Sciences
New Delhi 110029

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February 2010



All India Institute of Medical Sciences

The All India Institute of Medical Sciences (AIIMS) was established in 1956 as an institution of national importance by an Act of Parliament with the objects to develop patterns of teaching in undergraduate and postgraduate medical education in all its branches so as to demonstrate a high standard of medical education to all medical colleges and other allied institutions in India; to bring together in one place educational facilities of the highest order for the training of personnel in all important branches of health activity and to attain self-sufficiency in postgraduate medical education.

The Institute has comprehensive facilities for teaching, research and patient-care. AIIMS conducts teaching programmes in medical and para-medical courses both at undergraduate and postgraduate levels and awards its own degrees. Teaching and research are conducted in 50 disciplines. In the field of medical research AIIMS is the leader, having more than 1500 research publications by its faculty and researchers in a year. AIIMS also runs a College of Nursing, training students for B. Sc. (Hons.) Nursing and B. Sc. Nursing (Post-Certificate) degrees.

Twenty-five clinical departments including six super-speciality centres manage practically all types of disease conditions with support from pre-clinical and para-clinical departments. AIIMS also runs a 60-bedded hospital and the Comprehensive Rural Health Centre at Ballabgarh in Haryana and provides health cover to about 7.7 lakh people through the Centre for Community Medicine.

AIIMS AT A GLANCE

2008–2009

Year of establishment 1956

Teaching Departments and Centres	50	Medical graduates	2276
Faculty members (Sanctioned 625)	446	Postgraduates	7111
Non-faculty staff (Sanctioned 9312)	7356	Nursing graduates	1638
No. of Undergraduate students	651	Publications in journals	1592
No. of Postgraduate students	1023	Chapters in Books/monographs	285

HOSPITAL SERVICES

	OPD	Admission	Surgery	Bed (Gen.)	Bed (Pvt.)
Main Hosp.	1507786	174353	79578	1486	125
Dr.R.P. Centre	400914	29642	29276	280	21
Dr.BRA,IRCH	74280	23822	6651	167	15
C.T. Centre	227737	10614	3477	166	14
N.S. Centre	100074	6396	2741	166	14
C.C.M.	166886	29033	—	50	—
JPNAT Centre	37177	19226	1128	30	—

Average bed occupancy	79.9%
Average period of hospital stay	5.9 days
Net death rate	2.7%
Infection rate (Crude)	7.60%

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शरीरमात्रं खलु धर्मसाधनम्

AIIMS

ORGANISATIONAL STRUCTURE

Institute Body



Governing Body



**All India Institute of Medical Sciences
New Delhi**

1. Director's Review

I am glad to present the Fifty-third Annual Report and audited statement of accounts for the year 2008-2009.

The All India Institute of Medical Sciences (AIIMS) was established in 1956 by an Act of Parliament as an institution of national importance. This was in pursuance to the recommendations made by the Bhore Committee in 1946.

AIIMS has been entrusted to develop patterns of teaching in undergraduate and postgraduate medical education in all its branches so as to demonstrate a high standard of medical education to all medical colleges and other allied institutions in India; to bring together at one place educational facilities of the highest order for the training of personnel in all important branches of health activity; and to attain self-sufficiency in postgraduate medical education. AIIMS is a deemed university and awards its own degrees. In keeping with the mandate from the Parliament, AIIMS continues to be the torch bearer in the field of medical education, research and patient-care.

AIIMS is fully funded by the Government of India. However, for research activities, grants are also received from various sources including national, intergovernmental and other international funding agencies. While the major part of the hospital services are highly subsidized for the patients coming to the AIIMS hospital, certain categories of patients are charged for treatment/services rendered to them.

During the 2008-2009 academic session (i.e. for the courses commencing in July 2008 and January 2009), 384 students were admitted to various postgraduate, post-doctoral and super-speciality courses, i.e. MD, MS, MDS, MHA, PhD, MCh, DM, and MSc in various specialities. In the year under review, 1023 postgraduate and post-doctoral students were on the rolls in various courses and 252 students qualified for their degrees. AIIMS provides full time postgraduate and post-doctoral courses in 47 disciplines. The guiding principle of postgraduate training is to train students as teachers, researchers and competent doctors, who can investigate, manage and treat patients independently. As always, appropriate consideration was given to students from Scheduled Castes (SC), Scheduled Tribes (ST) and other backward (OBC) in accordance with Government of India guidelines and Twenty-four SC, 4 ST and 37 OBC students were admitted to MD/MS/MDS courses and 2 SC, 2 ST and 8 OBC students were admitted to MSc courses.

This year AIIMS admitted 77 students to its MBBS course (including 11 SC, 6 ST and 19 OBC students), 26 students to the B.Sc. Nursing (post-certificate) course (including 2 SC, 3 ST and 6 OBC students), 64 students to the B.Sc. (Hons) in Nursing course (including 7 SC, 4 ST and 10 OBC students), 15 students to the B.Sc. (Hons.) in Ophthalmic Techniques course (including 1 SC 2 ST and 6 OBC students) and 9 students to the B.Sc. (Hons.) in Medical Technology in Radiography course (including 5 OBC students).

AIIMS also provides short/long term training to doctors and other health-trainees from various organizations and state governments, WHO-in-country fellows and foreign students. Four hundred and sixty three (463) candidates received short/long term training in AIIMS during the year. In

addition, elective training was provided to several candidates, including foreign nationals. The Institute also continued to provide consultancy services to several neighboring countries under bilateral agreements or under the aegis of intergovernmental and other international agencies. During 2008-2009, the Institute trained 60 WHO-sponsored candidates/WHO-in-country fellows to fulfill its international obligations.

The details thereof w.e.f. 01.04.2008 to 31.03.2009 are as under:-

1.	Short term training	460
2.	Long term training	03
3.	WHO-in-country fellowship	33
4.	WHO-sponsored foreign nationals	27
5.	Elective training	62
6.	Foreign nationals	22

The MBBS course is completed in 5½ years that is subdivided into four periods. The initial three stages are focused on preclinical (1 year), para-clinical (1½ years) and clinical (2 years) subjects, which are followed by 1-year rotating internship. Para-medical courses like B.Sc (Hons.) in Nursing, Ophthalmic Techniques, Medical Technology in Radiography and Speech and Hearing continued to be popular and attracted students from other countries also. The curricula of these courses are under constant scrutiny by the faculty of the Institute for purposes of improvement. The medical college of the Institute has been adjudged the best in the country for the 8th consecutive year by national surveys published in the popular media.

The institute organized a number of workshops, symposia, conferences and training programmes in collaboration with various national, intergovernmental and other international agencies during the year. Professionals from various institutions all over the country participated in these seminars and workshops and benefited from updates. Also, guest and public lectures were delivered by visiting experts and faculty of AIIMS.

The All India Institute of Medical Sciences is a leader in the field of medical research. Major research projects focus on national priorities. Over 381 research projects were ongoing during this period. Research grants totaling Rs 59 crores (approximately) were received from various intergovernmental, other international and national funding agencies during the year 2008-2009.

During the year 2008-2009, the AIIMS hospital catered to patients from India, neighboring countries such as Nepal, Bangladesh, Sri Lanka, Bhutan and other Asian countries. The main hospital provided care to 1,50,7,786 outpatients and 65,867 in-patients and 108,486 patients with emergent conditions; and 79,578 surgical procedures were performed in the hospital. Due to expansion of facilities like OPD, emergency service, private wards and use of innovated methods, AIIMS main hospital has been able to provide better and efficient patient care. Due to quick turnover of patients, number of indoor admissions and surgery performed, have all increased. The average length of stay is around 5.9 days; the average bed occupancy, 79.9% and the net death rate, 2.7%; which is at par with similar parameters in developed countries. With the use of mechanical cleaning devices and active interaction of Hospital Infection Control Committee (HIFCOM), the general hygiene and sanitation

of the hospital is of a high standard. Medicines are supplied to all patients attending the Emergency services free of cost.

The Cardiothoracic and Neurosciences Centre (CN Centre) provided services to 227,737 outpatients (92,925 in Cardiology, 34,738 in Cardiothoracic and Vascular Surgery, 68,417 in Neurology and 31,657 in Neurosurgery), and 17,010 inpatients; and 6,218 surgeries were performed at the Centre.

The Jai Prakash Narain Trauma Centre has a state-of-the-art emergency room with 8 resuscitation bays, observation and triage areas and facilities for managing 20 critically ill patients. The Centre has two functional operation rooms, two 30-bedded wards, a multislice CT scanner, mobile X-ray units and heavy duty automatic processors for radiography, a 1.5 Tesla MRI, a C-Arm X-ray unit with 3-D facility, colour Doppler and well-equipped laboratories. In the year 2008-2009, the Trauma Centre provided services for 37,177 emergency contacts, of whom 19,226 had to be provided inpatient care and 971 had to be operated. A total of 63,186 radiological investigations were conducted at the Centre.

The Dr. B.R. Ambedkar Institute Rotary Cancer Hospital has 127 beds. The expanded Dr. BRAIRCH has modern, sophisticated machinery and equipment matching international standards. It is currently functioning through 8 disciplines namely Medical Oncology, Radiation Oncology, Surgical Oncology, Laboratory Oncology, Medical Physics, Anesthesiology, Radiodiagnosis and Preventive and Community Oncology. During 2008-2009, Dr. BRAIRCH attended to 74,280 outpatients (87,93 new cases and 65,487 old cases) and 23,822 inpatients (19,036 short admissions and 4,786 regular admissions); while 6,651 patients received surgical procedures (6,019 minor and 632 major).

Dr. Rajendra Prasad Centre for Ophthalmic Sciences attended to 197,928 outpatients in the general OPD, 37,019 emergency contacts, and 165,967 outpatients in specialty clinics, totaling 40,0914 patients during the year 2008-2009. Services were also provided to 29,642 inpatients and surgical procedures were performed on 29,276 patients.

The Organ Retrieval Banking Organization, a national facility and nodal centre for the country at All India Institute of Medical Sciences (AIIMS), New Delhi, was created with the objective of encouraging organ donations and fair and equitable distribution and optimum utilization of human organs. A dedicated four-digit-help line 1060 and the website (www.orbo.org) with the facility to download donor forms and email facility for correspondence, are available for round-the-clock public enquiries regarding organ donation and transplantation.

The Centre for Dental Education and Research is a full-fledged Dental college under the aegis of AIIMS. It conducts an MDS (postgraduate course) in various dental specialties. It is also the nodal centre for the National Oral Health Policy of the Government of India.

The Centre for Behavioural Sciences (National Drug Dependence Treatment Centre), AIIMS, at Ghaziabad is a 50 bedded centre that offers a wide range of services.

Community-based programmes have been integral part of the Institute's clinical and research activities. The Centre for Community Medicine has a widely acclaimed model of rural health services at Ballabgarh in the neighbouring state of Haryana. Apart from providing comprehensive health services at the doorsteps of people in the covered villages, the centre also provides secondary health care

services through a 50-bedded hospital at Ballabgarh. This hospital provided services to 166,886 outpatients and 7,009 inpatients and for 22,024 emergency contacts. The project has achieved significant successes in terms of improving health of mothers and children of the area. With Zero Maternal Mortality Rate and Crude Death Rate of 7.2, it is well ahead of targets set by Government of India for 2010. The Urban Health Programme and Family Health Exercise programmes of the Centre for Community Medicine cater to some urban slum areas of Delhi with a population of about 60,000. These services are provided through a Mobile Health Clinic that visits these slums 5 times in a week and provides preventive, promotive and primary level curative services; and para-medical staff who provide domiciliary services. The Urban Health Programme and Family Health Exercise programmes attended to 25,901 patients in 2008-09. The Centre for Community Medicine also has a Disease Outbreak Response Cell (DORC) for ensuring a rapid response to infectious disease outbreaks like the swine flu (H1N1 infection); and an AIDS Education and Training Cell for prevention of HIV/AIDS. This cell operates a very popular interactive telephone helpline called 'Shubhchintak' and an internet based helpline called 'e-shubhchintak' to answer queries of the general public on HIV/AIDS. The Centre for Community Medicine also runs a Sex and Marriage Counselling Clinic (SMCC) in the AIIMS Hospital.

In addition to community services provided by the Centre for Community Medicine, the departments of Obstetrics and Gynecology, Rehabilitation and Physical Medicine, Pediatrics and Dr. Rajendra Prasad Centre for Ophthalmic Sciences serve various rural communities through regular camps.

Despite increasing pressures the Institute has constantly endeavored to demonstrate its commitment to professionalism and service to the common people at an affordable cost. Thousands of patients from all over the country come to AIIMS everyday for succour.

Professor R. C. Deka
Director, AIIMS

2. The Institute and its Committees

INSTITUTE BODY

from 1.4.2008 to 31.3.2009

1. **Hon'ble Dr Ambumani Ramadoss** President
Union Minister for Health and Family Welfare
Nirman Bhawan, New Delhi 110011
(demitted his office)
2. **Shri R.K. Dhawan** Member
Member of Parliament (Rajya Sabha)
141, Golf Links, New Delhi 110003
3. **Professor Vijay Kumar Malhotra** Member
Member of Parliament (Lok Sabha)
6, Dr Bishamber Dass Marg, New Delhi 110001
4. **Dr Karan Singh Yadav** Member
Member of Parliament (Lok Sabha)
C-6 MP Flats, Baba Khadak Singh Marg
New Delhi 110001
5. **Dr Deepak Pental** Member
Vice Chancellor
University of Delhi, Delhi 110007
(Ex-Officio)
6. **Shri Naresh Dayal** Member
Secretary (Health)
Ministry of Health and Family Welfare
Nirman Bhawan, New Delhi 110011
7. **Dr R.K. Srivastava** Member
Directorate General of Health Services
Nirman Bhawan, New Delhi 110011
(Ex-Officio)
8. **Dr Shyam Prasad** Member
Vice President
National Board of Examinations, New Delhi

9. **Dr S.S. Agarwal** Member
Central Drug Research Institute
Chattar Manzil Palace, Post Box No. 173
Lucknow 226001 (UP)
Dr S.S. Agarwal
Former Director, SGPGI
D-13, Vivekanandpuri, Lucknow 226007 (UP)
10. **Professor B.P. Chatterjee** Member
Department of Biological Chemistry
Indian Association for the Cultivation of Science
Jadavpur, Kolkata 700032, West Bengal.
11. **Shri R.P. Agrawal** Member
Secretary
Department of Secondary Education and Higher Education
Ministry of Human Resource Development
Shastri Bhawan, (Gate No.6), New Delhi 110001
12. **Professor K.K. Talwar** Member
Director
Postgraduate Institute of Medical Education
and Research (PGIMER), Chandigarh 160012
13. **Professor Kartar Singh** Member
Director
Sanjay Gandhi Postgraduate Institute of
Medical Sciences (SGPGI), Lucknow, Uttar Pradesh
14. **Professor R. Surendran** Member
Professor and Head Department of
Surgical Gastroenterology, Government Stanley Hospital
Chennai, Tamil Nadu
15. **Dr (Mrs) Nilima Arun Kshirsagar** Member
Dean, Professor and Head
Department of Clinical Pharmacology
Seth G.S. Medical College and K.E.M. Hospital
Mumbai, Maharashtra
16. **Shri Naved Masood** Member
Additional Secretary and Financial Advisor
Ministry of Health and Family Welfare
Nirman Bhawan, New Delhi 110011

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|---|---|
| <p>17. Professor T.D. Dogra
Acting Director, AIIMS
Professor P. Venugopal
Director, AIIMS
Professor T.D. Dogra
Acting Director, AIIMS
Professor R.C. Deka
Director, AIIMS</p> | <p>Member-Secretary
20.12.2007 to 08.05.2008
Member-Secretary
09.05.2008 to 02.07.2008
Member-Secretary
03.07.2008 to 09.03.2009
Member-Secretary
from 10.03.2009</p> |
| <p>18. Shri Raama Murthy
Joint Secretary
Ministry of Health and Family Welfare
Nirman Bhawan, New Delhi 110011
Shri Pravin Krishan
Joint Secretary
Ms Shalini Prasad
Joint Secretary
Shri B.K. Prasad
Joint Secretary</p> | <p>Special Invitee
up to 15.04.2008</p> <p>16.04.2008 to 04.05.2008</p> <p>05.05.2008 to 22.01.2009</p> <p>from 23.01.2009</p> |
| <p>19. Dean (Academic), AIIMS</p> | <p>Special Invitee</p> |
| <p>20. Dean (Exams), AIIMS</p> | <p>Special Invitee</p> |

GOVERNING BODY

1. **Hon'ble Dr Ambumani Ramadoss** Chairperson
Union Minister for Health and Family Welfare
Nirman Bhawan, New Delhi 110011
2. **Shri R.K. Dhawan** Member
Member of Parliament (Rajya Sabha)
141, Golf Links, New Delhi 1110003
(from 21.6.06)
3. **Dr Karan Singh Yadav** Member
Member of Parliament (Lok Sabha)
C-6 M.P. Flats, Baba Khadak Singh Marg
New Delhi 110001
4. **Shri Naresh Dayal** Member
Secretary (Health)
Ministry of Health and Family Welfare
Nirman Bhawan, New Delhi 110011
5. **Dr R.K. Srivastava** Member
Directorate General of Health Services
Nirman Bhawan, New Delhi 110011
(Ex-Officio)
6. **Shri Naved Masood** Member
Additional Secretary and Financial Advisor
Ministry of Health and Family Welfare
Nirman Bhawan, New Delhi 110011
7. **Dr Shyam Prasad** Member
Vice President
National Board of Examinations, New Delhi
8. **Professor K.K. Talwar** Member
Director
Postgraduate Institute of Medical Education
and Research, Chandigarh
9. **Professor Kartar Singh** Member
Director
Sanjay Gandhi Postgraduate Institute of
Medical Sciences, Lucknow (UP)
10. **Professor R. Surendran** Member
Professor and Head of the Department of Surgical
Gastroenterology, Government Stanley Hospital, Chennai

- | | |
|--|---|
| <p>11. Professor T.D. Dogram
Acting Director, AIIMS
Professor P. Venugopal
Director, AIIMS
Professor T.D. Dogra
Acting Director, AIIMS
Professor R.C. Deka
Director, AIIMS</p> | <p>Member-Secretary
up to 08.05.2008
Member-Secretary
09.05.2008 to 02.07.2008
Member-Secretary
03.07.2008 to 09.03.2009
Member-Secretary
from 10.03.2009</p> |
| <p>12. Shri Raama Murthy
Joint Secretary
Ministry of Health and Family Welfare
Nirman Bhawan, New Delhi 110011
Shri Pravin Krishan, Joint Secretary
Ms Shalini Prasad, Joint Secretary
Shri B.K. Prasad, Joint Secretary</p> | <p>Special Invitee
up to 15.04.2008</p> <p>16.04.2008 to 04.05.2008
05.05.2008 to 22.01.2009
from 23.01.2009</p> |
| <p>13. Dean (Academic), AIIMS</p> | <p>Special Invitee</p> |
| <p>14. Dean (Examinations), AIIMS, New Delhi</p> | <p>Special Invitee</p> |

STANDING FINANCE COMMITTEE

1.	Shri Naresh Dayal	Chairperson
2.	Professor Vijay Kumar Malhotra	Member
3.	Shri R.K. Dhawan	Member
4.	Dr R.K. Srivastava	Member
5.	Shri Naved Masood	Member
6.	Dr Shyam Prasad	Member
7.	Shri R.P. Agrawal	Member
8.	Dr S.S. Agarwal	Member
9.	Professor T.D. Dogra	Member-Secretary (up to 08.05.2008)
	Professor P. Venugopal	Member-Secretary (09.05.2008 to 02.07.2008)
	Professor T.D. Dogra	Member-Secretary (03.07.2008 to 09.03.2009)
	Professor R.C. Deka	Member-Secretary (from 10.03.2009)
10.	Dean, Academic	Special Invitee
11.	Sh. Raama Murthy	Special Invitee (up to 15.04.2008)
	Shri Pravin Krishan	Joint Secretary (16.04.2008 to 04.05.2008)
	Ms Shalini Prasad	Joint Secretary (05.05.2008 to 22.01.2009)
	Shri B.K. Prasad	Joint Secretary (from 23.01.2009)

ESTATE COMMITTEE

1.	Professor Vijay Kumar Malhotra	Chairperson
2.	Professor Karan SinghYadav	Member
3.	Dr R.K. Srivastava	Member
4.	Dr S.S. Agarwal	Member
5.	Shri Naresh Dayal	Member
6.	Professor Deepak Pental	Member
7.	Shri Naved Masood	Member
8.	Shri R.P. Agrawal	Member
9.	Professor T.D. Dogra	Member-Secretary (up to 08.05.2008)
	Professor P. Venugopal	Member-Secretary (09.05.2008 to 02.07.2008)
	Professor T.D. Dogra	Member-Secretary (03.07.2008 to 09.03.2009)
	Professor R.C. Deka	Member-Secretary (from 10.03.2009)

ACADEMIC COMMITTEE

1.	Professor Nilima Arun Kshirsagar	Chairperson
2.	Professor R. Surendran	Member
3.	Professor Kartar Singh	Member
4.	Professor K.K. Talwar	Member
5.	Dr R.K. Srivastava	Member
6.	Dr Shyam Prasad	Member
7.	Professor B.P. Chatterjee	Member
8.	Shri R.P. Agrawal	Member
9.	Professor. T.D. Dogra	Member-Secretary (up to 08.05.2008)

Professor P. Venugopal
Professor T.D. Dogra
Professor R.C. Deka

Member-Secretary (09.05.2008 to 02.07.2008)
Member-Secretary (03.07.2008 to 09.03.2009)
Member-Secretary (from 10.03.2009)

HOSPITAL AFFAIRS COMMITTEE

- | | | |
|----|----------------------------------|---|
| 1. | Professor S.S. Agarwal | Chairperson (up to 18.06.2008) |
| | Shri R.K. Dhawan | Chairperson (19.06.2008 to 18.09.2008) |
| | Professor S.S. Agarwal | Chairperson (from 19.09.2009) |
| 2. | Shri R.K. Dhawan | Member |
| 3. | Professor Karan Singh Yadav | Member |
| 4. | Dr R.K. Srivastava | Member |
| 5. | Shri Naresh Dayal | Member |
| 6. | Shri Naved Masood | Member |
| 7. | Professor Nilima Arun Kshirsagar | Member |
| 8. | Professor K.K. Talwar | Member |
| | Dr Shyam Prasad | Member |
| 9. | Professor T.D. Dogra | Member-Secretary (up to 08.05.2008) |
| | Professor P. Venugopal | Member-Secretary (09.05.2008 to 02.07.2008) |
| | Professor T.D. Dogra | Member-Secretary (03.07.2008 to 09.03.2009) |
| | Professor R.C. Deka | Member-Secretary (from 10.03.2009) |

SELECTION COMMITTEE

- | | | |
|----|----------------------------------|---|
| 1. | Professor R. Surendran | Chairperson |
| 2. | Professor Karan Singh Yadav | Member |
| 3. | Dr R.K. Srivastava | Member |
| 4. | Professor K.K. Talwar | Member |
| 5. | Professor Kartar Singh | Member |
| 6. | Shri R.P. Agrawal | Member |
| 7. | Professor Nilima Arun Kshirsagar | Member |
| 8. | Dr Shyam Prasad | Member |
| 9. | Professor T.D. Dogra | Member-Secretary (up to 08.05.2008) |
| | Professor P. Venugopal | Member-Secretary (09.05.2008 to 02.07.2008) |
| | Professor T.D. Dogra | Member-Secretary (03.07.2008 to 09.03.2009) |
| | Professor R.C. Deka | Member-Secretary (from 10.03.2009) |

3. Academic Section

Dean

R.C. Deka
(upto 24.03.2009)

Rani Kumar
(from 25.3.2009)

Sub-Dean

Sunil Chumber

Registrar

L.R. Murmu
(upto 07.07.2008)

V.P. Gupta
(from 16.5.2008 and
with full powers from 08.07.2008)

EDUCATION

The Academic Section develops policy, plans and executes academic activities. It also administers intramural research projects. These activities encompass the undergraduate, postgraduate and doctoral programmes for medical, nursing and paramedical courses. These activities are conducted by the undergraduate, postgraduate and paramedical cells.

UNDERGRADUATE EDUCATION

The Section handles post-admission formalities for new students, develops and revises curricula and administers teaching programmes including internal assessment of undergraduate students. The courses include MB,BS, BSc (Hons) in paramedical courses such as Medical Technology in Radiography and Ophthalmic Techniques, and BSc Nursing (Post-certificate) and BSc (Hons) Nursing courses.

Bachelor of Medicine and Bachelor of Surgery (MB,BS)

The pattern of education at the undergraduate level was reviewed and implemented from July 2004. The duration of the MB,BS course continues to be 5½ years, including one year compulsory internship training. The training during this period is as follows:

One year	:	Pre-clinical training
One-and-a-half years	:	Paraclinical training
Two years	:	Clinical training
One year	:	Rotating internship (compulsory)

From August 2008 27 seats of MB,BS students are increased and now MB,BS seats are 77. Out of 77 seats, 5 seats are reserved for foreign nationals and the screening and admissions for these 5 seats is done on the recommendation of the Ministry of External Affairs, Government of India. For the remaining 72 seats (11 for Scheduled Caste, 6 for Scheduled Tribe, 19 OBC and 36 general category candidates), students are selected on the basis of their performance in an All-India Entrance Examination. Further, 3% seats are reserved for orthopaedic physically handicapped candidates on horizontal basis. During the year, there were 54,276 applicants, and 36,567 candidates appeared in the entrance examination for these 77 seats. The total number of undergraduate students as on 31 March 2009 was 328 including 47 interns.

Merit scholarships of Rs 750 per month and Rs 500 per month were awarded to 6 students who secured first and second position in the 1st, 2nd and final MB,BS examination.

Summer fellowships were awarded to nil for research in selected areas. These students were given a stipend of Rs 500 per month. They worked under the supervision of a member of the faculty.

Paramedical and Nursing Education

All activities pertaining to the admission and training of paramedical and nursing students are handled by this cell. A batch of 64 students was admitted for BSc (Hons) Nursing in August 2008. The current student strength for the nursing and paramedical courses is as follows:

<i>Nursing courses</i>	<i>Number of students</i>
BSc Nursing (Post-certificate)	45
BSc (Hons) Nursing	218
<i>Paramedical courses</i>	
BSc (Hons) Ophthalmic Techniques	39
BSc (Hons) Medical Technology in Radiography	22

POSTGRADUATE EDUCATION

The Academic Section looks after all the activities pertaining to admission, selection and training of postgraduate students including junior and senior residents. It also deals with all service matters relating to senior residents. It handles all activities of the PhD, DM, MCh, MD, MS, MDS, MHA, MSc and MBiotech courses in different disciplines.

The admission to all postgraduate courses is done by an All-India entrance examination that is held twice a year. Foreign nationals are also admitted through an entrance examination. Postgraduate students from Nepal are admitted under a bilateral agreement between the Governments of India and Nepal.

A total of 384 students, including 15 state-sponsored and 14 foreign nationals, were admitted to the above-mentioned courses during the year under review. The total number of postgraduate and doctoral students on 31 March 2009 was 1023. The discipline-wise distribution of postgraduate students is given below.

A total of 252 postgraduate students who completed degree courses in MS/MS/MDS/DM/MCh/PhD/MSc/MBiotech passed out during the year 2008–2009.

PhD	General	Sponsored
Anatomy	12	–
Biochemistry	42	–
Biophysics	21	–
Biostatistics	1	1 (in service)
Biotechnology	18	–
Cardiology	3	–
Cardiac Biochemistry	2	–
Forensic Medicine	1	–
Gastroenterology	8	–

Neurosurgery	1	–
Obstetrics and Gynaecology	–	2 (in service)
Haematology	10	1 (in service)
CTVS	4	–
Laboratory Medicine	10	–
Medical Oncology	5	–
Medical Physics	3	–
Medicine	10	–
Microbiology	30	–
Neurology	10	–
Nuclear Magnetic Resonance	2	1
Nuclear Medicine	4	1
Otorhinolaryngology (ENT)	1	–
Ophthalmology	3	2
Ocular Pharmacology	5	–
Ocular Microbiology	4	–
Community Ophthalmology	1	–
Ocular Pathology	2	–
Ocular Biochemistry	3	–
Paediatrics	10	–
Pathology	11	–
Centre for Community Medicine	2	–
Endocrinology	7	–
Paediatric Surgery	2	–
Neuro-Biochemistry	5	–
Pharmacology	14	–
Physiology	14	2
Psychiatry	5	–
Radiation Oncology	2	–
Reproductive Biology	4	–
Transplant Immunology and Immunogenetics	9	1
Total 313	301	12
DM	General	Sponsored
Cardiac Anaesthesiology	6	3
Cardiology	16	3
Clinical Haematology	5	2
Endocrinology	8	2
Gastroenterology	10	3
Haemato-Pathology	4	3
Medical Oncology	12	–
Neonatology	4	2
Nephrology	8	4
Neuro-Anaesthesiology	8	1
Neurology	15	3
Neuroradiology	2	–

Paediatric Neurology	6	1
Clinical Pharmacology	2	–
Total 133	106	27
MCh	General	Sponsored
Cardiothoracic & Vascular Surgery	16	–
Gastrointestinal Surgery	5	3
Neurosurgery	27	3
Paediatric Surgery	7	1
Urology	8	2
Total 72	63	9
MD	General	Sponsored
Anaesthesiology	26	–
Anatomy	13	–
Biochemistry	10	–
Biophysics	10	–
Community Medicine	17	–
Dermatology and Venereology	10	2
Forensic Medicine	8	–
Hospital Administration	4	7
Laboratory Medicine	7	–
Medicine	38	1
Microbiology	10	–
Nuclear Medicine	7	1
Obstetrics and Gynaecology	28	–
Ophthalmology	75	–
Paediatrics	19	3
Pathology	19	1
Pharmacology	10	–
Physical Medicine and Rehabilitation	7	–
Physiology	13	–
Psychiatry	18	1
Radiodiagnosis	17	3
Radiotherapy	7	1
MS		
Orthopaedics	13	2
Otorhinolaryngology	12	–
Surgery	37	1
MDS		
Conservative Dentistry and Endodontics	6	–
Orthodontics	6	1
Prosthodontics	6	1
Oral and Maxillofacial surgery	5	–
Total 458	434	24

MSc	General	Sponsored
Anatomy	–	–
Biochemistry	2	1
Biophysics	2	–
Perfusion Technology	4	–
Biotechnology	11	1
Nuclear Medicine Technology	1	1
Pharmacology	5	–
Physiology	–	–
Nursing		
Oncological Nursing	2	1
Cardiological/CTVS Nursing	3	–
Nephrological Nursing	2	–
Neurosciences Nursing	2	–
Paediatric Nursing	3	–
Psychiatric Nursing	3	–
Critical Care Nursing	3	–
TOTAL 47	43	4

Salaries: The present salary of residents, as recommended by the Sixth Pay Commission is:
 Junior Residents Rs 15600–39100 + (GP Rs 5400) plus allowances as per rules.
 Senior Residents Rs 15600–39100 + (GP Rs 6000) plus allowances as per rules.

SHORT-AND LONG-TERM TRAINING PROGRAMMES

The Section handles activities regarding training programmes of short- and long-term duration for both medical and paramedical personnel. During the year, the Institute had 460 short- and 3 long-term trainees. In addition, 27 WHO Fellows (FN) under WHO fellowship programme and 22 foreign trainees and 33 WHO Fellows (Indian national) for WHO-In-Country Fellowship training programme (2008–2009) were imparted training in various departments. The section also handles the elective posting of foreign undergraduate medical students. During the year 62 foreign undergraduate medical students underwent elective training.

COMMITTEE MEETINGS

The Academic Section is responsible for arranging the meetings of the Academic committee, Staff Council, Faculty Meetings and Dean's Committee. The details of the meetings held during the year are as under:

Academic Committee	7
Staff Council	1
Dean's Committee	Nil
Faculty Meetings	7

RESEARCH

The intramural research funds and its allocation is handled by the Section. The details of intramural research conducted during the year is given in Appendix I.

1. The research grant allocated to faculty members ranges from Rs 50,000 to Rs 1,00,000 per annum depending on the research project.
2. Project review by specially review groups—15 March.
3. Final recommendations of the Research Committee—31 March.
4. Allocation of funds—15 April.

ORATION'S

The Academic Section organized the following Orations during 2008–2009.

S.No.	Name of Oration	Name of Orator	Date of Oration, Time & Venue
1	Nineteenth Sarveshwari Memorial Oration	Professor Anil Nanda, Chairperson, Department of Neurosurgery, LSU Health Science Centre, Louisiana State University Medical Centre	On Thursday the 19 February 2009 at 4.00 pm. in LT-II, AIIMS

CONVOCATION

The Annual Convocation of the Institute was held on 7 January 2009. Dr R.K. Pachauri, Chairman, Intergovernmental Panel on Climate Change (IPCC) (UN) and Director, The Energy and Research Institute (TERI) addressed the Convocation. The Chief Guest distributed Institute Medals/Awards to the outstanding students and addressed the gathering. The President, AIIMS and Hon'ble Minister of Health and Family Welfare distributed the degrees.

Appendix I
ACADEMIC SECTION II
(Nursing and Paramedical Cell)

Intramural research grants for the year 2008–2009

S No	Name of the investigator	Title of the project	Amount sanctioned	Duration years
1.	Dr Nand Kumar Assistant Professor Dept. of Psychiatry	To observe for association between a catechol-O-methyltransferase polymorphism G158A and OCD in Indian subjects and its correlation with neuropsychological findings	1,00,000	2
2.	Dr S. Rastogi Professor Dept. of Orthopaedics	Prognostic factors in the management of Osteosarcoma: A clinical study	1,00,000	2
3.	Dr Raju Sharma Additional Professor Dept. of Radiodiagnosis	Diagnostic accuracy of coronal whole body diffusion-weighted MRI in oncologic imaging: Comparison with whole body STIR-MRI and FDG-PET-CT.	60,000	2
4.	Dr Shah Alam Khan Assistant Professor Dept. of Orthopaedics	Evaluation of VEGF expression in Osteosarcoma and its correlation with DCE-MRI and FDG-PET-CT Scan as surrogate markers of angiogenesis	1,00,000	1
5.	Dr Sandeep Guleria Additional Professor Dept. of Surgical Disciplines	To study the incidence and assess the risk factors for New Onset Diabetes Mellitus	90,000	1½
6.	Dr Purva Mathur Assistant Professor Dept. of Laboratory Medicine	Evaluation of serum procalcitonin levels for diagnosis of sepsis in trauma patients admitted to intensive care units	1,00,000	1
7.	Dr Sushma Bhatnagar Associate Professor Dept. of AnaesthesiaIRCH	Evaluating the correlation of plasma levels of morphine and its metabolites on pain control in cancer patients	1,00,000	1
8.	Dr Tulika Seth Assistant Professor Dept. of Haematology	Effect of genetic factors on variable clinical severity of HbE/B thalassaemia	1,00,000	2

9.	Dr Neeta Singh Assistant Professor Dept. of Obstetrics and Gynaecology	To evaluate the role of endometrial and sub endometrial blood flows in the prediction of pregnancy during <i>in-vitro</i> fertilization treatment	1,00,000	2
10.	Dr Sumit Sinha Assistant Professor Dept. of Neurosurgery	Role of simvastatin in prevention of vasospasm and improving functional outcome after aneurysmal sub-arachnoid hemorrhage: A randomized double-blind placebo-controlled trial	90,000	2
11.	Dr Vandana Jain Assistant Professor Dept. of Paediatrics	Growth, puberty and carbohydrate metabolism in children and adolescents with cystic fibrosis	1,00,000	1
12.	Dr Sachin Talwar Assistant Professor Dept. of CTVS	Effect of CPB on the serum thyroid hormone profile in paediatric patients weighing <10kg	1,00,000	1
13.	Dr Sandeep Mahajan Assistant Professor Dept. of Nephrology	Spectrum of bone disease in chronic kidney disease patients on haemodialysis and its course subsequent to successful renal transplant	1,00,000	2
14.	Dr V. Devagourou Assistant Professor Dept. of CTVS	A single prophylactic dose of pentoxifylline in patients undergoing valve replacement: A prospective double-blind randomized controlled study	1,00,000	1
15.	Dr S. Senthil Kumaran Assistant Professor Dept. of NMR	Neurocognitive changes associated with visualization of perception, spatial orientation and braille reading in visually challenged subjects, using functional magnetic resonance imaging (fMRI)	1,00,000	1
16.	Dr R. Goswami Associate Professor Dept. of Endocrinology and Metabolism	Intestinal calcium absorption in apparently healthy subjects before and after vitamin D supplementation	1,00,000	1
17.	Dr Sandeep Agarwala Associate Professor Dept. of Paediatric Surgery	Genetic parameters of neuroblastoma: A study on fine needle aspiration cultures	1,00,000	2

18.	Dr Ramesh Agarwal Assistant Professor Dept. of Paediatrics	Determination of mesenchymal stem cell concentration in umbilical cord blood at birth and their correlation with gestation	1,00,000	2
19.	Dr Mamta Sood Assistant Professor Dept. of Psychiatry	Prospective longitudinal study on duration of untreated psychosis in patients with first episode of psychosis	25,000	2
20.	Dr Raj Kumar Yadav Assistant Professor Dept. of Physiology	Adiponectin concentrations in serum and peritoneal fluid of patients with endometriosis	1,00,000	1
21.	Dr Naval K. Vikram Assistant Professor Dept. of Medicine	Oxidized low-density lipoprotein antibodies: Pathogenic implications x antibodies: Pathogenic implications for vascular involvement in patients with autoimmune disease and type 2 diabetes mellitus	1,00,000	2
22.	Dr Y. K. Gupta Professor and Head Dept. of Pharmacology	Effects of atorvastatin and pioglitazone on endothelial dysfunction in non-diabetic normolipidemic stable angina patients	88,450	2
23.	Dr Sheffali Gulati Associate Professor Dept. of Paediatrics Child Neurology Division	Randomized placebo- controlled trial of valproate in children with spinal muscular atrophy	1,00,000	2
24.	Dr Ranju Ralhan Professor Dept. of Biochemistry	Diagnostic significance of aberrantly methylated genes in breast cancer	1,00,000	1
25.	Dr Kalpana Luthra Associate Professor Dept. of Biochemistry	Genetic characteristics of HIV-1 subtype C envelopes inducing V3 antibodies	1,00,000	2
26.	Dr D.S. Arya Associate Professor Dept. of Pharmacology	Pharmacological studies on terminalia chebula in experimentally induced myocardial infarction in rats	1,00,000	1
27.	Dr Tanuj Dada Associate Professor Dr R.P. Centre for Ophthalmic Sciences	Mitochondrial genome mutation analysis in congenital glaucoma	1,00,000	3

28.	Dr K.H. Reeta Assistant Professor Dept. of Pharmacology	Comparative study of platelet aggregation, micro-inflammatory state and oxidative stress in renal transplant patients receiving different immunosuppressants	1,00,000	2
29.	Dr Renu Dhingra Associate Professor Dept. of Anatomy	Role of circulating angiogenetic factors in the pathogenesis of preeclampsia	75,000	2
30.	Dr Surender Singh Assistant Professor Dept. of Pharmacology	A randomized open-label prospective study of effect of atorvastatin on insulin sensitivity and pancreatic beta-cell function in type-2 diabetes mellitus patients	1,00,000	1
31.	Dr N.C. Chandra Assistant Professor Dept. of Biochemistry	A comparative study on expression and/or transcription between LDL receptor (LDLR) and tumor suppressor proteins (p53, pRB) in presence of Insulin, thyroxin and Benzo(a)-pyrene	1,00,000	3
32.	Dr T.K. Das Associate Professor Dept. of Anatomy	To study the regional differences in amyloid beta induced microglia activation <i>in vivo</i>	1,00,000	1
33.	Dr Suman Jain Assistant Professor Dept. of Physiology	Effect of exposure to magnetic field following implantation of ferromagnetic plates on the recovery from spinal cord injury in rats	1,00,000	1
34.	Dr Jagriti Bhatia Assistant Professor Dept. of Pharmacology	Evaluation of antihypertensive potential of emblica officinalis in DOCA-salt model of rat hypertension	1,00,000	1
35.	Dr T.C. Nag Associate Professor Dept. of Anatomy	Mechanisms of muller glial activation in aging human retina: An immunohistochemical investigation	1,00,000	2 ¼
36.	Dr Ritu Sehgal Assistant Professor Dept. of Anatomy	Cardiovascular effects of selective estrogen receptor modulators administered alone and in combination with parnaparin: A comparative histological study in ovariectomized rats	1,00,000	2

37.	Dr Y.S. Kusuma Assistant Professor Dept. of CCM	Antenatal care: Utilization, perceptions and expectations of migrant women in Delhi: A mixed methods study	1,00,000	2
38.	Dr K. Anand Associate Professor Dept. of CCM	Validation of an adult verbal autopsy tool at CRHSP Ballabgarh.	1,00,000	1
39.	Dr Puneet Misra Assistant Professor Dept. of CCM	Prevalence of metabolic syndrome and its selected socio-behavioural determinants among females aged more than 20 years residing in a rural area of Haryana.	1,00,000	1
40.	Dr Govind K. Makharia Associate Professor Dept. of Gastroenterology and Human Nutrition	Familial prevalence amongst first and second degree relatives of patients with celiac disease	49,500	2

ONGOING PROJECTS

S.No	Name of the investigator	Title of the project	Amount sanctioned	Duration
1.	Dr Anant Mohan Assistant Professor Medicine	Prognostic utility of various acute phase reactants in acute exacerbation of chronic obstructive pulmonary disease	1,00,000	2
2.	Dr D.N. Sharma Assistant Professor Radiation Oncology	A prospective randomized trial of amifostine (radioprotector) given subcutaneously during radiation therapy in head and neck cancer patients	1,00,000	3
3.	Dr Minati Choudhury Associate Professor Cardiac Anaesthesia	Imbalance between endothelin-1 and plasma nitric oxide products influences the outcome in children suffering from severe pulmonary hypertension due to congenital heart disease	1,00,000	3
4.	Dr Neeti Makhija Associate Professor Cardiac Anaesthesia	Role of coenzyme Q10 and alpha lipoic acid in attenuating the oxidative stress and systemic inflammatory response in patients undergoing coronary artery bypass graft surgery	1,00,000	3

5.	Dr Deepak Agrawal Assistant Professor (JPNATC) Neurosurgery and Gammaknife	Acute thalamic involvement in severe head injury: An autopsy study with histopathological correlation	1,00,000	3
6.	Dr S.B. Ray Additional Professor Anatomy	Role of cyclic AMP response elementbinding protein expression in the spinal cord of rat in nimodipine induced potentiation of morphine analgesia: An immunohistochemical study	96,000	2
7.	Dr B.R. Mirdha Additional Professor Microbiology	Prevalence of intestinal coccidiosis and other parasitosis in at risk individual	50,000	3
8.	Dr V.K. Iyer Associate Professor Pathology	Evaluation of chromosome 1p and 11p deletions in hepatoblastoma and hepatocellular carcinoma	1,00,000	3
9.	Dr Kunzang Chosdol Assistant Professor Biochemistry	Distribution of cancer susceptibility modifying polymorphisms (MDM2 SNP309 and p53 codon 72) in Indian population groups	1,00,000	2
10.	Dr Ratna Sharma Associate Professor Physiology	A study on stress reactivity of students as a function of their general and emotional intelligence and effect of meditation on the stress response	50,000	2
11.	Dr T. Velpandian Assistant Professor Ocular Pharmacology and Pharmacy Dr R.P. Centre	Development and validation of N-in-One dosing technique to evaluate ocular kinetics of drugs using LC/MS/MS	1,00,000	2
12.	Dr Nibhriti Das Professor Biochemistry	Paraoxonase (PON 1) activity and its genetic determinants (PON 1 gene polymorphisms, in coding region at codon 55, 192 and in promoter region at position -108) in relation to coronary artery disease (CAD)	50,000	3 years

13	Dr Arundhati Sharma Associate Professor Anatomy	To evaluate the possible presence of mutations in VSX1 gene in Keratoconus	1,00,000	2
14.	Dr Rajiva Gupta Associate Professor Medicine	To study the effect of statins in rheumatoid arthritis special reference to disease activity and lipid profile	95,100	2
15.	Dr Garima Shukla Associate Professor Neurology	Prevalence of the restless legs syndrome in women and its relationship with iron deficiency – a prospective case – controlled study from North India	44,000	2

Total funds available : 50,64,000
Total allocated : 50,63,050
Balance : 950

4. Examination Section

Dean (Exams)

Professor T. D. Dogra
(upto March 2009)

Sub-Dean (Exams)

Dr A. K. Dinda

Assistant Controller of Exams

B.K. Joshi
(Joined on 30.10.2008)

Accounts Officer

N.D. Sharma
(from November 2008)

Assistant Administrative Officer

V.D. Talwar
(from November 2008)

During the period under review (2008–2009), the Examination Section conducted the following Professional and Entrance Examinations.

POSTGRADUATE AND UNDERGRADUATE PROFESSIONAL EXAMINATIONS

Details of various undergraduate and postgraduate professional examinations conducted by AIIMS from 1.4.2008 to 31.3.2009.

S.No.	Examination	Number of students			
		Appeared	Absent	Passed	Failed
1.	Final Postgraduate/Post-doctoral	106	0	98	8
2.	MSc (Nursing), Phase I	12	0	12	0
3.	MSc (Nursing), Phase II	14	0	13	1
4.	Final MB,BS (Supplementary)	6	3	0	3
5.	Second MB,BS (Supplementary)	4	0	3	1
6.	BSc Nursing (Post-certificate), Phase I	20	0	15	5
7.	BSc Nursing (Post-certificate), Phase II	18	0	15	3
8.	BSc (Hons) Nursing, Phase I	58	0	49	9
9.	BSc (Hons) Nursing, Phase II	46	0	46	0
10.	BSc (Hons) Nursing, Phase III	52	0	52	0
11.	BSc (Hons) Nursing, Phase IV	49	0	49	0
	Total	385	3	352	30

S.No.	Examination	Number of students			Failed
		Appeared	Absent	Passed	
	B.F.	385	3	352	30
	July 2008				
12.	First Professional MB,BS	53	3	42	8
13.	BSc (Hons) Ophthalmic Techniques, Phase I	15	1	11	3
14.	BSc (Hons) Ophthalmic Techniques, Phase II	10	0	9	1
15.	BSc (Hons) Ophthalmic Techniques, Phase III	10	0	10	0
16.	BSc (Hons) Medical Technology in Radiography, Phase I	7	0	5	2
17.	BSc (Hons) Medical Technology in Radiography, Phase II	7	1	6	0
18.	BSc (Hons) Medical Technology in Radiography, Phase III	6	0	6	0
	August 2008				
19.	First Professional MB,BS (Supplementary)	9	0	9	0
	November 2008				
20.	BSc (Hons) Ophthalmic Techniques, Phase I (Supplementary)	1	0	1	0
21.	BSc (Hons) Ophthalmic Techniques, Phase II (Supplementary)	1	0	1	0
22.	BSc (Hons) Ophthalmic Techniques, Phase III (Supplementary)	0	0	0	0
23.	BSc (Hons) Medical Technology in Radiography, Phase I (Supplementary)	2	1	1	0
	December 2008				
24.	Final Postgraduate/Post-doctoral	102	0	95	7
25.	MSc/MBiotech (Supplementary)	2	0	2	0
26.	MSc (Nursing), Phase II (Supplementary)	1	0	1	0
27.	Final Professional MB,BS	51	1	39	11
28.	Second Professional MB,BS	48	0	38	10
29.	BSc Nursing (Post-certificate), Phase I (Supplementary)	6	0	1	5
30.	BSc Nursing (Post-certificate), Phase II (Supplementary)	4	0	3	1

31.	BSc (Hons) Nursing, Phase I (Supplementary)	9	0	9	0
32.	BSc (Hons) Nursing, Phase II (Supplementary)	2	0	2	0
33.	BSc (Hons) Nursing, Phase III (Supplementary)	0	0	0	0
34.	BSc (Hons) Nursing, Phase IV (Supplementary)	0	0	0	0
	January 2009				
35.	Final Professional MB,BS (Compartmental examination)	6	1	4	1
	Total	737	11	647	79

Entrance Examinations for Undergraduate and Postgraduate courses

S No	Course	Number of candidates		
		Date of examination	Applied	Appeared
1.	MD/MS/MDS (AIIMS) July Session 2008	11 May.2008	14,220	10,791
2.	DM/MCh/MHA July Session 2008	18 May 2008	1,580	1,181
3.	MB,BS (AIIMS) August Session 2008	01 June 2008	54,276	36,567
4.	BSc (Hons) Nursing 2008	22 June 2008	1,181	654
5.	BSc Nursing (Post-certificate) 2008	26 June 2008	141	99
6.	BSc (Hons) Paramedical Courses 2008	08 June 2008	271	170
7.	MSc Courses 2008	06 July 2008	302	180
8.	MSc Nursing 2008	14 June 2008	652	511
9.	MBiotechnology Entrance Examination 2008	12 July 2008	853	464
10.	PhD July Session 2008	29 June 2008	486	287
11.	Senior Residents Entrance Examination, July 2008 Session	20 July 2008	1,177	925
12.	MD/MS/MCh (6 years)/MDS (AIIMS) January Session 2009	09 November 2008	23,045	20,910
13.	DM/MCh/MHA January Session 2009	14 December 2008	1,525	1,216
14.	All-India PG Entrance Exam: MD/MS/ Diploma/MDS	11 January 2009	57,408	52,773
15.	PhD January Session 2009	18 January 2009	372	243
	Total		1,57,489	1,26,971

Number of entrance examinations conducted	:	15
Number of applicants	:	1,57,489
Number of candidates appeared	:	1,26,971
Candidates passed in PhD <i>viva-voce</i> examination	:	42

(1 April 2008 to 31 March 2009)

Examination for recruitment

S.No	Name of exam	Written exam	Interview	Applied	Appeared
1.	Technician Radiology Gd-II and Radiotherapy Gd-II	26 May 2008	27 May 2008	144	99
2.	Scientist –I (TII)	12 June 2008	5 August 2008	81	41
3.	Sister Gd-II	21 September 2008	18–20 October 2008	12,672	9,769
4.	Lab Technician	8 March 2009	15 and 16 April 2009	272	85
5.	Scientist – I (Pharmacology)	14 March 2009	15 May 2009	48	19
6.	Scientist – I (NMR)	16 March 2009	15 May 2009	32	16
7.	Jr. Physiotherapist/ Occupational Therapist	29 March 2009	—	506	360
Total				13,755	10,389

Number of examinations conducted	:	7
Number of applicants	:	13,755
Number of candidates appeared	:	10,389

Important entrance examinations conducted

1. All-India PG entrance examination for admission to the MD/MS/Diploma/MDS courses against 50% open merit seats quota was held in 107 centres (Local 22, outstation 85) in 15 cities of India on 11 January 2009. The results were declared on 15 February 2009.
2. AIIMS PG entrance examination for admission to the MD/MS/MCh (6 years)/MDS courses for the session starting from July 2008 was conducted at 29 centres in Delhi on 11 May 2008 and for January 2009 session at 41 centres on 9 November 2008. The results were declared on 26 May 2008 and 24 November 2008, respectively.

3. Selections for various Post-doctoral (superspecialty) courses, viz. DM/MCh and Masters in Hospital Administration for July 2008 and January 2009 sessions were made on a two-stage performance evaluation carried out from 18 May 2008 to 26 May 2008 and 14 December 2008 to 20 December 2008, respectively.
4. The Institute had also conducted the entrance examination for the post of Senior Residents/ Senior Demonstrators on 20 July 2008 at two centres in Delhi. All the candidates who had scored 50% or above in the written examination were called merit wise for the departmental assessment which was held on 24, 25 July 2008 and 26 July 2008, respectively.
5. Selections of candidates for registration to the PhD programme for the sessions starting from July 2008 and January 2009 were held from 29 June to 5 July 2008 and 18 to 27 January 2009. The results were declared on 5 July 2008 and 27 January 2009, respectively.
6. The entrance examination for admission to the MB,BS course of AIIMS for the August 2008 session was held in 111 centres (local 57, outstation 54) in 10 cities of India on 1 June 2008.
7. The entrance examination for admission to the BSc (Hons) Nursing course was held in Delhi and Thiruvananthapuram on 22 June 2008.
8. The entrance examination for admission to MSc and MBiotechnology courses for the August 2008 session was held in Delhi on 6 July 2008 and 12 July 2008, respectively.
9. The entrance examination for admission to MSc Nursing course, introduced from the year 2005. This examination was held on 14 June 2008 in Delhi. Admission was made by allotment of seats on merit through counselling held on 10 July 2008.
10. The entrance examination for admission to the BSc Nursing (Post-certificate) course was held in Delhi on 26 June 2008, followed by the personal assessment of candidates on 28 June 2008.
11. The entrance examination for admission to Paramedical courses—BSc (Hons) Ophthalmic Techniques and BSc (Hons) Medical Technology in Radiography for the August 2008 session was held in Delhi on 8 June 2008. Admissions to these two courses were made by allotment of seats on merit through counselling held on 15 July 2008.
12. The Examination Section also conducted Written/Skill Test for recruitment to the following posts at the Institute:
 - i) Technician Radiology Grade II held on 26 May 2008.
Interview..... held on 9 May 2008.
 - ii) Scientist – I held on 12 June 2009.
skill test/interviews.....5 August 2008.
 - iii) Sister Grade II held on 21 September 2008.
Interview held on 18, 19 and 20 October 2008.

- iii) Laboratory Technician held on 8 March 2009.
Interview.....15 and 16 April 2009.
- v) Scientist (Pharmacology) and) held on 14 March 2009
Scientist I (NMR).....16 March 2009
Interview..... 15 May 2009.....

Participation in other events

- 13. The Examination Section actively participates in the counselling for admission to the AIIMS- Postgraduate/Undergraduate courses and personal assessment/interview for BSc (Nursing) Post-certificate course.

SIGNIFICANT EVENTS

The Examination Section has started providing Ball Point Pen for writing/marking of Answer/option to candidates and Invigilators for all the Entrance Examinations.

5. General Administration

Deputy Director (Administration)

Shailesh Kumar Yadav, IPS

Chief Administrative Officer

Attar Singh

Senior Administrative Officers

K.C. Chhoker

Administrative Officers

Hospital

Kundan Kumar

Research Section

E.L. Lakra

General and Estate Section

K.K. Vaid

NDDTC

Ajay Kumar

Public Relations and Telemedicine

S. Rangabashiam

JPNA Trauma Centre

Rajavelu Simon

Recruitment and Hostel

Ravi Chauhan

Faculty, Establishment and Transport

V.V. Mishra

Legal and ACR

N.K. Sharma

SECURITY

Deputy Chief Security Officer

Rajiv Lochan

STORES

Stores Officers

R.L. Prasad
Pradeep Kumar Gupta

S.S. Bhaduria

K.D. Sharma

ENGINEERING SERVICES DEPARTMENT

Superintending Engineer

B.S. Anand (officiating)

GENERAL ADMINISTRATION

The General Administration, including personnel and establishment, security, estate, matters related to Engineering Services Department, stores, vigilance and public relations activities of AIIMS are controlled and supervised by the Deputy Director (Administration). There are various branches looking after the above-mentioned areas. Each branch is headed by a senior officer with supportive officers and staff members. A brief description of the activities of these branches is given below.

All matters relating to the Establishment Section and General Administration including appointment of staff, arranging meetings of statutory committees, management of estate and property, purchase of equipments, materials and consumables, security arrangements, and employees' welfare are looked after by the administration.

The total sanctioned staff of AIIMS is 9937, including the main hospital, all the centres and administration. These include the following:

S. No.	Category/group	Sanctioned strength	In position staff
1.	Faculty	625	446
2.	Group 'A'	321	190
3.	Group 'B'	789	614
4.	Group 'C'	6,296	4,705
5.	Group 'D'	1,906	1,847
	Total	9,937	7,802

6. Main Hospital

Medical Superintendent

D.K. Sharma

Additional Professor

Siddhartha Satpathy

(Department of Hospital Administration)

Associate Professor

I.B. Singh

(Department of Hospital Administration)

Sanjay Arya

(Department of Hospital Administration)

GENERAL INFORMATION

Total number of beds	1486
Main Hospital and private wards	1038
Bassinets	25
CNC	423

HOSPITAL PERFORMANCE INDICES

Item	Current Year	Past Year	Comments
Average length of stay (days)	5.9	4.7	Indicates effective utilization of beds
Average bed occupancy rate (%)	79.9	78.5	Indicates fair occupancy
Net death rate (%)	2.7	2.7	Indicates low mortality rate despite the fact that quite large number of critically ill patients are admitted to the hospital
Combined crude infection rate (%)	7.60	8.26	
Please <i>see</i> Appendices I and II for details			

6.1 Medical Record Services (Hospital)

Chief Medical Record Officer and Sub-Registrar, Births and Deaths

N.K. Sharma

Education and Training

A group of Medical Record Technician from St. Stephens Hospital, New Delhi visited Medical Record Section (Main Hospital) and outpatient department of AIIMS.

A group of 23 BSc (PC) Nursing students visited Medical Record Section (Main Hospital) and a brief lecture was delivered on Medical Record Management at AIIMS by Shri N.K. Sharma, Chief Medical Record Officer.

Meetings

Shri N.K. Sharma, Chief Medical Record Officer, Shri Yogesh Kumar Sharma, DEO and Shri Ashok Kumar, MRT attended the on-line registration of Birth and Deaths meeting on 18 September 2008 and 23 December 2008 in office of MOH, Health Department, NDMC, Palika Kendra, New Delhi.

Court attendance

A total of 1269 summons (average 4 summons per day) were attended to by the Medical Record Personnel in Delhi and outside Delhi.

Computerization of Medical Records

Computerization of Medical Records is in full swing. During the first phase, the Central Admission Office and Hospital Enquiry will be computerized and in the second phase, Medical Record Section (Hospital) will be computerized.

Inpatient services

The hospital has maintained its tradition of services and quality of patient care, in spite of the ever increasing number of patients that come to this hospital from all over the country as well as from abroad. A total of 82,877 patients were admitted during the year in the various clinical units of the Main Hospital and CNC. The department-wise, region-wise and gender-wise admissions are given in Appendices III and IV. The number of surgical procedures performed during the year in different surgical disciplines is given in Appendix V.

Records are systematically classified and categorized for easy retrievals in compactors. All the inpatient records of the CN Centre are maintained by the Medical Record Section of the Main Hospital.

Central Admission Office and Hospital Enquiry

Medical Records of patients admitted to the hospital are initiated from the Central Admission Office which also functions as an Enquiry counter. All types of information regarding patients, departments, doctors and centres are provided from this office.

This office functions round the clock, i.e. 365 days x 24 hours. Therefore, the staff works in shifts. This office is manned by Receptionists, Medical Record Technicians and other ministerial and hospital staff.

Outpatient department and specialty clinics

A total of 15,07,786 patients attended the general outpatient department and specialty clinics of the main hospital. The details of the outpatient load profile are given in Appendix VI.

APPENDIX I

Yearly Statistical Health Bulletin (2008–2009)

S. No.	Description	Main hospital	CNC	Total
1.	Total patient admitted	65,867	17,010	82,877
	a. Adults and children	63,621	—	—
	b. Newborn infants	2,246	—	—
2.	Total number of patients discharged	59,280	14,221	73,501
	a. Adults and children	57,259	—	—
	b. Newborn infants	2,021	—	—
3.	Total days of care	3,47,514	1,02,327	4,49,841
	a. Adults and children	3,33,926	—	—
	b. Newborn infants	13,588	—	—
4.	Average length of stay (ALS)	5.9	7.2	6.1
	a. Adults and children	5.8	—	—
	b. Newborn infants	6.7	—	—
5.	Total number of patient care days in hospital (as per daily census)	3,10,228	1,11,327	4,21,555
	a. Adults and children	3,03,893	—	—
	b. Newborn infants	6,335	—	—
6.	Daily Average number of patients	850	305	1,155
	a. Adults and children	833	—	—
	b. Newborn infants	17	—	—
7.	Average bed occupancy (%)	79.9	72.1	77.6
	a. Adults and children	80.2	—	—
	b. Newborn infants	68.0	—	—

8.	Births in hospital	2,246	—	2,246
	a. Male babies	1,142	—	—
	b. Female babies	1,102	—	—
	c. Intersex	2	—	—
9.	Total death (including newborns)	2,380	923	3,303
	a. Death under 48 hours	787	229	1,016
	b. Death over 48 hours	1,593	694	2,287
	c. Gross death rate (%)	4.0	6.5	4.5
	d. Net death rate (%)	2.7	5.0	3.2
10.	Attendance in casualty	1,08,486	—	1,08,486
	a. Deaths in casualty	797	—	797
	b. Brought dead in casualty	157	—	157

APPENDIX II

Department-wise distribution (Main Hospital + CNC)

Department	Admission	Discharges	Days of care	Average length of stay	Total deaths	Deaths under 48 hours	Deaths over 48 hours	Gross death rate %	Net death rate %
Medicine I	1,670	1,503	13,875	9.2	325	124	201	21.6	14.6
Medicine II	1,106	995	9,706	9.7	303	117	186	30.4	21.2
Medicine III	1,357	1,221	13,667	11.2	353	128	225	28.9	20.6
Surgery I	1,503	1,353	11,766	8.7	38	10	28	2.8	2.1
Surgery II	2,146	741,931	13,994	7.2	55	9	46	2.8	2.4
Surgery III	1,082	974	10,266	10.5	37	6	31	3.8	3.2
Surgery IV	1,657	1,491	10,896	7.3	32	4	28	2.1	1.9
Orthopaedics I	1,680	1,512	13,261	8.8	5	1	4	0.3	0.3
Orthopaedics II	2,121	1,909	14,766	7.7	9	—	9	0.5	0.5
Obstetrics and Gynaecology I	3,834	3,451	18,257	5.3	7	2	5	0.2	0.1
Obstetrics and Gynaecology II	3,129	2,816	14,913	5.3	3	1	2	0.1	0.1
Obstetrics and Gynaecology III	3,099	2,789	14,473	5.2	7	1	6	0.3	0.2
Nephrology	4,291	3,862	14,654	3.8	160	47	113	4.1	3.0

Endocrine	468	421	9,506	22.6	21	7	14	5.0	3.4
Gastroenterology	2,258	2,032	17,248	8.5	347	119	228	17.1	11.9
Haematology	7,102	6,392	15,208	2.4	157	58	99	2.4	1.6
Psychiatry	345	311	8,343	26.8	—	—	—	—	—
Urology	4,894	4,405	16,617	3.8	22	4	18	0.5	0.4
Otolaryngology I	1,177	1,059	4,989	4.7	3	1	2	0.3	0.2
Otolaryngology II	1,549	1,394	5,623	4.0	4	1	3	0.3	0.2
Otolaryngology III	1,446	1,301	6,734	5.2	3	1	2	0.2	1.5
Dermatology	3,739	3,365	13,024	3.9	10	—	10	0.3	0.3
New Born	2,246	2,021	13,588	6.7	42	18	24	2.1	1.2
Paediatrics I	2,661	2,395	9,705	4.1	91	22	69	3.8	2.9
Paediatrics II	1,505	1,355	8,056	5.9	71	20	51	5.2	3.8
Paediatrics III	2,819	2,537	9,263	3.6	72	18	54	2.8	2.1
Paediatric Surgery	2,550	2,295	17,445	7.6	72	7	65	3.1	2.8
Radio Therapy	59	53	290	5.5	27	19	8	50.9	23.5
Dental Surgery	191	172	1,548	9.0	—	—	—	—	—
Nuclear Medicine	637	573	1,094	1.9	—	—	—	—	—
Gastrointestinal and Liver	773	696	11,877	17.1	52	12	40	7.5	5.8
PMR	38	34	1,027	30.2	1	—	1	2.9	2.9
IRCH	211	190	1,363	7.2	51	30	21	26.8	13.1
Anaesthesiology	524	472	472	1.0	—	—	—	—	—
Total (MAIN)	65,867	59,280	3,47,514	5.9	2,380	787	1,593	0.4	2.7
Cardiology	7,367	6,271	26,123	4.2	308	117	191	4.9	3.1
CTVS	3,247	2,854	27,754	9.7	177	19	158	6.2	5.6
Neurology I	1,646	1,337	12,337	9.2	102	22	80	7.6	6.1
Neurology II	1,528	1,234	10,912	8.8	148	27	121	12.0	10.0
Neurosurgery I	1,737	1,285	12,180	9.5	85	18	67	6.6	5.3
Neurosurgery II	1,482	1,240	13,021	10.5	103	26	77	8.3	6.3
Neuro-anaesthesiology	3	—	—	—	—	—	—	—	—
Total (CNC)	17,010	14,221	1,02,327	7.2	923	229	694	6.5	5.0
GRANDTOTAL	82,877	73,501	4,49,841	6.1	3,303	1,016	2,287	4.5	3.2

APPENDIX III

Department-wise distribution of inpatients (2008–2009)

S.No.	Departments/Sections	Numbers
1.	Medicine I	1,670
2..	Medicine II	1,106
3.	Medicine III	1,357
4.	Surgery I	1,503
5.	Surgery II	2,146
6.	Surgery III	1,082
7.	Surgery IV	1,657
8.	Orthopaedics I	1,680
9.	Orthopaedics II	2,121
10.	Obstetrics and Gynaecology I	3,834
11.	Obstetrics and Gynaecology II	3,129
12.	Obstetrics and Gynaecology III	3,099
13.	Nephrology	4,291
14.	Endocrine	468
15.	Gastroenterology	2,258
16.	Haematology	7,102
17.	Psychiatry	345
18.	Urology	4,894
19.	Otolaryngology I	1,177
20.	Otolaryngology II	1,549
21.	Otolaryngology III	1,446
22.	Dermatology	3,739
23.	Newborn	2,246
24.	Paediatrics I	2,661
25.	Paediatrics II	1,505
26.	Paediatrics III	2,819
27.	Paediatric Surgery	2,550
28.	Radiotherapy	59
29.	Dental Surgery	191
30.	Nuclear Medicine	637

31.	Gastrointestinal and Liver	773
32.	PMR	38
33.	IRCH	211
34.	Anaesthesiology	524
	Sub-total (MAIN)	65,867
35.	Cardiology	7,367
36.	CTVS	3,247
37.	Neurology I	1,646
38.	Neurology II	1,528
39.	Neurosurgery I	1,737
40.	Neurosurgery II	1,482
41.	Neuro-anaesthesiology	3
	Sub-total (CNC)	17,010
	GRAND TOTAL	82,877

APPENDIX IV

Region-wise distribution of inpatients (2008–2009)

Region	Number of patients		Total
	Main Hospital	CNC	
Delhi	34,644	5,953	40,597
Uttar Pradesh	12,149	3,362	15,511
Haryana	7,197	2,014	9,211
Bihar	5,516	2,624	8,140
Rajasthan	1,151	605	1,756
Punjab	258	253	511
Other states	4,549	2,130	6,679
Other countries	403	69	472
Total	65,867	17,010	82,877

Gender-wise distribution of inpatients (2008–2009)
(Main Hospital and CN Centre)

Location	Male	Female	Male child	Female child	Total
Main Hospital	25,634	24,639	10,843	4,751	65,867
CNC	8,904	4,154	2,755	1,197	17,010
Total	34,538	28,793	13,598	5,948	82,877

APPENDIX V

Surgical procedures (2008–2009)

Sl. No.	Department	Major	Minor	Total
1.	Surgery I	2,953	747	3,700
2.	Surgery II	3,222	995	4,217
3.	Surgery III	2,755	583	3,338
4.	Surgery IV	2,254	878	3,132
5.	Gastrointestinal and Liver	5	537	542
6.	Urology	9,528	1,335	10,863
7.	Obstetrics	230	807	1,037
8.	Gynaecology	1,057	1,355	2,412
9.	ENT	24,763	2,064	26,827
10.	Orthopaedics I	471	1,105	1,576
11.	Orthopaedics II	710	1,003	1,713
12.	Paediatric Surgery	126	1,566	1,692
13.	Dental Surgery	16,558	1,694	18,252
14.	Casualty	277	—	277
	Total (MAIN)	64,909	14,669	79,578
15.	Cardiothoracic and Vascular Surgery	3	3,474	3,477
16.	Neurosurgery I	161	1,190	1,351
17.	Neurosurgery II	128	1,262	1,390
	Total (CNC)	292	5,926	6,218
	GRAND TOTAL	65,201	20,595	85,796

APPENDIX VI
Attendance in OPDs and Specialty Clinics (2008–2009)

Medical disciplines		New cases	Old cases	Total
1.	Medicine			
	<i>1. General OPD</i>	64,516	64,518	1,29,034
	<i>2. Specialty Clinics</i>			
	a) Chest	2,077	4,031	6,108
	b) Renal	5,974	20,639	26,613
	c) Endocrinology	9,444	22,472	31,916
	d) Nuclear Medicine	1,121	5,993	7,114
	e) Renal Transplant	163	5,523	5,686
	f) Rheumatology	356	7,919	8,275
	g) Geriatric	226	549	775
	HAEMATOLOGY	3,108	20,054	23,162
	GASTROENTEROLOGY	15,037	32,348	47,385
	PAEDIATRICS			
	<i>1. General OPD</i>	31,307	39,956	71,263
	<i>2. Specialty Clinics</i>			
	a) Well baby	390	705	1,095
	b) Fellow-up TB	214	1,731	1,945
	c) Renal	445	2,805	3,250
	d) Neurology	1,658	3,310	4,968
	e) Chest	487	3,236	3,723
	f) High-risk neonatal	325	947	1,272
	g) Genetic and birth defects	1,394	948	2,342
	DERMATOLOGY			
	<i>1. General OPD</i>	31,899	33,863	65,762
	<i>2. Specialty Clinics</i>			
	a) Sexually transmitted diseases	850	1,379	2,229
	b) Allergy	574	1,314	1,888
	c) Leprosy	421	2,382	2,803
	d) Pigmentation	567	2,114	2,681
	e) Psycho-sexual	—	—	—
	f) Dermatology surgery	412	903	1,315
	PSYCHIATRY			
	<i>1. General OPD</i>	3,368	—	3,368
	<i>2. Specialty Clinics</i>			
	a) Walk-in	10,246	23,643	33,889
	b) Child guidance	486	456	942

Surgical Disciplines	New cases	Old cases	Total
Surgical discipline			
1. <i>General OPD</i>	36,665	28,216	64,881
2. <i>Specialty Clinics</i>			
a) Plastic Surgery	—	—	—
b) Urology	12,414	28,281	40,695
c) G.I. Surgery	1,791	5,261	7,052
PAEDIATRIC SURGERY			
1. <i>General OPD</i>	6,310	12,741	19,051
2. <i>Specialty Clinic</i>			
a) Hydrocephalus	44	276	320
b) Intersex Clinic	37	291	328
c) Urology	314	2,993	3,307
ANAESTHESIA			
a) Pain clinic	952	2,474	3,426
b) Pre-anaesthesia	8,613	1,576	10,189
ORTHOPAEDICS			
1. <i>General OPD</i>	61,013	1,16,960	1,77,973
2. <i>Specialty Clinics</i>			
a) Follow-up	—	7,845	7,845
b) Tuberculosis	259	629	888
c) Polio	6	3	9
d) Scoliosis	363	1,058	1,421
e) Hand	649	897	1,546
f) CTEV	214	1,365	1,579
g) Arthritis	—	—	—
OTORHINO-LARYNGOLOGY AND RUAS			
1. <i>General OPD</i>	34,560	40,771	75,331
2. <i>Specialty Clinics</i>			
a) Audiology	126	97	223
b) Speech	1,084	2,335	3,419
c) Hearing	859	2,229	3,088
d) Voice	616	1,489	2,105
e) Vertigo	101	93	194
f) Rhinology	100	80	180

Surgical disciplines	New cases	Old cases	Total
OBSTETRICS AND GYNAECOLOGY			
1. <i>General OPD</i>	29,897	48,190	78,087
2. <i>Specialty Clinics</i>			
a) Postnatal	92	11	103
b) Infertility	—	—	—
c) IVF	520	1,622	2,142
d) Family welfare	6,541	3,217	9,758
e) Antenatal	449	2,542	2,991
f) Endocrine gynaecology	34	102	136
g) High-risk pregnancy	2,256	12,925	15,181
RADIOTHERAPY			
<i>General OPD</i>	344	56,805	57,149
DENTAL SURGERY			
1. <i>General OPD</i>	26,878	12,917	39,795
2. <i>Specialty Clinics</i>			
a) Orthodontics	1,163	7,737	8,900
b) Combined cleft palate	89	902	991
c) Trigeminal neuralgia	242	263	505
d) Restorative-cum-endodontic	11,898	10,184	22,082
e) Oral prophylaxis	6,172	9,172	15,344
f) Prosthodontics-cum- maxillofacial prosthesis	11,703	11,975	23,678
OTHERS			
1. Casualty	1,08,486	—	1,08,486
2. Employees Health Scheme	1,06,292	70,862	1,77,154
3. Nutrition	2,019	847	2,866
4. PMR	12,805	9,224	22,029
5. SMCC	2,148	2,408	4,556
Total	6,84,183	8,23,603	15,07,786

6.2 Hospital Dietetics Services

Chief Dietician

Parmeet Kaur (Acting)

Dietician

Swapna Chaturvedi

Assistant Dietician

Gurdeep Kaur Richa Jaiswal Vasundhara Singh Anjali Bhola Monita Gahlot

Number of indoor patients served different diets

Total number of diets	–	6,49,618
Normal diets	–	3,27,759
Semisolid	–	60,058
Therapeutic diets	–	1,39,321
Kitchen based enteral feeds	–	34,180
Commercial enteral feeds	–	975
Private ward diets	–	87,325

Nutrition clinic—outpatients

Old patients	–	847
Males	–	541
Females	–	306
New patients	–	2,019
Males	–	1,167
Females	–	852

6.3 Medical Social Welfare Unit

Welfare Office
Preeti Ahluwalia

PATIENTS WELFARE

Patient care: Rs 46,60,000 (approximately) raised as donation.

Purpose	Donation	Donor	
For treatment and surgery of poor and needy patients who are undergoing treatment in the Main Hospital and Centres	Rs 4,40,500	Shri Sai Bhakta Samaj (Regd.)	
	Rs 7,26,049	Handicapped Children's Rehabilitation Association	
	Rs 4,07,500	Jawahar Bhawan Trust	
	Rs 1,30,000	Rajendra Bhawan Trust	
	Rs 87,500	Sahu Jain Trust	
	Rs 85,800	Other Charitable Trust	
	Rs 25,800	Lal Devi Charitable Trust	
	Rs 27,172	Sewa Prakalp Trust	
	Rs 24,000	Vijay Gujral Foundation	
	Rs 17,035	Other individual donors	
	AIIMS Poor Fund Account	Rs 50,000	Mrs Dwarka Prasad Trust
		Rs 10,000	Smt Anita Swani
		Rs 7,000	Shri Naresh Swani
Anti-cancer drugs provided free to cancer patients	Rs 26,24,105	Gopal Foundation	

Patients living below poverty line are being assisted to avail of financial assistance for their treatment from *Rashtriya Arogya Nidhi*, PM National Relief Fund, Health Ministers Discretionary Grant and other governmental and non-governmental agencies.

Medicines were arranged for poor and needy patients from Hospital Poor Patient Fund. Patients were also assisted for admission, exemption of levy charges and investigation charges, etc.

Dharamshalas

As a welfare activity through the aegis of the AIIMS Hospital Social Welfare Society, the Rajgarhia Vishram Sadan, Sureka Vishram Sadan and Shri Sai Vishram Sadan provided shelter to over 16,300 patients and their attendants. The renovation of Rajgarhia Vishram Sadan was also undertaken so as

to improve the existing facility. In special cases, food is arranged through donors for the poor and needy inmates of the Vishram Sadans. Shakti Sewa Samiti Charitable Trust (regd) donated bed sheets, pillows, pillow covers and other items worth Rs 72,000 (approx) for the benefit of the inmates.

Employees' Welfare

Appointment on compassionate grounds

Cases for appointments on compassionate grounds were dealt with. Counselling services and moral support was provided to the family members so as to assist them to accept/overcome the great loss they has suffered and thereby enable them to shoulder the responsibilities that had fallen on them. Assistance for funeral expenses was also provided, if required, to the relatives of the deceased employees.

Counselling services

Counselling services were provided to employees, patients and their relatives so as to enable them to overcome/adjust to their physical, social, emotional, economic, familial and marital problems and thereby enhance their social functioning.

Redressal of grievances

Services are being provided for redressal of grievances to staff members and patients

Sponsorship of school fees

Handicapped Children's Rehabilitation Association sponsored school fees for the wards of our 'Group D' employees. School fees of 32 children was sponsored for a period of 6 months (total amount of sponsorship Rs 58950). In addition, school fees of two more children was sponsored through an individual donor.

Free hearse van facility

Free hearse van facility is being organized through Shri Sai Bhakta Samaj (Regd) to enable easy transportation of the dead body by the distressed relatives to their homes/crematorium in Delhi.

Sports activities

Facilitating participation of institute employees in the inter-ministry tournaments. The AIIMS Shooting Ball Team won the Inter Ministry Shooting Ball Championship and also secured 3rd prize in the 27th National Championship of Shooting Ball. The AIIMS Football Team secured the runner-up position in the Inter Ministry Football Tournament.

Diwali celebration

On the occasion of Diwali, Cardigans and gifts were distributed to the children of employees studying in the nursery and primary school being run by Medical Institute Residents Welfare Association (MIRWA) in Ansari Nagar campus.

It may kindly be ensured that the Annual Report of the Welfare Unit is not merged with that of the Medical Social Services Unit as both the Units are working independently of each other.

6.4 Hospital Billing Section

Following is the amount of donation received and the payments made to the patients during the financial year 2008–2009.

Donations received from donors: Rs 6,01,653.00
(Bank Interest + donations + Poor fund boxes)

Payment made to [66+194] patients: Rs 90,851.00

(The amount disbursed is from the donations received from donors during the year as well as from the previous balance lying in the ‘AIIMS POOR FUND ACCOUNT’).

6.5 Hospital Laundry

The mechanized laundry is providing its services to all departments of AIIMS Hospital, Dr R.P. Centre, Dr B.R. Ambedkar Institute Rotary Cancer Hospital, Cardiothoracic and Neurosciences Centre.

The laundry was visited by several batches of hospital administrators attending the courses at the National Institute of Health and Family Welfare and by several teams of doctors from other hospitals in the country. These visits have helped the participants to gain first hand knowledge of the mechanized laundry with a view to start similar system in their own hospitals.

Workload during the year 2008-2009

1. Total pieces processed	51,17,527
2. Total weight (in kgs)	15,74,623
3. Total cost of washing material (Rs)	16,23,165
4. Cost of washing material per piece (Rs)	0.3171
5. Cost of washing material per kg of linen (Rs)	1.030

6.6 Blood Bank (Hospital)

April 2008 to March 2009

Blood collection in donor room

1. Total relative donors	19,853
2. Total voluntary donors	12,651
From donation camps	8,052
From AIIMS Blood Bank	4,599
From Mobile Donation	Nil

3.	Collected from CNC	1,068
	IRCH	180
	Others	1,023
	Total collection	34,775

Camps organized 82

Routine Laboratory

1.	Total patients	42,237
2.	Total ABO grouping	1,08,020
3.	Total Rh	77,012
4.	Total OPD grouping and Rh	3,767
5.	Total cross-match (Emergency and Routine)	58,799
6.	Total donor grouping	69,550
7.	Total ICT	1,025
	ICT positive	190
8.	Total titre	120
9.	Total A/B	38,649
10.	Total DCT	466
	DCT positive	96
11.	Total blood issued (units)	33,583
12.	Total received back (units)	632
13.	Total small units	841
14.	Total blood discarded (units)	1,956
15.	Blood issued but not transfused	Nil
16.	Total blood issued to private ward (units)	2,591
17.	Total component issued to private wards	2,140
18.	Total blood issued to outside hospital (units)	926
19.	Total component issued to outside hospital	158
20.	Total cross-match but not transfused	9,054
21.	Blood issued to IRCH	3,314
	IRCS	5
	CNC	139
	Total	4,55,270

Special Procedure Laboratory

1.	Minor grouping	239
2.	Platelet antibody	68
3.	Reagent cell thawing	742
4.	Cell freezing	Nil
5.	DAT	43
6.	Cross-matching discrepancy	99
7.	Group discrepancy	22

8.	AB screening	77
9.	Blood thawing	Nil
10.	Antibody identification	22
	Total	1,312
11.	Component QC	73
12.	Antisera QC	77
13.	EQAS	11

Component Laboratory

1.	Platelet-rich concentrate	25,229
2.	Fresh-frozen plasma	17,248
3.	Liquid plasma	13,725
4.	Cryoprecipitate	984
5.	Red blood cells	30,973
6.	Single donor platelet pheresis (SDP)	105
	Total component prepared	88,274

Infection Laboratory

1.	HIV test	46,809
2.	HBV test	41,513
3.	Anti-HBc test	41,165
4.	HCV test	40,959
5.	VDRL	39,865
	Total	2,10,311

7. College of Nursing

Principal

Manju Vatsa

Lecturers

Ms Meena Agarwal

Ms Ashia Qureshi

Dr Sandhya Gupta

Ms Deepika C. Khakha

Ms Rachel Andrews

Ms Kamlesh Sharma

Senior Nursing Tutor

Ms Geeta Razdan

Nursing Tutor

Ms Kiran Singh Simak

Ms Sucheta

Ms Meena Ara

Ms Gayatri Batra

Ms Shashi Mawar

Ms Poonam Joshi

Ms Babita Sahoo

Ms Philomina Thomas

EDUCATION

Undergraduate

Fortynine students graduated from the four-year BSc (Hons) Nursing course, while 18 students graduated from the two-year BSc Nursing (Post-certificate) course.

Postgraduate

MSc Nursing - 14 students graduated from MSc Nursing two year course.

Eighteen students have joined the program this year in the following specialties:

1. Paediatric Nursing
2. Psychiatric Nursing
3. Cardiology/ CTVS Nursing
4. Neurosciences Nursing
5. Oncology Nursing
6. Critical care Nursing
7. Nephrology Nursing

Continuing Nursing Education (CNE)

1. The College of Nursing has organized the following Short-term courses/symposium / workshops:

“Cardiology Nursing Update” was held in October, 2008. A total of 32 nurses from AIIMS Hospital attended the update. Coordinator: Ms R.Andrews.

“Oncology Nursing Update” was held in October, 2008. In all 37 nurses from AIIMS hospital attended the update. Coordinator: Ms K.Sharma.

“Nephrology Nursing Update” was held in March, 2009. Total 27 nurses from AIIMS hospital attended the update. Coordinator: Ms D.C. Khakha

Workshop on “Feeding of normal & sick newborns with special emphasis on breast feeding” was held in November, 2007. In all 17 nurses from AIIMS attended the update. Coordinator: Ms P.Joshi.

Workshop on “Mental Health Nursing- child and adolescent psychiatry” was held in October, 2008. In all 34 nurses from AIIMS hospital attended the update. Coordinator: Dr S.Gupta.

“Neurological Nursing Update” was held in September, 2008. In all 24 nurses from AIIMS Hospital attended the update. Coordinator: Ms M.Agarwal.

Workshop on “Substance use disorder nursing” was held on March 2009. In all 17 nurses from AIIMS hospital attended the workshop. Coordinator: Dr S. Gupta.

Symposium on “Disaster Management” was held on Annual day of the college. More than 350 nurse participants, students & others from AIIMS hospital attended the programme. Coordinator: Dr S.Gupta.

A five days “HIV/AIDS training for nurses” funded by NACO/DSACS. 28 nurses from ART centres/ Community care centres from Delhi, Haryana, Punjab, Rajasthan, Chandigarh and Madhya Pradesh attended the training. Coordinator: Ms R.Andrews.

Three “Master Trainers training program in HIV/AIDS” funded by INC-GFATM project were held. A total of 90 Faculty members from different colleges of nursing in Delhi, Chandigarh, Kolkata, SNDT Mumbai, Punjab, Chattisgarh, Gujrat, Rajasthan and Haryana attended the programmes. Coordinator: Dr Manju Vatsa.

2. The College of Nursing conducted orientation/briefing sessions for:

Two groups of visitors from abroad and 5 groups of visitors from various educational institutions of India.

Faculty members of the College attended 21 workshops/conferences and delivered 67 lectures for 35 continuing nursing/medical education programmes and workshops held during the year.

CONSULTANCY AND PARTICIPATION AS EXPERT

M.Vatsa participated as a core group member for ‘PhD consortium in India’ coordinated by the Indian Nursing Council: took teaching sessions through Video conferencing for PhD scholars; continuing as Guide for 6 PhD scholars for consortium for PhD in Nursing, INC and RGUHS.

Member of the Indian Nursing Council and its executive and education committees.

Pilot testing of Essential Newborn Care package for nurses training tool. WHO collaborating centre for newborn care, AIIMS.

Member National Advisor Board, Prism’s Nursing Practice- *Journal of clinical nursing – education*, training and career development, (earlier called *The Journal of Nursing*) , Quarterly publication of Prism books, Bangalore, since its inception in 2005.

Member of organizing committee for XVI National Conference of Indian association of Social Psychiatry, Dept of Psychiatry

Convenor for the workshop on Lactation Management conference of ISOPARB, AIIMS, New Delhi

She was Expert member for Technical resource group on HRD for Technical support for capacity building and HR planning and Development. NACO-Phase III.

Development of National maternal health policy, Govt. of India, Ministry of Health and Family Welfare, Maternal Health Division.

Revision of MTP act, Ministry of Health and Family Welfare, Govt. of India

Strengthening of Pre-service education of ANM, GNM as Skilled Birth Attendant, INC.

Technical meeting on strengthening nursing and midwifery programmes to support NRHM, INC

Teaching modules for ANM school teachers for midwifery INC

Skilled birth attendant modules and teaching –INC and CEDPA

Indian Association of Neonatal Nurses (IANN) president and executive Committee member

Regional advocacy workshop on Tobacco control law and measures” PGI Chandigarh of Health and Family Welfare, Govt. of India Tobacco Cessation centre, PGI Chandigarh

Review meeting on Pre service IMNCI for NIPI states LHMC/WHO

Commonwealth steering committee for nursing and midwifery in SE asia region Workshop on HR issues for nursing and Midwifery including HIV/AIDS implications and presentation proposal writing and influencing skills

Expert group meeting on community and home based newborn care – finalization of and strategy modules NIHFW and UNOPS

Invited as Chief Guest for ENBC training for teachers in Haryana state at MM College of nursing, Mullana Ambala

Dr Manju Vatsa, Principal and Dr Sandhya Gupta, Lecturer continue to be on review panel of *Indian Journal of Nursing and midwifery*

Dr Manju Vatsa , Principal and Ms Sandhya Gupta, Ms R. Andrews and Ms Deepika C.Khakha, Lecturers participated as expert for

Development of “training manual for nurses for trainers and nursing personnel in HIV/AIDS” organized by the Indian Nursing Council, and NACO

Two days orientation training program for trainers for HIV modules organized by the Indian Nursing Council under GFATM project.

Dr S Gupta is nominated as:

Chief editor of Indian Society of Psychiatric Nurses

Joint-organizing secretary for International conference of Indian society of Psychiatric Nursing to be held in 2009 at Bangalore.

Member of Editorial Board: International Journal of Nursing Education

Member Expert group of NACO on HIV/AIDS for IDUs, Govt of India

Member Education committee, Indian nursing Council

Member of technical committee, Indian Standard's Institute

Was organizing secretary for National workshop on teaching and learning methods for health professions" organized by CMET, AIIMS in Nov. 2008.

Expert group member of committee on geriatric care homes in India by Helpage India

Participated as expert for revision of syllabus of 'Nursing management of Substance Use Disorders for Paramedical staff, NDDTC, AIIMS .

Organized National workshop on teaching and learning methods for health professions" organized by CMET, AIIMS in Nov. 2008.

Facilitator for workshops on 'standards for old age homes' and 'standards for long term care' for the Conference Proceedings of international conference of Gerontology, organized by Indian geriatric society, held in Delhi in February, 2009

Ms Rachel Andrews

Was trainer for HIV/AIDS TOT under the GMFT project at con AIIMS and Kolkata

Coordinator for HIV/AIDS course for the NACO in training of nursing personnel working in ART centers

Was expert committee member for developing evaluation tools for the critical care specialty training for nurses organized by booc.

Worked as counsellor for IGNOU Post basic BSc nursing 2nd year students in Medical Surgical Nursing course (24 hours)

Ms Rachel Andrews, Ms Deepika Khakha, and Ms Kamlesh Sharma attended workshop for "Medical Teachers on Research Methodology Improving Quality of PG theses held at Department of Paediatrics, AIIMS.

Ms Deepika Khakha was

Co-ordinator for Asian Congress of Urology, Nursing Workshop, 3-4 October, 08.

Resource Person for Sessions for NACO Training in HIV Counselling for Paramedical Staff of Central Paramilitary Forces Medical Services organized by Jamia Milia Islamia University, October 2008

Ms Kamlesh Sharma, Lecturer, was resource person for

Training of trainers workshop on “Breast self examination” for CGHS doctors from Delhi , AIIMS, May 2008.

One day workshops on Kangaroo Mother Care (KMC) at Sir Ganga Ram Hospital and Chacha Nehru Hospital in Delhi, November 2008.

KMC practices session in “Lactation management and KMC workshop” ISOPARB conference, March 2009.

For development of training module on Midwifery, organized by INC

Subcommittee member (DNC) to develop ANM practical records and question bank, December, 2008.

Ms K.Sharma, S. Mawar, A. Qureshi, G. Razdan, P. Thomas attended Master trainer training programme on HIV/AIDS for nurses organized by CON AIIMS, under INC- GFATM project

Ms Kiran Singh is continuing as programme officer of NSS Unit, AIIMS.

Dr M.Vatsa, Principal and other faculty members participated as resource persons/committee Members for the following organizations:

- Various committees at AIIMS
- Indian Nursing Council: General Body, Executive Committee and Education committee
- Baba Farid University of Health Sciences Faculty of Nursing:
- Ministry of Health and Family Welfare, Government of India
- R.A.K College of Nursing, external lecturers selection committee
- CMET- AIIMS adjunct faculty
- Punjab University , Chandigarh: Board of Studies in Nursing
- NEIGRIHMS Shillong – NIMHANS – Selection Committee
- Indira Gandhi National Open University: Core/expert group member
- Trained Nurses’ Association of India
- *Indian Journal of Nursing and Midwifery*: Review Committee
- G.G.S. Indraprastha University – Institutional Assessment committee
- Indian Academy of Hospital Administration
- I.P. University: Inspections, College of Nursing of Batra Hospital and St. Stephen Hospital, Safdarjang and RML Hospitals
- NIPI
- Jamia Milia Islamia University

Faculty members of the College participated in conduct of inspections and examinations in various colleges of nursing and universities in India.

CLINICAL AND COMMUNITY SERVICES

The faculty and students participated in outdoor and indoor patient-care activities of all the departments of the institute. They organized and conducted 6 rounds of Pulse Polio programme at 2 centers of South Delhi, organized by Government of NCT of Delhi.

Ms Kiran Singh coordinated and supervised the programme.

- Hundred health education sessions in rural areas and 100 in urban slums and OPDs on various health issues such as B.P. Immunization, New born care, PNC Care etc.
- ‘Prevention of Substance abuse’, a community awareness camp was held in Kalyanpuri .
- One month Training programme on “Life skills” for Street children and school drop-outs in Trilok puri
- An educational programme for patients recovering from Substance Use disorder, taking treatment from Trilok puri treatment centre.
- Street plays (10) and exhibitions on various health related topics for urban slums.
- Prevention of obesity, HIV/AIDS substance abuse, prevention of female feticide.
- Newborn week was celebrated in November 2009. 100 women participated in Breastfeeding promotion programmes in urban and rural community at Ballabgarh.

PUBLICATIONS

Arora S, Vatsa M, Dadhwal V. A study to compare cabbage vs hot and compresses in treatment of breast engorgement. *Indian Journal of Community medicine* (serial online) 2008. Cited 2008 July 24;33;160-2, available from <http://www/ijcm.org.in/test.asp?2008/33/3/160/42053>.

Subhashini L, Vatsa M, Lodha R. Knowledge attitude and practices among health care professionals regarding pain in children. *Indian Journal of Paediatrics* 2008.

Subhashini L, Vatsa M, Lodha R. Comparison of two pain scales in Indian children. *The Indian Journal of Paediatrics*, 2008. PMID: 18568301 [PubMed].

Oommen A, Vatsa M, Paul V. Breastfeeding practices of urban and rural mothers in North India: A longitudinal study. *Indian Pediatrics*, accepted 2009.

Nyamathi A, Vatsa M, Khakha DC, Smith DM, Leake B, Fahey JL. HIV knowledge improvement among nurses in India: Using a train the trainer program. *JANC (Journal of the Association of Nurses in AIDS care)* 2008; Vol. 19, No. 6.

Sreeja I, Gupta S, Lal R, Singh MB. Comparison of burden between family caregivers of patients having schizophrenia and epilepsy. *The internet Journal of Epidemiology* 2009, ISSN:1540-2614.

Gupta S. Investigation into the quality of life of institutionalized older persons. Papers published in Conference Proceedings of international conference of Gerontology, organized by Indian geriatric society, held in Delhi in February, 2009.

Gupta S. Training need of formal and informal caregivers of older persons. Papers published in Conference Proceedings of international conference of Gerontology, organized by Indian geriatric society, held in Delhi in February, 2009.

Gupta S. Role of nurse in psychosocial rehabilitation. Papers published in Conference Proceedings of international conference of Social Psychiatry by Indian society of social psychiatry, held in Delhi in November, 2008.

Gupta S. Investigation into the quality of life of parents of mentally challenged children. Proceedings of The Richmond Fellowship and Asia Pacific Forum Conference: Psychosocial Rehabilitation Across Cultures organized by Richmond society, held in Bangalore in November, 2008.

Khakha DC. Adherence is key to HIV treatment. *The Nursing Journal of India*. 2008, Vol. XCIX, 6:125-127.

Sabitha PB, Khakha DC, Aggarwal M, Mahajan S, Gupta S, Yadav SL. Effect of cryotherapy on arteriovenous fistula puncture related pain in hemodialysis patient. *India Journal of Nephrology* 2008;**18**:155-158.

Vatsa M, Gupta S, Khakha DC, *et al.* HIV/AIDS and ART training for nurse-facilitator's guide and nurses manual published by NACO and INC, 2008.

Razdan G. Project Literacy initiative for Empowerment (LIFE) by UNESCO and NIOS (National Open School). The module literacy for safe motherhood.

Mawar S. A comparative study to assess the quality of life of patients with ESRD on two different dialysis modalities and to identify factors associated with the quality of life. *Indian Journal of Nursing*, May, 2008, P107.

Thomas P. Indian Nurses: seeking new shores. In: Connell J (ed). *The international Migration of Health workers*. New York: Routledge 2008.

AWARDS AND HONOURS

Principal, Dr Manju Vatsa is Nominated member, faculty of nursing, Baba Farid University of Health Sciences, Faridkot, Punjab.

Mrs M Aggarwal, lecturer is selected for 'Dr Sehgal oration award' by the Society of Indian Neuro Science Nursing.

Dr S Gupta is Awarded PhD in August 2008 in old age care by Panjab University.

Dr S Gupta has been nominated as a Member of Board of studies, Punjab University, Chandigarh.

8. Research Section

The mandate of the All India Institute of Medical Sciences makes research an important and integral part of the activities of the faculty. AIIMS has been at the forefront of conducting high quality research, both in the fields of basic and applied health sciences. During the year under review, the faculty of AIIMS had 381 ongoing projects and initiated 110 new projects from national and international agencies amounting to nearly Rs 58.7 crore.

This section deals with the administration of all the extramural research conducted at AIIMS. The Research Committee constituted by the Director is as follows:

From 1 April 2008 to 7 July 2008

1. Professor R.C. Deka, Dean (Academic)	Chairperson
2. Dr P.P. Kotwal, Professor of Orthopaedics and Professor-in-Charge (Research Section)	Vice-Chairperson
3. Dr Sunil Chumber, Sub-Dean (Academic)	Member
4. Dr A.K. Dinda, Sub-Dean (Exam)	Member
5. Deputy Director (Administration)	Member
6. Dr G.K. Rath, Professor and Head of Radiotherapy Chief, IRCH	Member
7. Dr N.K. Mehra, Professor and Head of T.I.I.	Member
8. Dr S.K. Panda, Professor and Head of Pathology	Member
9. Dr N.R. Jagannathan, Professor and Head of NMR	Member
10. Dr A. Malhotra, Professor and Head of Nuclear Medicine	Member
11. Dr Subrata Sinha, Professor and Head of Biochemistry	Member
12. Dr V.K. Bahl, Professor and Head of Cardiology	Member
13. Dr R.M. Pandey, Professor and Head of Biostatistics	Member
14. Dr Kameshwar Prasad, Professor of Neurology	Member
15. Dr S.P. Garg, Professor of Ophthalmology	Member
16. Dr Shobha Broor, Professor of Microbiology	Member
17. Dr R. Guleria, Professor of Medicine	Member
18. Dr J.S. Tyagi, Professor of Biotechnology	Member
19. Dr Nikhil Tandon, Professor of Endocrinology and Metabolism	Member
20. A Representative of the Indian Council of Medical Research (ICMR) nominated by Director General, ICMR	Member
21. Financial Adviser	Member
22. Sh. S.P. Mahla,	Member
23. Sh. K.C. Chhoker, Finance and Chief Accounts Officer (Research Section) Senior Administrative Officer (Research)	Member-Secretary
24. A Representative of Society of Young Scientists	Member

From 8 July 2008 to 31 March 2009

1. Professor R.C. Deka, Dean (Academic)	Chairperson
2. Dr N.R. Jagannathan, Professor and Head of Nuclear Magnetic Resonance	Member
3. Dr S.S. Chauhan, Professor of Biochemistry	Member
4. Dr Rama Chaudhary, Professor of Microbiology	Member
5. Dr Y.D. Sharma, Professor and Head of Biotechnology	Member
6. Dr Y.K. Gupta, Professor and Head of Pharmacology	Member
7. Dr R. Handa, Professor of Medicine	Member
8. Dr C.S. Bal, Professor of Nuclear Medicine	Member
9. Dr S.K. Aggarwal, Additional Professor of Nephrology	Member
10. Dr G.V.S. Murthy, Additional Professor of Community Medicine	Member
11. Dr Sunil Chumber, Sub-Dean (Academic)	Member
12. Dr D.K. Mitra, Associate Professor of T.I.I.	Member
13. Dr A.K. Dinda, Additional Professor of Pathology	Member
14. Dr S. Bhatnagar, Scientist-III, Department of Paediatrics	Member
15. Dr A.B. Dey, Professor of Medicine and Professor-in-Charge (Research Section)	Member-Secretary

Ongoing projects funded by Indian agencies

Investigator	Project	Funding agency	Funds (Rs)
Anatomy			
Rima Dada	Analysis of mitochondrial DNA mutations in pathogenesis of spermatogenic arrest.	ICMR	6,45,087
Shashi Wadhwa	Regional electron microscope facility	DST	16,29,020
Shashi Wadhwa	Influence of prenatal auditory stimulation on the development of synaptic proteins brain derived neurotrophic growth factor and spatial memory in chick hippocampus	DBT	7,35,003
T.S. Roy	Prenatal development and maturation of human inferior colliculus	DST	4,64,062

Biochemistry			
D.N. Rao	To evaluate the correlation between levels of cytokines (IL-6,IL-8,IL-10) in seminal plasma in different groups of infertile men and correlation with sperm morphology functions and bacteria infection in semen	ICMR	2,28,238
D.N. Rao	Immunocapture based diagnostic assay for the detection of <i>Plasmodium falciparum</i> HRP-2 and LDH antigen	ICMR	4,58,400
D.N. Rao	Development defensin(s) as a mucosal adjuvant/ imicrobicife with peptide antigens of HIV	ICMR	2,02,523
D.N. Rao	Immunocapture based diagnostic assay for the detection of plasmodium falciparum HRP-2 and LDH antigen	ICMR	2,17,707
D.N. Rao	T Reg cells and other negative regulatory elements of IL-2 in leprosy patients	ICMR	7,55,356
D.N. Rao	Development Defensin(s) as a mucosal adjuvant/ imicrobicife with peptide antigens of HIV	DBT	5,32,497
D.N. Rao	Programme for productization of diagnostics and development of prophylactics for neglected infectious diseases with filariasis as a model	DBT	5,52,301
Kalpana Luthra	Differential cell response of goat granulose cell to LH or hCG stress in cell culture system. To analyze the signal transduction pathway in the two	ICMR	1,50,025
Kalpana Luthra	Genetic polymorphism of cholesterol ester transfer protein in hyperlipidemic patients. A case control study	ICMR	4,76,528
Kalpana Luthra	SDF-1 and DC-SIGNR polymorphisms and expression in HIV-1 infection	ICMR	5,70,945
M.R. Rajeswari	Neurological disorders Friedreich's ataxia (FRDA) and spinocerebellar ataxia (SCA) associated with DNA trinucleotide repeats; Identification and Development of protein biomarkers and circulating DNA for clinical diagnosis	ICMR	6,16,601
N.C. Chandra	Studies on SREBP- mediated regulation of low-density lipoprotein receptor (LDLR), low -density lipoprotein receptor-related protein (LRP) and receptor-associated protein (RAP)	DST	6,90,780

N.C. Chandra	An <i>in vitro</i> model study of hyperlipoproteinemia on the degree of LDL receptor expression in placental trophoblast cells: Correlation with oral steroid contraceptive induced hyperlipoproteinemia	ICMR	5,28,088
N.C. Chandra	An <i>in vitro</i> silencing of endogenous oxidized-LDL-receptor(LOX-I)gene by SiRNA: Study of NF-KB activated expression of proinflammatory cytokines and related atherogenic proteins-its evaluation against anti-inflammatory cytokine mediated responses	DBT	11,50,636
Neeta Singh	Mitochondria in apoptosis and human cancer	ICMR	2,45,574
Neeta Singh	A study of molecular and biological factors in pathogenesis of ovarian cancer	ICMR	4,60,969
Neeta Singh	Development of HPV vaccine prototype	DBT	5,82,566
Nibhriti Das	Expression and modulation of complement receptors: Significance in the pathophysiology and prognosis of autoimmune disorders	CSIR	4,49,112
Nibhriti Das	Evaluation of the role of free radical homeostasis cell adhesion molecules, nitric oxide, HDL and associated gene polymorphisms in relation to the risk and severity of coronary artery disease	ICMR	6,15,422
Parthaprasad Chattopadhyay	Hypoxia and CPG island methylation of selected loci in tumor cell genome: Modulation of methylation and subsequent effects on cell proliferation and chemotherapeutic response	ICMR	3,57,663
S.S. Chauhan	Characterization of the positive regulatory region of the first exon of human cathepsin L gene	DST	3,32,608
S.S. Chauhan	Mechanism(s) of regulation of human dipeptide peptidase-III expression in tumor cell lines	DRDO	29,28,954
Subrata Sinha	Interaction of DNA repair genes and p53 in determining the cellular response to genotoxic agents in glial tumor cell-lines.	DST	2,40,949
Subrata Sinha	Funds for improvement of S&T infrastructure (FIST)	DST	24,29,634
Subrata Sinha	Deregulated initiation of translation in oral carcinogenesis	DST	3,20,568
Subrata Sinha	Generation and characterization of phage displayed recombinant antibodies to biochemically and immunologically relevant epitopes of the oncodevelopmental antigen heat stable alkaline phosphatase	ICMR	4,65,590

Subrata Sinha	Ligand based selection from combinatorial libraries for generating recombinant antibodies to the placental (oncofetal) isozyme of alkaline phosphatase: Characterization and validation in clinical cancers	DBT	4,80,125
Subrata Sinha	Therapy of infectious and chronic diseases. Targeted gene delivery and long-term specific modulation of gene expression	DBT	23,04,730
Biomedical Engineering Unit			
J.C. Bhardwaj	Reversibility of injectable intravascular contraceptive for the male technology development and multicentric non human primates study	MOHFW	2,56,029
J.C. Bhardwaj	Study of fallopian tube function with luminal implant	Markansas Research Division	1,54,919
J.C. Bhardwaj	Evaluation of vaginal microbial flora and sperms after styrene maleic anhydride (SMA) application	IIT	2,28,920
Sneh Anand	Analysis of autonomic nervous system correlates and health of rhythmic breathing techniques	MOHFW	12,80,185
Biophysics			
A. Srinivasan	Infrastructural support for clinical proteomics	DBT	3,60,989
A. Srinivasan	Proteomics of human body fluids: Structural characterization of proteins and target identifications for diagnosis and drug discovery	DBT	7,26,805
Krishna Dalal	A randomized clinical trial on the effect of reflexology in the management of patients suffering from diabetic neuropathy: Case studies	ICMR	8,05,831
Krishna Dalal	Randomized clinical trial (RCT) of reflexology therapy and usual drug treatment in the management of intractable epilepsy	CCRYN	3,50,061
Punit Kaur	Three-dimensional structure determination of the novel mammalian signaling proteins SPX-40 secreted during involution and their complexes with various oligosaccharides and designed oligopeptides	DST	4,41,350
Punit Kaur	Setting up bioinformatics centres at AIIMS, New Delhi	ICMR	13,88,956
Sharmistha Dey	Structure based rational drug design: Development of specific anti-inflammatory agents using phospholipase A2 and cyclooxygenase-2 as target enzymes	CSIR	3,98,200

Sharmistha Dey	Design synthesis and evaluation of inhibitors of Lipooxygenase a anti-inflammatory agents	DST	5,19,467
Sujata Sharma	Structural studies of signaling proteins expressed during involution/breast cancer and ligand design	DST	8,70,571
Sujata Sharma	Determination of amino acid sequence and three-dimensional structure of phospholipase A2 from Indian red scorpion	DST	0
Sujata Sharma	Isolation and three dimensional structure determination of the novel signaling protein SPX-40 from memory gland secretion during involution	DST	5,21,221
Sujata Sharma	Clinical proteomics: Structural and functional studies of proteins present in pleural fluid	DST	3,56,489
T. P. Singh	Distinguished Biotechnologist award	DBT	3,88,733
Biostatistics			
R. M. Pandey	Development of appropriate prevention and intervention strategies for non-communicable nutrition related disorders among women in post-reproductive period	DST	2,03,074
R. M. Pandey	New born screening for congenital hypothyroidism and congenital adrenal hyperplasia: A multicentric study	ICMR	2,83,958
V. Sreenivas	A multicentric randomized controlled clinical trial of lamivudine, lamivudine and adefovir, glycyrrhizin and adefovir in HBV related decompensated cirrhosis	ICMR	2,72,300
Biotechnology			
Anushree Gupta	Polymorphisms in genes of the endothelin system in patients undergoing coronary artery bypass grafting surgery and having a concomitant diagnosis for diabetes	ICMR	10,47,720
H. K. Prasad	Functional characterization of RV2986c, a DNA binding protein of <i>Mycobacterium tuberculosis</i>	DST	6,08,906
H. K. Prasad	Study of transmission of livestock derived pathogenic mycobacteria and its prevalence among humans (zoonotic tuberculosis)	DBT	4,99,364
H. K. Prasad	Development of vaccine for control of bovine tuberculosis	DBT	64,438
H. K. Prasad	Molecular switch in Th1-Th2 response by SMAR1: Its implications in <i>Mycobacterium</i> infection	DBT	5,18,343

J.S. Tyagi	Fast Track Proposal: Pharmacophore-based screening of compounds targeting DevR response regulator and assesment of their anti- <i>Mycobacterium tuberculosis</i> activity	DST	7,17,500
J.S. Tyagi	Evaluation of devRmutant of <i>Mycobacterium tuberculosis</i> in animal model of tuberculosis and in cultured bacilli: Virulence and gene expression analysis	DBT	2,82,380
J.S. Tyagi	High throughput PCR assays for diagnosiing tubercluisis caused by <i>Mycobacterium tuberculosis</i> and <i>Mycobactorium bovis</i> using molecular beacons	DBT	2,35,495
J.S. Tyagi	Reconstructing cellular network: Two-component regulatory systems	DBT	38,50,223
Satya N. Das	Studies of FAC (CD95) and FAS ligand (CD95L) gene polymorphisms and their association with tobacco related oral carcinomas	ICMR	1,82,304
Satya N. Das	Development and characterization of autologous NKT cell vaccine for active specific immunotherapy of oral squamous cell carcinoma	DBT	6,46,213
Cardiac Anaesthesiology			
Poonam Malhotra Kapoor	Myocardial preconditioning against infarction in patients undergoing coronary artery bypass surgery: A comparision of isoflurane and sevoflurane	ICMR	15,478
Cardiac Biochemistry			
R. Lakshmy	Evaluation of HDL2, HDL3 and apolipoprotein A 1 levels in a large Indian industrial population: Association with genetic variants in CETP, LCAT, hepatic lipase and LPL gene	DST	19,47,031
R. Lakshmy	Relation of candidate gene variants regulating triglyceride metabolism to serial changes in childhood body mass index and coronary artery disease risk factors in young adulthood	ICMR	12,04,414
R. Lakshmy	Low dose magnesium sulphate regimen for management of eclampsia: A randomized controlled trial	ICMR	2,34,938
R. Lakshmy	Circulating endothelial progenitor cells in CAD patients: Role of telomere length and telomerase activity in EPC senescence	DBT	14,84,920
Cardiac Radiology			
Gurpreet Gulati	MRI for <i>in vivo</i> tracking iron oxide labeled mesenchymal stem cells in a rat model of heart failure	DBT	13,25,000

Cardiology			
Balram Bhargava	Stanford India Biodesign Programme	DBT	1,29,25,124
Balram Bhargava	Cardiovascular product evaluation support service for industry	DBT	51,54,580
Balram Bhargava	Biodesign in medicine	DBT	5,60,350
G. Karthikeyan	Non-invasive detection of sub-clinical disease activity inpatients with established rheumatic valvular heart disease	DBT	6,50,215
R. Juneja	Intravascular ultrasound for severe pulmonary artery hypertension in congenital heart diseases	DST	7,30,839
V. K. Bahl	Clinical validation of a low cost telemedicine equipment at a tertiary care hospital	N. C. Pvt Ltd	2,00,000
Cardiothoracic and Vascular Surgery			
Balram Airan	Establishment of Centre for Stem Cell Research: Basic and Translational	DBT	717,50,000
Balram Airan	Surgical treatment for ischemic heart (STICH) failure trial	CLINIRx Research Pvt Ltd, Gurgaon	12,49,008
Balram Airan	Use of autologous bone marrow stem cells for myocardium regeneration	DBT	9,27,342
Centre for Dental Education and Research			
Veena Jain	To develop indigenous bite force measuring appliance and to test in patients with different clinical conditions	DBT	246,683
O. P. Kharbanda	Development of visual analog scale for smile characteristics following orthodontic treatment and its correlation with the treatment outcome	ICMR	287,734
Centre for Behavioural Sciences (Psychiatry)			
Manju Mehta	National mental health programme	MOHFW	103,155
Pratap Sharan	A study of the effects of LY: A selective norepinephrine reuptake inhibitor (NERI), in treatment of major depression. Protocol H9pMC-Linbd.	Ranbaxy/ EliLilly Pvt Ltd	220,278
Rajesh Sagar	Efficacy and safety of a Gomeiatine (25Mg/day with potential adjustment at 50 mg/day with potential adjustment at 50 mg/day given orally compared to placebo in addition to a mood stablizer in bipolarri patients with a current major depressive episode	Quintiles Spectral India	800,146

Centre for Community Medicine			
K. Anand	Development of a model for integrated management of non-communicable diseases through existing health system in India	ICMR	932,415
K. Anand	NCD Risk Factor Surveillance under Integrated Diseases Surveillance project	ICMR	193,124
Puneet Mishra	Development of appropriate prevention and intervention strategies for non-communicable nutrition related disorders among women in post-reproductive period	DST	54,477
Centre for Dental Education and Research			
Ajoy Roychoudhry	A randomized double blind placebo controlled study of efficacy of lactobacillus CD2 lozenge in patients with chronic periodontitis	CD Pharma India Pvt Ltd	358,752
Ritu Duggal	Detection of apoptosis in human periodontal ligament during orthodontic tooth movement	ICMR	200,666
Dermatology and Venereology			
K. K. Verma	Randomized clinical trial of azathioprine weekly pulse versus daily azathioprine for the treatment of parthenium dermatitis	ICMR	480,959
Neena Khanna	A phase II, double blinded, randomized placebo controlled non-inferiority trial of Epi Cept TM NP-1 topical cream (Amitriptyline 4% Ketamine 2%) vs. oral Gabapentin in post-herpetic neuralgia (PHN)	Apothecaries Ltd	291,058
V. K. Sharma	Evaluation of cyclophosphamide pulse therapy as adjuvant in the management of pemphigus	ICMR	415,368
V. K. Sharma	Programme support for skin pigmentation and melanocyte-keratinocyte biology	DBT	717,000
Dr B. R. Ambedkar Institute–Rotary Cancer Hospital			
Ritu Gupta	SERC FAST TRACK Scheme: Immunophenotypic characterization of plasma cells by flowcytometry in health and disease with particular reference to plasma cell myeloma	DST	21,621
Ritu Gupta	Regulatory T cells repertoire in plasma cell myeloma	DBT	483,889
Atul Sharma	A randomized double blind study of efficacy of lactobacillus CD2 lozenges in preventing radiation and chemotherapy induced oral mucositis in head and neck	CD Pharma India Pvt Ltd	453,477

B. K. Mohanti	Patterns of care and survival studies in Cancer Registry Programme	ICMR	508,041
G. K. Rath	A randomized controlled comparative trial to evaluate the efficacy and safety of 2-Deoxy-D-Glucose(2DG) as a radiomodifier in the treatment of Glioblastoma multiforme	Dr Reddy's Lab Pvt Ltd	88,630
Lalit Kumar	Expansion of adult human bone marrow and cord blood stem cells for reprogramming into hepatocytes	ICMR	913,801
Lalit Kumar	Neoadjuvant chemotherapy followed by interval debulking surgery versus upfront surgery followed by chemotherapy in stage III and stage IV epithelial ovarian carcinoma	ICMR	387,553
Lalit Kumar	<i>In vitro</i> expansion and establishment of human fetal liver hematopoietic stem cell line	DBT	1,821,748
Lalit Kumar	Grastim (G-CSF) mobilized peripheral blood progenitor cell (PBPC) transplantation (allogeneic or autologous): A multicentric study	Dr Reddy's Lab Pvt Ltd	417,484
Lalit Kumar	Combination of P53, EGFR status and tumor grading in determining the outcome of early epithelial ovarian cancers	DBT	19,503
Lalit Kumar	To study the molecular biology of multiple myeloma.	DBT	229,040
Lalit Kumar	Endothelial progenitor cells as biomarker of disease activity in multiple myeloma	DBT	360,050
Lalit Kumar	A study of the prevalence and type of anaemia in lymphoid malignancies	Global Cancer Concern India	58,200
N. K. Shukla	Characterization and functional analysis of differentially expressed genes in esophageal cancer	DST	389,811
P. K. Julka	A phase III trial of ALIMTA vs. docetaxel in patients with locally advanced or metastatic non-small cell lung cancer	Ranbaxy/ Eli Lilly Pvt Ltd	660,484
P. K. Julka	A randomised, double-blind, parallel-group, multi-centre, phase III study comparing the efficacy and tolerability of fulvestrant (FASLODEX) 500 mg with fulvestrant (FASLODEX) 250 mg in postmenopausal women with oestrogen receptor positive advanced breast cancer progressing or relapsing after previous endocrine therapy	Quintiles Spectral India	101,910
P. K. Julka	An open label randomized multi-centre phase III study of trastuzumab in combination with a fluoropyrimidine and cisplatin versus chemotherapy alone as first-line therapy in patients with HER2 positive advanced gastric cancer	Siro Clin Pharma Pvt Ltd	49,366

P. K. Julka	A randomized double blind placebo controlled multi-centre phase 3 study of denosumab on prolonging bone metastasis free survival in men with hormone refractory prostate cancer	Quintiles Spectral India	398,506
V. Raina	Antioxidants as adjunct to chemotherapy of lung cancer: <i>In vitro</i> study	Dr Reddy's Lab Pvt Ltd	40,897
V. Raina	A treatment protocol for patients with gastrointestinal stromal tumor who are ineligible for participation in other SU011248 protocols and are refractory to or intolerant of imatinib mesylate	Pfizer Ltd	504,855
V. Raina	An ascending dose, sequential group, placebo-controlled, multicenter, phase I study of RWJ 800088 in subject with cancer receiving platinum-based chemotherapy regimens protocol 800088-NAP-1002: Phase I	Johnson & Johnson	584,516
V. Raina	A SU011248 expanded access protocol for systemic therapy of patients with metastatic renal cell carcinoma who are ineligible for participation in other SU011248 protocol but may derive benefit from the treatment with Su011248	Pfizer Ltd	482,485
V. Raina	A randomized double blind multicentre placebo controlled study of adjuvant lapatinib in women with early stage Erb B2 overexpressing breast cancer EGF105485	GlaxoSmith Kline Asia Pvt Ltd	1,609,816
V. Raina	Randomized phase 3 trial of ALIMTA (Pemetrexed and Carboplatin) versus Etoposide and Carboplatin in extensive stage small cell lung cancer	Ranbaxy/ EliLilly Pvt Ltd	207,764
Sameer Bakhshi	An open label multicentric study to assess the efficacy and safety of pegylated recombinant human granulocyte colony stimulating factor (pegfilgastrin) injections in patients undergoing myelosuppressive chemotherapy	Cadila Healthcare	468,295
Sameer Bakhshi	An open label multicentric study to assess the efficacy and safety of recombinant human granulocyte colony stimulating factor (filgastrim) injections in patients undergoing myelosuppressive chemotherapy	Cadila Healthcare	302,104
Dr R. P. Centre for Ophthalmic Sciences			
Gita Satpathy	Evaluation of polymerase chain reaction assay for detection of HSV genome in tear specimens as a rapid diagnostic tool for laboratory diagnosis of HSV keratitis particlary stromal keratitis and atypical epithelial keratitis vis antigen detection and genomic DNA detection by PCR assay in corneal scrapings	ICMR	578,667

Radhika Tandon	Ocular surface reconstruction with alternative autografts of non-ocular origin	DST	349,409
Radhika Tandon	Development of a potential bio-polymer to serve as an alternative substrate of human amniotic membrane for <i>ex vivo</i> expansion of corneal epithelial stem cells	DBT	1,298,000
Rohit Saxena	Study on the prevalence, therapeutic option and outcome measures of amblyopia	DST	258,616
T. Velpandian	Evaluation of the biodisposition of Xanthophylls in Indian donor eyes and detection of their content in commonly available fruits and vegetables	DST	11,567
T. Velpandian	Evaluation of characterization of colours and documentation of their ocular toxicity in the northern States of India during the festival of colours (Holi)	DST	198,125
T. Velpandian	Development of topical ocular formulation of calcium dobesilate and evaluation of its formulation characteristics	Ozone Pharma Ltd	273,792
T. Velpandian	Development of novel water-soluble isoflavone derivatives using in-silico approach and determination of its ocular pharmacological activity in experimental model of post-menopausal dry eye	DBT	1,271,485
Tanuj Dada	Mutation analysis in congenital and developmental glaucoma in North Indian population	DBT	782,745
Endocrinology and Metabolism			
A. C. Ammini	Comparison of efficacy of metformin and spironolactone in the management of polycystic ovarian syndrome	ICMR	276,258
A. C. Ammini	Demographic and clinical profile of young diabetics in a tertiary care hospital in north India	ICMR	302,995
A. C. Ammini	Postmenopausal evaluation and risk-reduction with lasofoxifene (Pearl)	Pfizer Ltd.	107,662
A. C. Ammini	Effects of arzoxifene on vertebral fracture incidence and on invasive breast cancer incidence in postmenopausal woman with osteoporosis or with low bone density	Quintiles Spectral India	1,196,991
A. C. Ammini	A phase 2B long-term randomized, open-label safety and tolerability trial comparing (S.S.) reboxetine (PNU-165442G) with routine care in patients with chronic painful diabetic peripheral neuropathy (DPN)	Pfizer Ltd	150,030
Nikhil Tandon	Registry of people with diabetes in India with young age at onset	ICMR	1,249,965

Nikhil Tandon	A randomized, double-blind, placebo-controlled, parallel group study to determine whether, in patients with type 2 diabetes at high risk for cardiovascular and renal events, aliskiren, on top of conventional treatment, reduces cardiovascular and renal morbidity and mortality	Novartis India Ltd	1,446,043
Nikhil Tandon	A phase 3 open label parallel group study to evaluate the efficacy and safety of human insulin inhalation powder (HILP) compared to preprandial injectable insulin in insulin-naive patients with type 2 diabetes mellitus	Ranbaxy/ EliLilly Pvt Ltd	-13,753
Nikhil Tandon	A phase 3 open label, parallel group study, to evaluate the efficacy of preprandial human insulin inhalation powder (HIP) compared to preprandial injectable insulin in patients with type I diabetes mellitus	Ranbaxy/ EliLilly Pvt Ltd	345,491
Nikhil Tandon	A phase III randomized placebo controlled clinical trial to study the safety and efficacy of Mko 364 in overweight and obese patients with type 2 Diabetes mellitus (T2DM)	Neeman Medical International Asia Ltd	261,355
Nikhil Tandon	Novel antigen diabetic agent evaluation study	Reliance Clinical Research Services	325,940
Nikhil Tandon	Effect of glycemic control of once daily administration lieaglutide in combination with metformin versus glimepiride in combination with metformin in subjects with type 2 diabetes: A 16 week randomized double blind double dummy, active control 4 armed parallel group multicentre multinational trial	Nova Nordisk India	225,651
Rajesh Khadgawat	Correlation between first trimester glucose screening and serum insulin levels with development of gestational diabetes mellitus in pregnancy	ICMR	390,516
Ravinder Goswami	Prevalence and significance of celiac disease in patients with type 1 diabetes	ICMR	961,272
Ravinder Goswami	Pattern and significance of single nucleotide polymorphism at select sites in two important candidates genes, i.e. vitamin D receptor and parathormone genes in subjects with osteoporosis	DRDO	427,494
Ravinder Goswami	Role of oral vitamin D as an adjunct therapy in category I pulmonary tuberculosis along with assessment of immunological parameters (double-blind, randomized, placebo-controlled, clinical Trial)	DBT	1,004,490

ENT (Otorhinolaryngology)			
Alok Thakar	Phase II/III randomized placebo controlled clinical trial of curcumin in squamous head and neck cancers	DBT	1,917,075
Alok Thakar	Prevalence of hypothyroidism following treatment of head and neck cancer and its impact on quality of life	DST	563,610
R. C. Deka	Assessment of changes in the T, C levels, dynamic range and changes in the neural response telemetry in cochlear implant users: To evaluate possible electrical stimulation induced damage to the neural elements	ICMR	337,315
R. C. Deka	Efficacy of intratympanic dexamethasone in the management of tinnitus and its effect on improving quality of life: A clinical study	ICMR	196,616
Gastroenterology and Human Nutrition			
S. K. Acharya	FIST infrastructure in universities and higher educational institute	DST	-1,130,415
S. K. Acharya	Advanced center for liver diseases	ICMR	4,337,803
S. K. Acharya	A multicentric randomized controlled clinical trial of lamivudine and adefovir, glycyrrhizin and adefovir in HBV-related decompensated cirrhosis	ICMR	901,739
S. K. Acharya	An Open label response adaptive study of telbivudine in adults with HBeAg positive compensated chronic hepatitis B	Novartis India Ltd.	388,286
Govind Makharia	Detection of Mycobacterial pathogens in patients with Crohn's disease	DBT	960,983
Vineet Ahuja	A phase III, randomized, multicentre, double blind, parallel group, active comparator study to compare the efficacy and safety of SPD476 (measalazine) 2.4 g/day once daily (QD) with Asacol 1.6 g/day twice daily (BID) in the maintenance of remission in patient with ulcerative colitis	PPD Pharma Development India Pvt. Ltd	237,019
Vineet Ahuja	A randomized, double-blind controlled trial of the probiotic preparation VSL*3 for assessing clinical and histological response in patients with microscopic colitis	CD Pharma India Pvt Ltd	164,103
Vineet Ahuja	Evaluation of efficacy and tolerability of curcumin (NCB-2) enema in ulcerative colitis	Himalaya Drug Co.	309,807
Anoop Saraya	Role of enteral nutrition in preventing complications in severe acute pancreatitis in randomized control trial	ICMR	43,792

Anoop Saraya	Genetic basis of alcohol induced pancreatic disorders	ICMR	322,836
Pramod Garg	Is chronic pancreatitis a premalignant disease	ICMR	554,074
Umesh Kapil	Epidemiology of gallbladder cancer with special reference to nutritional risk factor	ICMR	362,061
Y. K. Joshi	Assessment of intestinal permeability in chronic liver disease and its consequences	ICMR	811,304
Gastrointestinal Surgery			
T. K. Chattopadhyay	Identification of novel esophageal squamous cell carcinoma genes by using a combination of array-based CGH and gene expression microarrays	DBT	826,895
Haematology			
Tulika Seth	Assesment of the effect of planned intervention on awareness, perception and attitude regarding common cancers in Delhi: A community based longitudinal study	The Cancer Foundation	381,705
Renu Saxena	Fund for improvement of S&T Infrastructure in University and Higher Educational Institutions (FIST)	DST	-345,597
Renu Saxena	Elucidation of molecular genetics of acute leukemia in India	ICMR	128,348
Renu Saxena	Evaluation of platelet receptor polymorphism in patients with coronary artery disease	ICMR	1,184,299
Renu Saxena	Thalassemia awareness and screening programme for detection of thalassemia trial	National Thalassemia Welfare Society	81,045
Renu Saxena	Organisation of ISHTM AIIMS external quality assurance programme	ISHTM	852,717
Laboratory Medicine			
A. K. Mukhopadhyay	Assessment of risk factor associated with Alzheimers's disease and vascular dementia	ICMR	835,995
M. Irshad	Cloning sequencing and expression of different genomic regions of transfusion transmitted virus (TTV) prevalent in Indian population	ICMR	1,151,506
Sarman Singh	Transmission of drug resistant hepatitis B virus in close family contracts of HBV-related chronic liver disease patients	DST	305,616
Sarman Singh	Identification of <i>Leishmania donovani</i> reservoir (S) in various animal species of endemic areas using species-specific antibodies and PCR technique	DST	919,160

Sarman Singh	Genotyping of <i>Mycobacterium tuberculosis</i> isolates from an endemic area of Delhi and determining their transmission dynamics in the house hold contacts and the community using molecular methods	ICMR	1383,535
Sarman Singh	Proteomic analysis of the <i>M. tuberculosis</i> during the stage of acquisition of resistance to the isoniazid and rifampicin	DBT	23,05,216
Sarman Singh	Developing a novel multiplex PCR assay for simultaneous detection and differentiation of hepatitis A and E, <i>Salmonella</i> spp. <i>Entamoeba histolytica</i> and <i>Giardia lamblia</i> directly from drinking water samples	DBT	17,53,732
Sarman Singh	A novel multiplex PCR assay for simultaneous detection and differentiation of <i>Mycobacterium tuberculosis</i> , <i>M. avium</i> complex and other <i>Mycobacterium</i> species directly from clinical samples from suspected tuberculosis cases	DBT	6,00,093
Medicine			
A. B. Dey	Development of a web-portal directed at welfare of older people	DST	15,00,000
A. B. Dey	Determinants of the functional status of the older Indian	ICMR	2,79,893
Anant Mohan	Study of the prevalence of respiratory virus infections in hospitalized patients with acute exacerbation of chronic obstructive pulmonary disease and their impact on morbidity and mortality	ICMR	4,75,607
Ashok Kumar	Methotrexate in Rheumatoid Arthritis: Pharmacogenetics and clinico-immunological correlates	DBT	2,91,737
G. C. Khilnani	Effect of outdoor and indoor air pollution in children's health in Delhi: A controlled study	Min. of Env. & Forest	8,91,269
Naval K. Vikram	Investigation of genetic basis and gene-lifestyle interactions in generalized and regional obesity, insulin resistance and diabetes in Asians	DBT	13,68,437
Randeep Guleria	Assessment of nutritional and antioxidant enzyme status in mechanically ventilated critically ill patients. Effect on mortality and strategies for improving nutritional support	DST	4,69,582
Randeep Guleria	Genetic, metabolic and hormonal profile in obstructive sleep apnea syndrome	DST	11,64,000
Randeep Guleria	Serum leptin, nutritional status and inflammatory markers in chronic obstructive pulmonary disease. Relationship with dyspnea and severity of disease	ICMR	603,689

Randeep Guleria	Clinical implications of circulating DNA and protein markers in lung cancer	ICMR	707,000
Randeep Guleria	Design and development of personal use respiratory device for patients with respiratory failure	Min. of Comm. and IT	586,632
Randeep Guleria	Double blind randomized placebo controlled trial of herbal compound MA-364 in patients with mild to moderate bronchial asthma	Maharishi Ayurveda	44,326
Randeep Guleria	Influenza awareness preparedness and response (IAPR): An Inclen, AIIMS, NIHFW program for physicians in India	INCLEN	906,000
Randeep Guleria	An interventional nutritional study in subjects with newly diagnosed active tuberculosis (TB)	GlaxoSmith Kline Asia Private Ltd	733,398
S. K. Sharma	Impact of HIV infection on latent TB among patients with HIV-TB co-infection	ICMR	316,675
S. K. Sharma	Antiretroviral treatment	MOHFW	1,680,612
S. K. Sharma	Treatment outcome and drug resistance among category II pulmonary tuberculosis under RNTCP	Delhi Tapedik Unmulan Samiti	190,012
S. K. Sharma	Efficacy of thrice weekly intermittent short course antituberculosis chemotherapy in tuberculosis patients with and without HIV infection	NACO	1,057,251
S. K. Sharma	Programme support for immuno-proteomics based diagnostics of infectious diseases	DBT	-1,117
S. K. Sharma	Incidence of deep venous thrombosis (DVT) among patients admitted in medical wards and intensive care unit (ICU) of a tertiary care hospital (A protocol study)	Pfizer Ltd	115,854
S. K. Sharma	A population based study of prevalence and risk factors in sleep disorders breathing in south Delhi	Pfizer Ltd	53,662
S. K. Sharma	Evaluation of the efficacy of thrice weekly DOTS regimen in TB pleural effusion at six months.	DGHS	640,634
S. K. Sharma	Efficacy of oral zinc administration as an adjunct therapy in category I pulmonary tuberculosis along with assessment of immunological parameters	DBT	572,510
S. K. Sharma	Role of oral vitamin D as an adjunct therapy in category I pulmonary tuberculosis along with assessment of immunological parameter (Double-blind, randomized, placebo-Controlled, clinical trial)	DBT	784,468
S. K. Sharma	Efficacy and safety of immunomodulator (<i>Mycobacterium w</i>) as an adjunct therapy in category I pulmonary tuberculosis along with assessment of immunological parameters	DBT	2,053,334

S. K. Sharma	Impact of HIV infection on latent TB among patients with HIV-TB co-infection	DBT	5,253,5401
S. K. Sharma	Survey on prevalence of tuberculosis	MOHFW	4,575,193
Sanjeev Sinha	Study of early versus delayed initiation of antiretroviral therapy for HIV infected patients with tuberculosis on antituberculosis chemotherapy in Indian subjects	NACO	1,221,041
Sanjeev Sinha	Study of prevalence and types of baseline HIV drug resistance in the antiretroviral treatment-naive and previously treated HIV infected Northern India population	NACO	2,031,425
Sanjeev Sinha	Nevirapine versus efavirenz based highly active antiretroviral therapy regimens in antiretroviral-naive patients with HIV and tuberculosis infection in India	NACO	3,093,276
Uma Kumar	A randomized open-label study in the Asia-Pacific region comparing the safety and efficacy of etanercept with usual DMARD therapy in the subject with Rheumatoid Arthritis	Quintiles Spectral India	987,400
Microbiology			
Arti Kapil	Clinico-epidemiologic and molecular characterization of extended spectrum Beta lactamase (ESBL) producing <i>Klebsiella</i> spp., <i>E. coli</i> and <i>Enterobacter</i> spp. causing nosocomial and community infections	ICMR	191,715
B. K. Das	Pneumolysin DNA construct as a vaccine candidate against <i>Streptococcus pneumoniae</i> : An immune response study	DST	18,958
B. K. Das	Pneumococcal surface adhesin A (Psa.A) DNA construct as a vaccine candidate against <i>Streptococcus pneumoniae</i> : An immune response study	DBT	740
B. R. Mirdha	Detection, identification and molecular characterisation of intestinal coccidia and microsporidia in patients with chronic diarrhoea and malabsorption syndromes	ICMR	368,440
B. R. Mirdha	Application of specific amplification of <i>Entamoeba histolytica</i> DNA for the diagnosis of amoebic liver abscess (ALA) directly from ultrasound guided aspirated pus	ICMR	286,587
Benu Dhawan	Detection of <i>Ureaplasma urealyticum</i> and <i>Mycoplasma hominis</i> in patients with lower genitourinary tract infection by PCR assay: Association of <i>U. urealyticum</i> biovars with clinical outcome	ICMR	340,969

Benu Dhawan	Phenotypic and genotypic characterization of methicillin and mupirocin research <i>Staphylococci</i>	DBT	361,977
Madhu Vajpayee	External quality assessment programme	NACO	596,428
Madhu Vajpayee	Voluntary counselling and testing facility (VCTC)	NACO	490,539
Rama Chaudhary	Cloning and expression of <i>Mycoplasma pneumoniae</i> P1 gene and its fragments to study their role in cytodherence	ICMR	76,613
Rama Chaudhary	Detection and identification of thermophilic <i>Campylobacter</i> spp. (C.j, C.C, C.U and C.L.) and molecular sub-typing of <i>Campylobacter jejuni</i> in fecal samples of diarrheic patients and in food samples using multiplex PCR, PCR REFO and PRGE	ICMR	590,148
Rama Chaudhary	Cloning and expression of flagellin gene of <i>Salmonella typhi</i> : An immunodiagnostic approach	ICMR	488,365
Rama Chaudhary	Development of multiplex real time quantitative PCR assay to detect <i>Chlamydia pneumoniae</i> , <i>Legionella pneumophila</i> and <i>Mycoplasma pneumoniae</i> in community acquired pneumonia	DBT	300,694
Rama Chaudhary	To study colonization and immunomodulatory effect of probiotic strains in Indian Children	DBT	1,495,922
Rama Chaudhary	Administration of <i>Lactobacillus rhamnosus GG</i> for the prevention and treatment of <i>Clostridium difficile</i> infection and subsequent diarrhea in Indian population	DBT	672,355
Seema Sood	Development of DNA biosensor for detection of <i>Nelisseria gonorrhoea</i> in clinical samples	DBT	927,619
Shobha Broor	Multisite monitoring of human influenza viruses in india	ICMR	29,673,279
Shobha Broor	Acute respiratory viral infections in rural India	ICMR	1,419,278
Shobha Broor	Noroviral infections in paediatric acute gastroenteritis and asymptomatic children	ICMR	533,540
Shobha Broor	Multisite epidemiological and virological monitoring of human influenza viruses in India	Sanofi Pasteur India Pvt Ltd	15,818
Shobha Broor	An RNA interference based approach to study the simultaneous inhibition of respiratory syncytial virus (hRSV) and Human metapneumovirus virus (hMPV) multiplication in tissue culture and animal model	DBT	1,287,773
Urvashi B. Singh	Role of oral vitamin D as an adjunct therapy in category I pulmonary tuberculosis along with assessment of immunological parameter (double-blind, randomized, placebo-controlled, clinical Trial)	DBT	200,029

National Drug Dependence Treatment Centre			
Anju Dawan	To test the effectiveness of oral substitution with buprenorphine and to establish a protocol for oral substitution with buprenorphine	UN International Drug and Crime Control Program	872,617
Rajat Ray	A post-marketing surveillance of Addnole-N	Russan Pharma Ltd, Mumbai	335,392
Nephrology			
S. K. Agarwal	Validation and development of predicting formula for estimation of glomerular filtration rate in Indian adults with various degrees of renal function	ICMR	584,877
S. K. Agarwal	Detection of HCV core antigen (HCVc-Ag) for diagnostic screening of HCV infection in patients on maintenance haemodialysis	ICMR	881,732
S. K. Agarwal	To study the diagnostic value of quantiferon gold test in detecting latent tubercular infection in end stage renal disease patients on replacement therapy	ICMR	186,481
Neurobiochemistry			
S. Vivekanandhan	Genetic polymorphism of drug metabolizing enzymes CYP2D6, CYP2C19 and CYP2C9 and GST genes in patients developing toxicity to specific antiepileptic drug, phenytoin	ICMR	193,800
S. Vivekanandhan	The study of mitochondrial dysfunction in genesis of programmed cell death cascade in patients with amyotrophic lateral sclerosis	ICMR	770,866
S. Vivekanandhan	Health Profile of population of Nellore (AP): An ICMR co-ordinated task force study	ICMR	801,403
S. Vivekanandhan	Exploring the role of MHC and co-stimulatory molecules in the immune evasion mechanism of glioma stem cells	DBT	825,000
S. Vivekanandhan	Pharmacogenetics of epilepsy drug therapeutics	DBT	776,764
S. Vivekanandhan	Validation of gel dosimetry as 3D verification tool for highly conformal radiotherapy techniques	AERB	480,866
Neurology			
Achal Kumar Srivastava	Mitochondrial variations and common founders for Friedreich's ataxia in the Indian population	ICMR	215,362
Kameshwar Prasad	Clinical epidemiology unit	INCLIN	280,115
Kameshwar Prasad	Intravenous autologous bone marrow stromal cells (MSC) or mononuclear cells (MMC) for patients with acute ischaemic stroke: A multi-institutional project.	DBT	2,645,969

Kameshwar Prasad	Mobilization of stem cells using G-CSF for acute ischemic stroke. A randomized clinical trial	DBT	2,001,348
Kameshwar Prasad	Central data management facility	DBT	1,251,300
Kameshwar Prasad	Capacity building for Stroke Research Programme	DBT	1,405,530
M. V. Padma	Intra-arterial autologous bone marrow mononuclear cells (MNCs) infusion in patients with non-progressive (static) encephalopathy with special reference to cerebral palsy	DST	1,266,224
M. V. Padma	Normobaric oxygen therapy in acute ischemic stroke	ICMR	917,680
Madhuri Behari	Clinical correlation of AchR-Abs and MuSK-Abs in Myasthenia gravis patients in context with phenotype and genotype variation	ICMR	760,735
Madhuri Behari	A phase III, double blind placebo controlled study to determine the efficacy and safety of a low (50–100 mg/day) and high (150–200 mg/day) dose range of safinamide as add-on therapy in patients with idiopathic Parkinson's disease with motor fluctuations, treated with a stable dose of levodopa and a phase III, double blind placebo controlled, 12 months extension study to investigate the long term efficacy and safety of a low (50–100 mg/day) and high (150–200 mg/day) dose range of safinamide, as add-on therapy in patients with idiopathic Parkinson's disease with motor fluctuations, treated with a stable dose of levodopa	CLINIRx Research Pvt Ltd, Gurgaon	1,630,899
Madhuri Behari	Implantation of adult human retinal pigment epithelial cells in the 6-OHDA lesioned rat model of Parkinson dis	DBT	2,091,363
Madhuri Behari	A multicentre randomized double blind placebo and entacapone controlled parallel group study of the efficacy safety and tolerability of E2007 in levodopa treated Parkinson's disease patients with motor fluctuations	Quintiles Spectral India	592,282
Madhuri Behari	Identification of novel gene(s) familial Parkinson's disease	DBT	102,703
Manjri Tripathi	Correlation of electrophysiological states and haemodynamic changes during simultaneous performance of EEG-fMRI (SEM) in intractable epilepsy: Another non-invasive tool for localisation of seizures..in patients with intractable epilepsy	DBT	1,673,250

Neuroradiology			
Ajay Garg	SERC Fast Track Proposal for Young Scientist Scheme: Phase imaging and diffusion tensor imaging Novel MR contrasts in the evaluation of cryptogenic focal epilepsy	DST	131,448
Ajay Garg	Quantitative vessel size imaging (VSI) in cerebral gliomas and correlation with histopathological grading and vascular endothelial growth factor expression	DBT	253,080
Neurosurgery			
B. S. Sharma	DST FIST Programme-2006	DST	3,190,805
P. Sarat Chandra	Evaluation of autonomic function, saccadic eye movement control and fibrilin gene (exon 24-28) in the development of bony craniovertebral junction anomalies	DBT	564,540
Nuclear Magnetic Resonance			
N. R. Jagannathan	Upgradation of the existing animal MR scanner for biomedical research	DST	804,401
N. R. Jagannathan	A proposal for 700 MHz NMR spectrometer for biomedical research	DST	75,660,000
Nuclear Medicine			
G. P. Bandopadhyaya	Synthesis and chemical characterization of different formulations of Alginate-Tamoxifen beads	DST	468,597
G. P. Bandopadhyaya	To evaluate radiolabelling and efficacy of radiolabelled betacyclodextrin for infection imaging	ICMR	700,586
Obstetrics and Gynaecology			
Alka Kriplani	Diagnosis of genital tuberculosis in infertile women and the effect of anti-tubercular therapy	ICMR	391,459
Alka Kriplani	Role of mifepristone (RU-486) in the management of uterine leiomyoma	ICMR	338,038
Alka Kriplani	Phase-I Phase-II clinical trials on safety and capability of probiotic selected strains of <i>Lactobacilli</i> to colonize in vagina for reproductive health of women	DBT	262,902
Neerja Bhatla	Development of HPV candidate vaccine/s preparation of clinical trial site/cohort for vaccine testing	DBT	1,653,807
Suneeta Mittal	Human reproduction research centre	ICMR	1,570,000
Suneeta Mittal	Estimation of oxidative stress during oral iron supplementation (daily vs weekly) with or without vitamin C among anemic pregnant mothers	ICMR	138,562

Suneeta Mittal	Prevention of mother to child transmission of HIV	Delhi State AIDS Control Society	204,474
Suneeta Mittal	Pretreatment with misoprostol before vacuum aspiration versus MVA: A double blind RCT	MOHFW	496,689
Sunesh Jain	Evaluation of curcumin in the management of advanced cancer cervix	DBT	2,406,594
Orthopaedics			
Rajesh Malhotra	A new hip hemiarthroplasty option based on 'femoral stem design suitable for the morphology of proximal femur of elderly Indian population	CSIR	2,471,487
Rajesh Malhotra	Some medico-technical issues determining mechanical properties of ligaments and (ii) development of stereocameras for operative/anatomic video sequences	ICMR	360,774
Surya Bhan	Evaluation of efficacy of platelet concentrate in the treatment of non union of fractures of long bones	ICMR	2,192,979
Kanchan Mittal	To study the profile of musculoskeletal pain in tea garden workers in northeast India	ICMR	978,183
Paediatric Surgery			
D. K. Gupta	N-myc gene amplification by polymerase chain reaction in neuroblastoma tumour surveillance by detecting tyrosine hydroxylase protein using RT-PCR	DBT	297,290
M. Bajpai	Pelvi-ureteric junction obstruction: A study on apoptosis and mRNA upregulation in patients with ACE I/D gene polymorphism with respect to disease aetiopathogenesis and monitoring therapy by molecular markers or renin angiotensin system activation	DST	980,154
M. Bajpai	A study on prognostic impact of molecular genetic alteration in hepatoblastoma	DST	832,081
M. Bajpai	Study of angiotensin converting enzyme insertion/deletion gene polymorphism in vesicoureteric reflux and its correlation with molecular markers of renin angiotensin system activity in the early diagnosis of renal damage	DBT	616,766
Paediatrics			
Arvind Bagga	Daily corticosteroids to prevent infection associated relapses in patients with frequently relapsing nephrotic syndrome	ICMR	452,371

Arvind Bagga	Dose ranging study to evaluate the safety and efficacy of olmesartan medoxomil in children and adolescents with hypertension	Quintiles Spectral India	491,393
Arvind Bagga	A multicenter randomized double blind evaluation of 12 weeks of valsartan to enalapared to enalapril on sitting systolic blood pressure in children 6 to 17 years of age with hypertension	PPD Pharmaceutical Development India Pvt. Ltd.	155,124
Arvind Bagga	A randomized multicenter double blind 6week study to the evaluate dose response of valsartan for blood pressure education in children 1-5 year old with hypertension followed by a 2 week placebo withdrawal period	PPD Pharmaceutical Development India Pvt Ltd	262,970
Madhulika Kabra	IMD newborn screening for congenital hypothyroidism and congenital adrenal hyperplasia: A multicentric study	ICMR	1,766,578
Madhulika Kabra	An integrated approach for mutation analysis and identification of new gene (S) for X-linked mental retardation	DBT	450,084
Madhulika Kabra	Programme support on genetic medicine	DBT	8,182,953
Madhulika Kabra	Identification of novel genes for nonsyndromic hearing loss in the Indian population	DBT	763,390
Madhulika Kabra	Evaluation of MLPA and array CGH for the detection of cryptic subtelomeric rearrangements in idiopathic mental retardation	DBT	871,060
Madhulika Kabra	Validation of strategies for rapid prenatal detection of aneuploides	DBT	575,210
Madhulika Kabra	Molecular genetic studies in Indian children with steroid resistant nephrotic syndrome	DBT	155,200
Pankaj Hari	Antibiotic prophylaxis in the management of vesico-ureteric reflux: A multicentric randomized double blind placebo controlled trial	ICMR	540,127
Pratima Ray	Evaluation of chikungunya infection in children and adults	DBT	6,446,000
Pratima Ray	Characterization of rotavirus strains from a multi-centric rotavirus surveillance study at AIIMS, Delhi	DBT	1,247,474
Rachna Seth	To understand the deviation in cell signaling pathway autism through neurotrophic factors (insulin like growth factor-1) and undertake a randomized blinded trial with olanzapine to evaluate its effects on insulin like growth factor-1 (IGF-1), clinical symptoms of autism and autism rating scales	DST	160,551

Shinjini Bhatnagar	Zinc as an immunomodulators in the treatment of possible serious bacterial infections in infants more than 7 days and upto 2 months of age	DBT	2,535,059
Shinjini Bhatnagar	Efficacy of stem cells in the improvement of left ventricular function in patients with acute myocardial infarction	DBT	686,430
Shinjini Bhatnagar	Effects of administering 10 mg zinc orally to young infants aged 7 days and upto 4 months with possible serious bacterial infection on survival and function of peripheral blood mononuclear cells ... age	DBT	2,991,282
Vandana Jain	Kigs advanced patient outcome survey number SN87-052-38	Pfizer Ltd	-40
Veena Kalra	FIST in Subject Area life Sciences for Level II support	DST	2,185,298
Pathology			
A. K. Dinda	Development of nanoparticulate system for selective receptor specific macrophage targeting	DBT	735,608
Chitra Sarkar	Glial tumours: a correlative clinicopathological study of chromosome 1p/19q status, epidermal growth factor receptor (EGFR) amplification and p53 expression	ICMR	672,468
S. K. Panda	Operation of the J. C. Bose Fellowship	DST	851,212
S. K. Panda	FIST Program	DST	6,626,544
S. K. Panda	Study of viral proteins and other molecular markers in hepatitis E virus (HEV) infected cells using high throughput molecular techniques	DBT	4,144,459
S. K. Panda	Investigation related to mechanism of entry of HEV into the host cells	DBT	6,874,483
Seema Sen	Detection of human papilloma virus genome in malignant ocular lesions	ICMR	739,882
Vaishali Suri	Study of the role of bone marrow derived pluripotent cells in peripheral nerve repair in adult rats	ICMR	1,138,612
Pharmacology			
D. S. Arya	Pharmacological and molecular studies on cardio-protective potential of some unani drugs in experimentally induced myocardial infection	CCRUM	339,452
K. H. Reeta	Estimation of oxidative stress during oral iron supplementation (daily vs. weekly) with or without vitamin C among anemic pregnant mothers	ICMR	688,459

S. K. Maulik	Modulatory effect of phytoadaptogens on cardiovascular and neurological changes induced by experimental stress in rats	DST	740,048
S. K. Maulik	Clinical trial of a standardized preparation of Terminalia arjuna in patients with left ventricular dysfunction	DBT	372,116
Surender Singh	Standardization and pharmacological studies of widely practiced anti-arthritic Unani preparation 'Majoon Suranjam' based on clinical Unani literature	ICMR	578,142
Y. K. Gupta	Efficacy and safety evaluation on antiepileptic activity of selected Indian herbs	DST	259,960
Y. K. Gupta	Antiemetic study of ginger against cancer chemotherapy induced emesis	Dabur Research Foundation	527,749
Y. K. Gupta	National Pharmacovigilance Program	MOHFW	169,017
Y. K. Gupta	Pharmacological evaluation of medicinal plants and their products	Ranbaxy/ EliLilly Pvt Ltd	1,729,246
Y. K. Gupta	Training module in clinical research	DBT	1,348,300
Y. K. Gupta	Assesment of awareness of environmental mercury pollution in healthcare system: Solutions and strategies for prevention	Min. of Environment & Forest	528,699
Physiology			
Debabrata Ghosh	An mRNA expression array cluster analysis of human first trimester placental trophoblast cell functions	DST	313,696
Debabrata Ghosh	Defining endometrial receptivity for blastocyst implantation using cDNA based array technology	DST	1,404,871
H. N. Mallick	The role of lateral preoptic area in regulation of body temperature, thermal preference, sleep-wakefulness and homeostatic restoration of sleep during chronic exposure in rats	ICMR	252,465
Jayasree Sengupta	Elucidating endometriosis using genomic strategy	DBT	2,042,291
Raj Kumar Yadav	Psychoneuroimmune effects of meditation An evaluation by PET and biochemical markers	DBT	547,080
Rashmi Mathur	Motor responses to noxious/non-noxious stimuli in spinalised humans and rats: Role of electromagnetic stimulation in recovery	DST	525,731
Rashmi Mathur	Effect of bone marrow cells transplantation and magnetic stimulation in the sensory motor functional recovery of spinalised rat	ICMR	606,092

Ratna Sharma	A study to assess acute mental stress induced changes in EEG, cognitive behaviour and neurosteroids across the menstrual cycle and effect of meditation on stress induced changes	CCRYN	547,088
S. C. Mahapatra	Immunomodulatory effects of Tulsi (<i>Ocimum sanctum</i> Linn) on healthy human subjects	AYUSH, MOHFW	680,601
Reproductive Biology			
Anand Kumar	Testing of pregnancy kits produced by Hindustan Latex Ltd for supply to NRHM programme of Govt of India	Hindustan Latex	356,871
Ashutosh Halder	Prevalence of 22q 11 deletion syndrome in children with structural cardiac malformation : A tertiary care referral hospital-based study in Delhi	ICMR	514,730
Stem Cell Facility			
Sujata Mohanty	Isolation and expansion of mesenchymal stem cells (MSC) from human bone marrow (BM)/umbilical cord blood (UCB) and evaluation of its cardiomyogenic and neurogenic differentiation potential	ICMR	942,341
Sujata Mohanty	Transplantation of mesenchymal stem cells in animal models of myocardial infarction and Parkinson's disorder	DBT	1,577,000
Surgery			
Anurag Srivastava	Safety and efficacy of autologous stem cells in prevention of amputation of patients with chronic critical limb ischemia	DBT	171,700
Anurag Srivastava	Adjuvant taxifen: Longer against shorter (ATLAS) for breast cancer patients	Oxford Univ., UK	91,366
Maneesh Singhal	Ultrasonic debridement of post traumatic wounds	Overseas Associates	65,000
Sandeep Guleria	Evaluation of efficacy and tolerability of Tacrolimus in patients undergoing renal transplantation	Panacea biotech Ltd.	467,622
Sandeep Guleria	Save the Kidney	Rajiv Gandhi Foundation	172,516
Anita Dhar	Safety and efficacy of autologous stem cells in prevention of amputation of patients with chronic critical limb ischemia	DBT	4,868,000
Transplant Immunology and Immunogenetics			
D. K. Mitra	Early detection of polarized producing allo-reactive T cells and the role of chemokines in their selective homing among patients undergoing renal transplantation	DST	1,236,451

D. K. Mitra	Impact of HIV infection on latent TB among patients with HIV-TB co-infection	ICMR	167,636
D. K. Mitra	Study of NKT cells in polarized immunity among leprosy patients	ICMR	1,189,978
D. K. Mitra	Efficacy of oral zinc administration as an adjunct therapy in category I pulmonary tuberculosis along with assessment of immunological parameters	DBT	878,456
D. K. Mitra	Role of oral vitamin D as an adjunct therapy in category I pulmonary tuberculosis along with assessment of immunological parameter (double-blind, randomized, placebo-controlled, clinical trial)	DBT	679,419
D. K. Mitra	Studies on T cell mediated suppression of immunity in visceral leishmaniasis patients	DBT	1,371,432
D. K. Mitra	Impact of HIV infection on latent TB among patients with HIV-TB co-infection	DBT	827,118
N. K. Mehra	Monitoring T cell activation markers and cytokine production following allogenic renal transplantation	ICMR	351,360
N. K. Mehra	HLA profile of Raica community of Rajasthan	ICMR	1,062,931
N. K. Mehra	Genomic analysis of MHC genes (HLA and non-HLA) in type 1 diabetes in the Indian population	ICMR	3,062,824
N. K. Mehra	Program support for advanced program in histocompatibility and transplant immunology (PS-APHTI)	DBT	243,759
N. K. Mehra	Genetic basis for HIV-I transmission resistance and disease progression polymorphism in MHC chemokine/ cytokin and their receptor genes	DBT	3,722,156
N. K. Mehra	Immunotherapy of drugs in refractory leukemias and lymphomas expressing HCG or subunits by a highly specific recombinant chimeric antibody against beta HCG linked to curcumin or other drugs	DBT	339,500
N. K. Mehra	Haematopoietic stem cell transplantation in India: Challenges and opportunities and immunogenetic aspects of HIV infection	DBT	587,972
Urology			
Amlesh Seth	Molecular analysis of gene markers in urine cytology and tissue histology specimens of Indian patients with superficial and muscle invasive transitional cell carcinoma of urinary bladder	ICMR	464,617

Ongoing research projects funded by World Health Organization

Centre for Behavioural Sciences (Psychiatry)		
Pratap Sharan	Development of an identification instrument for depression for South East Asia Region of the World Health Organization	42,501
Obstetrics and Gynaecology		
Suneeta Mittal	Comparison of three misoprostol regimes after pretreatment with mifepristone for early pregnancy termination: A multinational RCT	144,965
Paediatrics		
V. K. Paul	South East Asia Regional Neonatal-Perinatal Database network	132,032
V. K. Paul	WHO guidelines for feeding of LBW infants: Feasibility, requirements and effects of their implementation in health facilities in India	851,222
Shinjini Bhatnagar	Efficacy of zinc (given as an adjunct) in the treatment of severe and very severe pneumonia in hospitalized children 2-24 months of age	3,688,014

Ongoing research projects funded by international agencies

Investigator	Project	Funding agency	Funds (Rs)
Biochemistry			
Kalpna Luthra	Characterization of HIV-1 subtypes from Indian subjects	NIH, USA	723,257
Cardiology			
Balram Bhargava	Untreated heart failure: Activation of the immunological and inflammatory systems and changes after short term treatment	British Council, UK	1,242,216
Balram Bhargava	Future revascularization evaluation in patients with diabetes mellitus: Optimal management of multivessel disease (The FREEDOM Trial)	NIH, USA	999,182
G. Karthikeyan	Diagnostic performance of gated SPECT myocardial perfusion imaging at rest in patients presenting to the emergency room with chest pain and a normal or non-diagnostic ECG	IAEA	557,527
V. K. Bahl	A clinical evaluation of the Xience TM V everolimus eluting coronary stent system in the treatment of patients with <i>de novo</i> coronary artery lesions	Abbott Vascular, USA	1,091,896

Computer Facility			
R. S. Tyagi	Mainstreaming HIV/AIDS concerns in going drugs demand programmes in South Asia	UN International Drug and Crime Control Programme	866,764
Dermatology and Venereology			
V. K. Sharma	A prospective, randomized, double-blind, placebo-controlled, parallel group, multicenter, 52 week trial to assess the efficacy and safety of adjunct mycophenolate mofetil (mmf) to achieve remission with reduced corticosteroids in subjects with active pemphigus vulgaris	Aspreva Pharmaceutical Corporation, Canada	201,745
V. K. Sharma	A randomized, double blinded study to evaluate the safety and efficacy of intralesional administration of PCNA synthetic chimeric ribozyme (VIT 100) (Chelase) in the treatment of keloids and hypertrophic scars when administered concurrently with 5 FU and Kenalog	Clinicyte, USA	12,938
Dr B. R. Ambedkar Institute–Rotary Cancer Hospital			
V. Raina	Randomized trial of adjuvant endocrine therapy and chemotherapy in women with early breast cancer: The adjuvant breast cancer trial (ABC trial)	Coordination Committee, Institute of Cancer Research, UK	94,828
V. Raina	Adjuvant tamoxifen long against short (ATLAS) trial	Oxford Univ., UK	1,406,219
V. Raina	Indox Cancer Trials Network Center	Oxford Univ., UK	2,262,214
V. Raina	An open label study to evaluate the efficacy and safety of human recombinant granulocyte colony stimulating factor (G-CSF) in patients with chemotherapy induced neutropenia	Clinigene International Pvt Ltd	135,359
Endocrinology and Metabolism			
A. C. Ammini	A one year multicentre, international randomized double blind study with comparison of benfluorex (150 mg b.d or 150 mg TID) versus pioglitazone (30 mg OD or 45 mg OD) in combination with sulphonylurea administered orally for treatment of type 2 diabetes	Institute De Recherches Internationales Servier (IRIS), France	285,635
Rajesh Khadgawat	A phase III, multicentre, randomized, parallel group study of safety and efficacy of the LB03002, a new sustained release formulation of human recombinant growth hormone as compared to standard daily therapy with genotropin in the treatment of naïve children with growth failure due to insufficient secretion of endogenous growth hormone	Parexel International Ltd, UK	1,745,716

Gastroenterology and Human Nutrition			
Govind Makharia	Protocol C0524T17-18 A phase 2/3 multicenter, randomized, placebo-controlled, double-blind study to evaluate the safety and efficacy of golimumab induction therapy, administered subcutaneously in subjects with moderately to severely active ulcerative colitis	Centocor Research & Development, USA	284,798
Haematology			
Renu Saxena	Molecular characterization and treatment of acute lymphoplasmic leukemia on protocol MCP-943	INCTR USA	2,218,844
Medicine			
Naval K. Vikram	Body fat and its relationship with metabolic syndrome indicators in overweight pre-adolescents and adolescents	IAEA	657,908
Naveet Wig	Phase I planning grant to the international clinical, operational and health services research training for AIDS/TB programmes	NIH, USA	2,447,005
S. K. Sharma	Evaluation of management strategy for pulmonary embolism	IAEA	86,871
Microbiology			
Rama Chaudhary	Prevention of infection in neonates in India	Univ. of Maryland	83,593
National Drug Dependence Treatment Centre			
Anju Dawan	To test the effectiveness of oral substitution with buprenorphine and to establish a protocol for oral substitution with buprenorphine	UN International Drug and Crime Control Program	872,617
Nephrology			
S. K. Agarwal	A randomized double blind, placebo, controlled, four arm, parallel group, multicentric, multinational, safety and efficacy trial of 100 mg, 300 mg and 900 mg of abetimus sodium in systemic lupus erythematoses (SLE) patients with a history of renal disease	Lajolla Pharma Company, California	917,428
Neurology			
Madhuri Behari	Protocol OV-1003 safety and Efficacy of Melperone in the treatment of patients with psychosis associated with Parkinson's disease	Ovation Pharmaceuticals, USA	570,129
Madhuri Behari	A randomized, double-blind, placebo-controlled, dose-escalation study of single and multiple oral dose administration of BIIBo14 in subjects with moderate to late-stage Parkinson's disease who are also receiving treatment with levodopa	Biogen Idec Limited, UK	921,694

Neurosurgery			
Ashish Suri	The International infant hydrocephalus study (IIHS): A multicentre prospective randomized study	The International Society for Paediatric Neuro-surgery (ISPNE)	70,569
Ashish Suri	A multi-national, multi-centre, open-label, active-controlled, randomized parallel-group dose-finding study to evaluate the efficacy and safety and two doses of AP 12009-G004 in adult patients with recurrent high-grade glioma, administered intratumorally as continuous high-flow microperfusion over a 7-day period every other week	Antisense Pharma GmbH, Germany	165,399
B. S. Sharma	A phase-II randomized, double-blind, placebo-controlled, dose finding, safety and tolerability trial of XY2405 as a treatment for traumatic brain injury	LSHTM, UK	302,385
Deepak Agarwal	A registry for comparing catheter related infection rates among various shunt systems in the treatment of hydrocephalus	Codman & Shurtleff Inc., USA	279,500
Deepak Kumar Gupta	PPHM 0503: Open label, dose confirmation study of intestinal 1131-ch TNT-A/B MAb (COTARAR) for the treatment of recurrent glioblastoma multiforme (GBM) at first relapse	Peregrine Pharmaceuticals, USA	781,867
P. Sarat Chandra	Surgical trial in lobar intracerebral haemorrhage (STICH II trial)	The Medical Res. Council, UK	0
Nuclear Medicine			
Chetan D. Patel	Role of cerebral perfusion SPECT in the differential diagnosis of dementia	IAEA	189,496
Rakesh Kumar	Role of nuclear cardiology techniques in escjemia assessment with exercise imaging in asymptomatic diabetes	IAEA	606,323
Obstetrics and Gynaecology			
J. B. Sharma	CORONIS: International study of caesarean section surgical technique: A randomized factorial trial	National Perinatal Epidemiology Unit, Univ. of Oxford, UK	2,245,513
Neerja Bhatla	A phase H1b, double-blind, randomized, controlled study to evaluate the immunogenicity and safety of glaxosmithkine biological HPV-16/18...18-35 years	GlaxoSmith Kline Asia Private Ltd	173,177
Neerja Bhatla	Parallel performance trial of fast HPV versus HC2 for cervical cancer screening	Digene Corporn, USA	475,992

Paediatrics			
Madhulika Kabra	Economic modelling study non-invasive(NI) RhD tisting in Europe and Asia under SAFE Network	University of Warwick, UK	999,799
S. K. Kabra	Development of continuing medical education (CME) programs to strengthen AIDS treatment in India	NIH, USA	103,411
S. K. Kabra	Strengthening of Cystic Fibrosis services at AIIMS	Cystic fibrosis/ WorldWide, USA	277,150
S. K. Kabra	Zinc supplementation in childhood tuberculosis patients in Delhi, India	Univ. of Bergan, Norway	2,363,536
S. K. Kabra	Surveilance of serotype distribution and anti-microbial resistance pattern in invasive bacterial infection (IBIS) caused by <i>Streptococcus pneumoniae</i> and <i>Haemophilus influenzae</i> in India (IBIS Extension Phase III)	South Asian Pneumococcal Alliance (SAPNA)	51,547
Sheffali Gulati	Model infection centres (MICs): A program to improve infection practices in the country	INCLIN & USAID	1,437,261
Shinjini Bhatnagar	Specific targeted research or innovation project	Univ. of Bergan, Norway	852,714
Shinjini Bhatnagar	Efficacy of zinc (given as an adjunct) in the treatment of severe and very severe pneumonia in hospitalized children 2-24 months of age	John Hopkins Bloomberg School of Public Health (JHBSPH)	3,137,968
Transplant Immunology and Immunogenetics			
N. K. Mehra	Type 1 diabetes genetics consortium (TIDGC): An international effort	NIH, USA	589,706
N. K. Mehra	Comprehensive approach to understand streptococcal diseases and their sequelae to develop innovative strategies for diagnosis therapy, prevention and control	European Commission	2,083,318

New research projects funded by Indian agencies			
Investigator	Project	Funding agency	Funds (Rs)
Anatomy			
Rima Dada	Genetic and DNA fragmentation study in infertile couples opting for ART and couples experiencing recurrent IVF/ICSI failure	ICMR	1,298,261
S. B. Ray	A study on the novel analgesic effect of intraspinal loperamide in a murine model of postsurgical pain	ICMR	1,699,895
Shashi Wadhwa	Influence of prenatal chronic noise exposure on vrain stem auditory nuclei hippocampus and spatial memory in chicks	DBT	5,326,000
T. C. Nag	Photoreceptor changes in the ageing human retina and their possible link with oxidative stress	DBT	1,000,000
Biochemistry			
Alpana Sharma	Determination of telomerase activity and telomere length in the T-cells of peripheral blood in patients of Parthenium induced contact dermatitis and its correlation with severity of the disease	DBT	1,802,000
D. N. Rao	A study to assess the effects of long-term obstruction of epididymis on the morphology, functional and chromatin status of epididymal spermatozoa in men: Comparison with ejaculated sperm from men of proven fertility	ICMR	590,066
D. N. Rao	III Clinical trial with an intravasal injectable male contraceptive-RSIUG	ICMR	130,160
D.N.Rao	Multiple antigen peptide approach (MAP) incorporating BT constructs of FI and V antigen of Y pestis in nanoparticles for plague vaccine	DBT	1,788,000
Kunzang Chosdol/ Subrata Sinha	An <i>in vitro</i> study of the role of FAT, a Drosophilla tumour suppressor gene homologue in human glial tumorigenesis	DRDO	2,489,980
Neeta Singh	To study the immune response of T cell dominant synthetic peptides derived from HPV-16 using different adjuvants in a mouse model of cervical cancer	DBT	1,133,000
Biophysics			
Punit Kaur	Structural and functional studies of pepidoglycan recognition proteins	DST	1,600,000
Savita Yadav	Isolation, purification and structural and functional characterization of new proteins from amniotic fluids and seminal plasma	DST	1,000,000

Savita Yadav	Purification, biochemical and functional characterization of heparin binding proteins in human seminal plasma	DBT	1,321,000
Sharmistha Dey	Development of synthetic alternatives to currently available microbicidal agents	ICMR	512,379
Sujata Sharma	Structural and functional studies of lactoperoxidase	DST	1,450,000
Biotechnology			
H. K. Prasad	Comprehensive proteomics profiling of CSF proteins from patients of different meningitis infections for biomarker discovery	DBT	170,000
J. S. Tyagi	Comprehensive proteomics profiling of CSF proteins from patients of different meningitis infections for biomarker discovery	DBT	1,825,000
J. S. Tyagi	Computational design and development of inhibitors for the treatment of tuberculosis	DBT	105,000
Cardiology			
Balram Bhargava	A clinical trial comparing treatment with cangrelor (in combination with usual care) to usual care in subjects who require percutaneous coronary intervention	Quintiles Research India Pvt Ltd	44,850
Balram Bhargava	A clinical trial comparing cangrelor to clopidogrel in subjects who require percutaneous intervention	Quintiles Research India Pvt Ltd	44,850
Balram Bhargava	Efficacy of stem cells in improvement of left ventricular function in patients with acute myocardial infraction	DBT	1,759,800
Rakesh Yadav	Zyban as an effective smoking cessation aid for patients following an acute coronary syndrome: The ZESCA trial	Centre for Chronic Disease Control	55,969
V.K. Bahl	A double-blind, randomized, placebo-controlled, multicenter study to assess the efficacy and safety of Darbeopetin alpha treatment on mortality and morbidity in heart failure (HF) subjects with symptomatic left ventricular systolic dysfunction and anaemia	Amgen Technology Pvt Ltd	44,335
Centre for Behavioural Sciences (Psychiatry)			
R. K. Chadda	Development of pharmacogenomics SNP database for critical candidate genes involved in drug response for schizophrenia	DBT	270,000
Rajesh Sagar	A multi-center, double blind, randomized, placebo-controlled, parallel group, flexible dose titration, add-on study of mecamlamine 2.5 to 7.5 mg in the treatment of major depressive disorder with subject who are partial responders or non-responders to citalopram therapy	QED Pharmaceutical Services Pvt Ltd	100,000

Centre for Community Medicine			
Puneet Mishra	Pilot study on menstrual hygiene and practices of rural women and their willingness to pay for low-cost sanitary pad	DST	250,000
Centre for Dental Education and Research			
Ritu Duggal	Assessment of safety profile for dental procedures in India	MOHFW	5,787,000
Dermatology and Venereology			
Somesh Gupta	A comparative study of effectiveness of immunotherapy with intralesional injection of killed <i>Mycobacterium w</i> vaccine and imiquimod cream in clinical resolution of external anogenital warts and reduction of viral load: A randomized trial	DBT	1,628,000
Dr B. R. Ambedkar Institute–Rotary Cancer Hospital			
Ritu Gupta	Molecular and immunological basis of biological heterogeneity in chronic lymphocytic leukemia	DBT	1,071,200
Atul Sharma	Randomized phase IIIb, multicentre, open-label parallel study of enoxaparin (low molecular weight heparin) given concomitantly with chemotherapy vs chemotherapy alone in patients with inoperable gastric and gastro-oesophageal cancer	Criterion	78,739
Lalit Kumar	Lenalidomide plus low dose dexamethasone versus thalidomide plus low dose dexamethasone for multiple myeloma: A randomized, phase III study	Dr Reddy's Lab Pvt Ltd	60,000
V. Raina	A randomized, multi-centre, open-label, phase III study of adjuvant lapatinib, trastuzumab, their sequence and their combination in patients with HER2/ErbB2 positive primary breast cancer	GlaxoSmith Kline Asia Private Ltd	92,141
V. Raina	An open label multicenter phase I/II study to evaluate safety and efficacy of P276-00 in patients with relapsed and/or relapsed/refractory multiple myeloma	Piramal Life Sciences	80,233
V.Raina	A double-blind, randomized phase 2b study evaluating the efficacy and safety of Sorafinib compared to placebo when administered in combination with paclitaxel in patients with locally recurrent or metastatic breast cancer	Reliance Clinical Research Services Pvt Ltd	319,056
V.Raina	Evaluation of circulating tumour DNA in serum of breast cancer patients	DBT	700,000
V.Raina	An open-label, randomized comparative multicentric study to assess safety and efficacy of Biomab-EGFR TM (Nimutuzumab) in combination with chemotherapy versus chemotherapy alone in the treatment of patients with stage IIIb/IV non small cell lung cancer (NSCLC)	Clinigene International Pvt Ltd	293,547

Sameer Bakhshi	Pharmacokinetic and toxicity profile of high dose methotrexate: Relationship with serum creatinine and MTHFR polymorphisms in Indian children	Jiv Daya Foundation	200,000
Dr R. P. Centre for Ophthalmic Sciences			
Gita Satpathy	Development of small interfering RNAs (s)RNAs for inhibition of enterovirus 70 and coxsackevirus A24 virus causing acute hemorrhagic conjunctivitis	DBT	2,417,000
Rohit Saxena	Assesment of magnitude and progression of myopia in school going children in Delhi	DST	1,417,000
Atul Kumar	Use of autologous bone marrow derived stem cells for rehabilitation of patients with age- related macular degeneration and retinitis pigmentosa: A phase-1 clinical trial	ICMR	389,978
Emergency Medicine			
Praveen Aggarwal	To compare the efficacy and safety of intravenous methyl prednisolone followed by oral administration of methyl prednisolone with intravenous hydrocortisone followed by oral prednisolone in the treatment of acute exacerbation of chronic obstructive lung disease	Pfizer Ltd	174,791
Praveen Aggarwal	To compare the efficacy and safety of intravenous methyl prednisolone followed by oral administration of methyl prednisolone with intravenous hydrocortisone followed by oral prednisolone in the treatment of acute bronchial asthma	Pfizer Ltd	124,138
Endocrinology and Metabolism			
A. C. Ammini	B-cell dysfunction versus insulin resistance in polycystic ovary syndrome in Indian women	ICMR	300,000
A. C. Ammini	Congenital adrenal hyperplasia genotype phenotype correlation	DBT	925,000
M. L. Khurana	Development of N-BNP assay for screening of cardiovascular disease in patients with type II diabetes mellitus	ICMR	644,188
M. L. Khurana	Relationship of androgens deficiency to the bone mineral density in aging men	ICMR	831,416
Viveka P. Jyotsna	Effect on glycemic control, depression and quality of life, in patients of diabetes mellitus with rhythmic breathing (Sudarshan Kriya Yoga and Pranayam) in addition to standard treatment of diabetes	ICMR	490,050
Gastroenterology and Human Nutrition			
S.K.Acharya	Identification of a biomarker for differentiation of Crohn's disease from intestinal tuberculosis using proteomics and gene expression analysis	DBT	1,554,000

Govind Makharia	A pilot study to estimate the community prevalence of celiac disease	ICMR	1,486,378
Govind Makharia	A multicenter study of efficacy and safety of DOTS category I regimen in abdominal tuberculosis under revised national tuberculosis control program	MOHFW	2,870,036
Govind Makharia	Efficacy and safety of mesalamine delayed-release tablets (1.2 g), Par Pharmaceutical (Test Drug) in the treatment of active mild to moderate ulcerative colitis: A double blind, double dummy, multicenter randomized phase III, comparison with placebo and lialda (1.2 g) mesalamine delayed-release tablets, Shire US Inc (Reference drug)-292-07	Pharmacia India Pvt Ltd	363,375
Pramod Garg	A study of mutational and histopathological risk factors for gallbladder cancer in patients with gallstones	DBT	1,674,000
Shyam Prakash	A randomized, double blind, placebo controlled study of efficacy of Lactobacillus lozenges in patients with chronic periodontitis	CD Pharma India Pvt Ltd	734,875
Shyam Prakash	A randomized double blind study of efficacy of L CD2 lozenges in preventing radiation and chemotherapy induced oral mucositis in head and neck cancer	CD Pharma India Pvt Ltd	431,225
Umesh Kapil	Efficacy of daily iron folic acid supplementation in correction of iron deficiency anemia amongst 3-5 years old children	ICMR	323,000
Haematology			
Renu Saxena	Role of nitric oxide in the development of stroke	DST	1,000,000
Renu Saxena	Modulation of genes in response to imatinib therapy in the Philadelphia-chromosome-positive chronic myeloid leukemia	ICMR	442,852
Laboratory Medicine			
A. K. Mukhopadhyay	Study of oxidative stress risk factors in Alzheimer's disease and vascular dementia in geriatric patients	ICMR	599,408
A. K. Mukhopadhyay	Effect of yoga on serum interleukin levels in adolescents with depression	CCRYN	418,700
M. Irshad	Role of hepatitis C virus (HCV) core protein in diagnosis and pathogenesis of HCV infection	ICMR	750,128
Sarman Singh	Isolation and purification of active compounds with anti-leishmanial activity of Unani medicinal plants	CCRUM	1,100,000

Medicine			
A. B. Dey	Health emergencies in older people: Predictors of hospital revisit and adverse outcome	ICMR	365,854
Anant Mohan	Mitochondrial DNA mutations and its clinical applications in lung cancer	DBT	914,000
Rajiva Gupta	Genome sciences and predictive medicine	DBT	414,000
Randeep Guleria	To evaluate the efficacy and safety of fixed dose combination of formoterol and fluticasone dry powder inhaler in the management of partly controlled and uncontrolled asthma. A prospective study	Ranbaxy/ EliLilly Pvt Ltd	66,502
Randeep Guleria	A randomized, double-blind, placebo controlled, exploratory study to assess the safety and efficacy of multiple doses of ACZ885 in COPD	Novartis India	110,837
S. K. Sharma	International, multi-centre, randomized, double blind study to compare the overall mortality in acutely ill medical patients treated with enoxaparin versus placebo in addition to graduated elastic stocking	Reliance Clinical Research Services Pvt Ltd	359,802
S. K. Sharma	Comparison of tuberculin skin test (TST) and interferon- γ release assay in latent TB infection and tuberculosis disease	NCT	166,646
S. K. Sharma	Obstructive sleep apnoea and the effect of treatment with continuous airway pressure (CPAP) on metabolic syndrome	Pfizer Ltd	354,680
Uma Kumar	A phase IIIB multicenter, randomized, double-blind, double-dummy study to compare the efficacy and safety of Abatacept administered subcutaneously and intravenously in subjects with rheumatoid arthritis, receiving background methotrexate, and experiencing an inadequate response to methotrexate	Bristol Meyer Squibb India Pvt Ltd	298,444
Microbiology			
Arti Kapil	Mechanisms of resistance to ciprofloxacin in <i>Salmonella typhi</i>	ICMR	326,863
Arti Kapil	Comprehensive proteomics profiling of CSF proteins from patients of different meningitis infections for biomarker discovery	DBT	120,000
Arti Kapil	Expert group on antibiotic susceptibility testing (EGAST) 2008: Observational plan	Pfizer Ltd	5,000
Arti Kapil	Development of neno silver Nanohydrogels for biomedical applications	DBT	668,000

B. R. Mirdha	Study of genetic diversity and phylogentic analysis of <i>Pneumocystis</i> proved isolate obtained from patients with clinical diagnosis of <i>Pneumocystis carinii</i> pneumonia (PCP)	CSIR	792,000
Shobha Broor	Respiratory virus infections: Rapid low molecular detection	ICMR	1,106,984
Shobha Broor	Cloning and expression of G protein gene of group B respiratory syncytial viruses in bacterial and mammalian systems and their antigenic as well as biophysical characterization	DBT	1,547,000
Urvashi B. Singh	Comprehensive proteomics profiling of CSF proteins from patients of different meningitis patients for biomarker discovery	DBT	537,000
National Drug Dependence Treatment Centre			
Anju Dawan	Effectiveness of yoga in patients of opiate dependence	AYUSH, MOHFW	442,000
Neurology			
M. V. Padma	Efficacy of minocycline in acute ischemic stroke: A single blinded placebo-controlled, trial	ICMR	109,283
Manjri Tripathi	Cognitive activation studies of languages and memory as a preoperative evaluation in patients with intractable epilepsy: A novel noninvasive method of investigation	DST	892,134
Manjri Tripathi	A randomized double blind parallel group multicenter study to evaluate the retention rate, efficacy, safety, and tolerability of carisbamate, topiramate and levetiracetam as adjunctive therapy in subjects with partial onset seizures	Quintiles Research India Pvt Ltd	22,425
Nuclear Magnetic Resonance			
N. R. Jagannathan	Magnetic resonance spectroscopic imaging (MRSI) and diffusion-weighted MRI (DW-MRI) in the non-invasive detection, assessment of treatment response and tumor metabolism in breast cancer	DST	700,000
Obstetrics and Gynaecology			
J. B. Sharma	Study of efficacy and safety of directly observed treatment strategy (DOTS) in female genital tuberculosis	MOHFW	2,449,041
Alka Kriplani	Comparative study of oral single dose of metronidazole, tinidazole, secnidazole and ornidazole in the case of bacterial vaginosis	DST	574,800
Alka Kriplani	An open label single-arm, non-comparative study to evaluate the efficacy and safety of iron sucrose (OROFER-S) injection in the treatment of iron deficiency anaemia during pregnancy	Emcure Pharmaceutical Ltd	100,001
Suneeta Mittal	Phase IV multicentric study with Centchroman	ICMR	258,950

Orthopaedics			
Rajesh Malhotra	An observational study to assess back pain in patients with severe osteoporosis treated with Teripartide versus antiresorptives	EliLilly	186,577
Rajesh Malhotra	A phase III randomised, parallel group, double-blind, active controlled study to investigate the efficacy and safety of oral 220 mg dabigatran etexilate (110 mg on the day of surgery followed by 220 mg once daily) compared to subcutaneous 40 mg enoxaparin once daily for 28-35 days in prevention of venous thrombo-embolism in patients following primary elective total hip arthroplasty (RE-NOVATE II)	Siro Clin Pharma Pvt Ltd	284,349
Paediatric Surgery			
D.K.Gupta	Role of stem cells in a surgically created rat model of biliary atresia	ICMR	131,228
M. Bajpai	A study on clinical and molecular markers of chronic interstitial nephropathy in congenital unilateral ureteropelvic junction obstruction	DBT	853,000
Paediatrics			
Madhulika Kabra	To compare integrated screening with contingent sequent screening for prenatal detection of Downs syndrome in the Indian context	DBT	334,000
Ramesh Agarwal	Micronutrient status of low birth weight babies during early infancy	ICMR	665,123
Shinjini Bhatnagar	Intravenous autologus bone marrow derived stem cell therapy for patients with acute ishaemic stroke: A multiinstitutional project	DBT	478,300
Pathology			
Manoj K. Singh	Primary cutaneous lymphomas: Use of an antibody panel to improve diagnostic accuracy in skin biopsy, classify cases using the WHO-EORTC classification of primary cutaneous lymphomas, flowcytometric analysis of peripheral blood to detect and quantity the circulating neoplastic lymphocytes in these patients, attempt to delineate therapeutic subgroups for future planning of therapeutic options	ICMR	298,494
Pharmacology			
D. S. Arya	Studies on pharmacological and molecular mechanism to investigate an angiotensin type 1 receptor blocker, Irbesartan in experimental model of myocardial ischemia-reperfusion injury	ICMR	667,774

D. S. Arya	Screening and scientific evaluation of hypoglycemic effects of some unani dugs in streptozotocin-induced diabetic rats	CCRUM	700,000
D. S. Arya	To study the cardioprotective effects of Seabuckthorn pulp oil in experimental models of myocardial infarction (MI)	NAIP	377,000
Y. K. Gupta	Safety study of UNIM-401 and UNIM-403 in the treatment of chronic plaque psoriasis	CCRUM	802,864
Physiology			
Ashok Kumar Jaryal	Development of blood flow variability software using impedance plethysmography technique and derivation of BFV-BPV relationship	Min. of Communication and IT	2,176,000
Jayasree Sengupta	Role of human chrionic gondatropin in endometrial receptivity for pregnancy establishment	DST	1,700,000
Jayasree Sengupta	Effect of inorganic arsenic compounds on the activity of intestinal smooth muscle in mammals: A molecular physiological study	DST	520,000
Rashmi Mathur	To study the effect of repeated magnetic stimulation on sensori-motor recovery in spinal cord injured patients	DST	974,820
Sanjay Kumar Sood	To study pre-attentive and attentive processing of phonemes and tones in dyslexic children using pre-pulse inhibition paradigm, mismatch negativity and long latency event related evoked potentials	DST	2,223,200
Surgery			
Maneesh Singhal	Comparison of conventional paraffin gauze dressing and femtotechnology based sustained silver ion in calcium alginate foam dressing for acute wounds	Lupin Ltd	88,000
Sushma	Comparative study of sustained silver ion releasing semipermeable 3D foam dressing and conventional paraffin gauze dressing for skin graft donor site	Coloplast	125,093
Transplant Immunology and Immunogenetics			
N. K. Mehra	Genetic basis for HIV-1 transmission, resistance and disease progression: Polymorphism in MHC, chemokine/cytokine and their receptor genes	ICMR	111,240

New research projects funded by WHO

Centre for Behavioural Sciences (Psychiatry)			
Pratap Sharan	Validation of the depression identification instrument in an outpatient population	WHO	121,200
Centre for Community Medicine			
K. Anand	Implementation of community-based intervention for non-communicable disease at Ballabgarh, India	WHO	95,000
Centre for Dental Education and Research			
Naseem Shah	To frame policy guidelines for oral health promotion and interventions for handicapped population	WHO	120,300
Haematology			
Renu Saxena	Validation of haemoglobin colour scale for hemoglobin estimation: A multicentric study	WHO	302,610
New research projects funded by international agencies			
Cardiology			
Balram Bhargava	Untreated heart failure: Activation of the immunological and inflammatory systems and changes after short term treatment	British Council, UK	1,242,216
Sandeep Seth	Multi-Sensor Monitoring in Congestive Heart Failure (MUSIC)	Corventis, USA	527,879
Centre for Behavioural Sciences (Psychiatry)			
Sonali Jhanjee	Rolling out of Opioid Substitution Treatment (OST) in Tihar Prisons, India - A collaborative Project of UNODC-ROSA, AIIMS & Tihar Prisons	UN International Drug and Crime Control Program	36,050
Dermatology and Venereology			
Somesh Gupta	Determination of melanin and haemoglobin distribution in the skin of idiopathic cutaneous hyperchromia of the orbital region (ICHOR)	Service de Dermato-logie, France	138,960
Dr B. R. Ambedkar Institute–Rotary Cancer Hospital			
Atul Sharma	A phase-II, multicenter, open label, randomized study of Mapatumumab (TRM-1, (HGS 1012), a fully human monoclonal antibody to TRAIL-R1) in combination with Bortezomib (VELCADE) and Bortezomib alone in subjects with relapsed or refractory multiple myeloma	Parexel International Ltd, UK	89,700

Sushma Bhatnagar	CP045/06/FCNS: An open label study investigating long term safety and tolerability of Nasalfent (fetanyl citrate nasal spray) in the treatment of breakthrough cancer pain (BTCP) in subjects taking regular opioid therapy	Archimedes Development Ltd, UK	833,884
Laboratory Medicine			
Sarman Singh	The role of TNFa, IFN γ and the success of anti-tuberculosis therapy in immune restoration disease in HIV/TB co-infected patients responding to ART	Univ. of Western Australia	146,990
Medicine			
Sanjeev Sinha	ASHA HIV Health Promotion Intervention in India	NIH, USA	454,375
Neurology			
Kameshwar Prasad	Efficacy of nitric oxide in stroke (ENOS): A prospective, international, multicentre, randomised, parallel-group, blinded, controlled, collaborative, factorial trial to investigate the safety and efficacy of treatment with transdermal glyceryl trinitrate, a nitric oxide donor, and of stopping or continuing prior antihypertensive therapy, in patients with acute stroke	Univ. of Notting-ham, UK	15,473
M. V. Padma	Predicting hematoma growth and outcome in intra cerebral hemorrhage using contrast bolus CT (PREDICT): A part of Multicentric study	Univ. of Calgary, Canada	58,956
Madhuri Behari	A randomized, multicenter, double-blind, placebo-controlled, dose-comparison study to determine the efficacy, and safety of BG00012 in subjects with relapsing-remitting multiple sclerosis (IN109MS301)	Biogen Idec Ltd, UK	280,112
Vinay Goyal	Safety and effectiveness of open label melperone in the treatment of patients with psychosis in Parkinson's disease (OV: 1005)	Ovation Pharma, USA	44,850
Neurosurgery			
B. S. Sharma	A prospective, multicentre, double blind, randomized, placebo-controlled, parallel-group study to assess the efficacy and safety of clazosentain in reducing vasospasm-related morbidity and all-cause mortality in adult patients with aneurysmal subarachnoid hemorrhage treated by surgical clipping	Actelion Pharmaceuticals Ltd, Switzerland	454,878
P. Sarat Chandra	Safety, tolerability and effectiveness evaluation of the ISS in the treatment of vascular dementia: A pilot study	Brains Gate Ltd, Israel	163,208

Nuclear Medicine			
C. S. Bal	A multicentric, open-label, randomized phase II/III study to evaluate the safety and efficacy of Combretastatin A-4 phosphate in combination with paclitaxel and carboplatin in comparison with paclitaxel and carboplatin against anaplastic thyroid carcinoma	Oxigene, USA	414,165
C. S. Bal	Lu-177 EDTMP in hormone refractory prostate cancer patients with bone metastases: A phase I activity escalation study	IAEA	669,130
Rakesh Kumar	Cost effective differential diagnosis in lung cancer using PET generator based radiopharmaceuticals	IAEA	522,786
Paediatrics			
Arvind Bagga	Levamisole treatment for children with steroid sensitive nephrotic syndrome: A multicentre, double-blind, placebo-controlled randomized trial	Ace Pharmaceuticals BV, Netherlands	782,188
Madhulika Kabra	A multicenter, randomized, double-blind parallel, group study of gene-activated human glucocerebrosidase (GA-GCB) enzyme replacement therapy compared with Imiglucerase in patients with type 1 Gaucher disease	Shire Human Genetic Therapies Inc, USA	1,073,809
Shinjini Bhatnagar	Hib meningitis sentinel surveillance in north India	John Hopkins Bloomberg School of Public Health	2,213,219
Shinjini Bhatnagar	Etiology and characteristics of influenza and other acute lower respiratory infection in New Delhi	John Hopkins Bloomberg School of Public Health	1,890,961

9.1 Anaesthesiology

Professor and Head

Chandralekha

Professors

M.K. Arora
S. Rajeswari
L. Kashyap

D.K. Pawar
Anjan Trikha
Dilip Shende

Ravinder Kumar Batra
Maya Dehran

Additional Professors

Ganga Prasad

Associate Professors

Virender K. Mohan
Rani Sunder

Vimi Rewari

Vanlal M. Darlong

Assistant Professors

A.P. Bhalla
Jyotsna Punj

R. Pandey
Rashmi Ramachandran

Anjolie Chhabra

EDUCATION

Undergraduate and Postgraduate

Academic activities of undergraduates, postgraduates and paramedical staff (BSc Nursing, MSc Nursing) are continuing as before.

Short- and long-term training

Training of doctors and technicians from India and abroad in various aspects of anaesthesia, intensive care management, pain medicine and emergency care is continuing.

Number of doctors and para-medical staffs from various medical colleges:

– Pain-clinic	1
– ICU	3
– Anaesthesia	2

Continuing Medical Education

Professor Ravinder Kumar Batra

- ‘Workshop for DNB candidates’, National Board of Examinations, AIIMS, New Delhi; 12–14 April 2008.
- ‘CME-Hands-on-workshop for trainers’ sponsored by National Board of Examinations, Jaipur Golden Hospital, New Delhi; 25–27 July 2008.
- ‘CME-Hands-on-workshop for trainers’ sponsored by National Board of Examinations Sir Ganga Ram Hospital, New Delhi; 4–6 August 2008.

- ‘CME-Hands-on-workshop for trainers’ sponsored by National Board of Examinations, Care Hospital, Hyderabad; 20–21 September 2008.
- ‘How to plan a research project and write a Protocol’ for post-graduate students, AIIMS, New Delhi; 1 October 2008.
- ‘CME-Hands-on-workshop for trainers’ sponsored by National Board of Examinations, Dina Nath Mangeshkar Hospital, Pune; 4–5 October 2008.
- ‘CME-Hands-on-workshop for trainers’ sponsored by National Board of Examinations, Southern Railway Hospital, Chennai; 11–12 October 2008.
- ‘CME-Hands-on-workshop for trainers’ sponsored by National Board of Examinations, Sr John Hospital, Bangalore; 18–19 October 2008.
- ‘CME-Hands-on-workshop for trainers’, sponsored by National Board of Examinations, LHMC and S.K. Hospital, New Delhi; 25–26 October 2008.
- ‘Module of attempting theory examination for DNB candidates 2008’, AIIMS, New Delhi; 2 November 2008.
- ‘How to plan a research project and write a Protocol’ for post-graduate students, AIIMS, New Delhi; 27 March 2009.
- ‘Obstructive jaundice’, CME-Workshop for DNB candidates, AIIMS, New Delhi; 12 April 2008.
- CME-Hands-on-workshop for faculty for DNB, organized by National Board of Examinations, Jaipur Golden Hospital, New Delhi; 25–27 July, 2008. He delivered lectures on:
 - Bedside teaching of long case and short case
 - Bedside teaching of cases in ward round
 - Teaching of spots
 - Writing of protocol, thesis and doing research
 - Constructing of MCQs, Short questions, their advantages and disadvantages
- CME-Hands-on-workshop for Faculty for DNB, organized by National Board of Examinations, Sir Ganga Ram Hospital, New Delhi; 4–6 August 2008. He delivered lectures on:
 - Bedside teaching of long- and short-case
 - Bedside teaching of cases in ward round
 - Teaching of spots
 - Writing of protocol, thesis and doing research
 - Constructing of MCQs, short questions, their advantages and disadvantages
- CME-Hands-on-workshop for faculty for DNB, organized by National Board of Examinations, Care Hospital, Hyderabad; 20–21 August 2008. He delivered lectures on:
 - Bedside teaching of long- and short-case
 - Bedside teaching of cases in ward round
 - Teaching of spots

- Writing of protocol, thesis and doing research
- Constructing of MCQs, Short questions, their advantages and disadvantages.
- ‘How to plan a research project and write a Protocol’, ‘Purpose and process of thesis in workshop’ for post-graduate students, AIIMS, New Delhi; 1 October 2008.
- ‘How to plan a research project and write a Protocol’, ‘Submission of documents for IEC in workshop’ for post-graduate students, AIIMS, New Delhi; 1 October 2008.
- CME-Hands-on-workshop for Faculty for DNB, National Board of Examinations, Dina Nath Mangeshkar Hospital, Pune; 4–5 October 2008. He delivered lectures on:
 - Bedside teaching of long- and short-case
 - Bedside teaching of cases in ward round
 - Teaching of spots
 - Writing of protocol, thesis and doing research
 - Constructing of MCQs, Short questions, their advantages and disadvantages
- CME-Hands-on-workshop for Faculty for DNB, organized by National Board of Examinations, Southern Railway Hospital, Chennai; 11–12 October 2008; He delivered lectures on:
 - Bedside teaching of long- and short-case
 - Bedside teaching of cases in ward round
 - Teaching of spots
 - Writing of protocol, thesis and doing research
 - Constructing of MCQs, Short questions, their advantages and disadvantages
- ‘Perioperative cardiac evaluation for non-cardiac surgery’, CME programme PGA 2008, G.K.N.M. Hospital, Coimbatore; 18 October 2008.
- CME-Hands-on-workshop for Faculty for DNB, organized by National Board of Examinations, Sr John Hospital, Bangalore; 18–19 October, 2008. He delivered lectures on:
 - Bedside teaching of long- and short-case
 - Bedside teaching of cases in ward round
 - Teaching of spots
 - Writing of protocol, thesis and doing research
 - Constructing of MCQs, Short questions, their advantages and disadvantages
- ‘Perioperative cardiac evaluation for non-cardiac surgery’, CME programme PGA 2008, at Maulana Azad Medical College, New Delhi; 22 October 2008.
- CME-Hands-on-workshop for Faculty for DNB, organized by National Board of Examinations, Lady Harding Medical College and S.K. Hospital, New Delhi; 25–26 October 2008; He delivered lectures on:
 - Bedside teaching of long- and short-case
 - Bedside teaching of cases in ward round
 - Teaching of spots

- Writing of protocol, thesis and doing research
- Constructing of MCQs, Short questions, their advantages and disadvantages
- ‘Subject expert in anaesthesia’, CME on ‘Module of attempting theory examination for DNB candidates 2008’, AIIMS, New Delhi; 02 November 2008.
 - Planning and organization of short structured questions
 - Grading of short-structured questions and listing of key skills for attempting theory questions
 - Attempting short structured questions
- ‘Early goal directed therapy in sepsis’, CME and FCCS Course at JNMC, Aligarh, Uttar Pradesh; 12 December 2008.
- ‘Purpose and process of thesis in workshop’, CME on ‘How to plan a research project and write a Protocol’ for post-graduate students; AIIMS, New Delhi; 27 March 2009.
- ‘Submission of documents for IEC in workshop’, CME on ‘How to plan a research project and write a Protocol’ for post-graduate students, AIIMS, New Delhi; 27 March 2009.

Teleconferencing Session

- ‘Quiz in anaesthesia’, Moderated the teleconferencing session for DNB candidates; IGNOU, New Delhi; 24 April 2008.
- Quiz on ‘Case scenario in anaesthesia’; 24 April 2008.
- ‘Interpretation of biochemical, haematological investigations and Cerebrospinal Fluid’, Moderated the teleconferencing session for DNB candidates, IGNOU, New Delhi; 22 May 2008.
- Moderator and co-ordinator for teleconferencing session for DNB Anaesthesia candidates, IGNOU, New Delhi; 30 March 2009.

Radio-talk (FM Band 105 Hz)

- ‘How to prepare for clinical/practical DNB examinations in anaesthesia’; 24 April 2008.
- ‘Anaesthesia’ in *Hindi*; 1 August 2008.
- ‘Critical care and pain clinic’ in *Hindi*; 29 August 2008.
- ‘How to prepare for DNB (Anaesthesia) theory examinations’; 25 September 2008.
- ‘How to prepare for clinical/practical DNB examinations in Anaesthesia’; 11 December 2008.
- ‘How to prepare for clinical/practical DNB examinations in Anaesthesia’; 26 February 2009.
- Moderator and co-ordinator for radiotalk session for DNB Anaesthesia candidates, IGNOU; 30 March 2009.
- ‘How to write protocol, do research and write thesis’, AIIMS, New Delhi; 1 October 2008.
- ‘How to plan a research project and write a Protocol’, AIIMS, New Delhi; 27 March 2009.

Professor Anjan Trikha

- ‘Practical regional anaesthesia for outpatients’, CME in World Anaesthesia Day, Hyderabad; October 2008.
- ‘Controversies in obstetric anaesthesia’, CME on ‘Obstetric anaesthesia’, Baba Sahib Ambedkar Hospital, New Delhi; November 2008.
- ‘How I would do it’, CME on ‘Management of difficult airway’, Department of Anaesthesiology and Intensive Care, Maulana Azad Medical College and Associated Hospitals; February 2009.
- ‘Non invasive ventilation’, CME on ‘Basics of mechanical ventilation’, JLN Bhillai Hospital, Bhillai, Chhattisgarh; March 2009.
- ‘Trouble shooting for a patient on mechanical ventilation’, CME on ‘Basics of mechanical ventilation’, JLN Bhillai Hospital, Bhillai, Chattisgarh; March 2009.
- ‘Mechanical ventilation strategies for some common conditions’, CME on ‘Basics of mechanical ventilation’, JLN Bhillai Hospital, Bhillai, Chhattisgarh; March 2009.

Dr Vimi Rewari

- ‘Anesthesia for congenital heart disease’, EORCAPS-2008, UCMS & GTB Hospital, Delhi; 22 September 2008.
- ‘Anesthesia for valvular heart disease in pregnancy’, CME on ‘Obstetric Anesthesia—an update’, Baba Sahib Ambedkar Hospital, New Delhi; 15 November 2008.

Professor S. Rajeshwari

- ‘Electrolyte fluid and imbalance’, C.G. Saraiya CME; 2 February 2008.
- ‘Critical Care—Management of Shock and DIC’, National CME (Obstetrics and Gynaecology): Module 6, Series 2.

National and International Conferences

- Organized 1st International Congress on ‘Recent advances in anaesthesia (INCRAA); 30 January – 1 February 2009.

Lectures delivered

Dr Chandralekha

- ‘ARDS—past, present and future’, 9th Annual North Zone conference of Indian Society of Anaesthesiologists (NZ-ISACON-2008), Kashmir, Srinagar; 26–27 July 2008.
- ‘Anaesthetic risk of surgery in kidney disease: Can we quantitate and prevent’, 2nd National Congress on Prevention of Kidney Disease in India, Department of Nephrology; 16–17 February 2008.

- ‘Anaesthesia problems in CRF patients’, EORCAPS-2008, UCMS & GTB Hospital, Delhi; September 2008.

Professor Ravinder Kumar Batra

- Chaired and Moderated the Panel Discussion on ‘Mechanical ventilation in critical care’, 47th Annual Conference and CME of Indian Society of Anaesthesiologists (Delhi Branch) and Indian College of Anaesthesiologists, New Delhi; 6 April 2008.
- Chaired session on ‘Anaesthesia’, International Anaesthesia and Critical Care Review–2008, Ludhiana, Punjab; 15–16 November 2008.
- Moderated workshop on ‘Mechanical ventilation’, APICON 2009, Greater Noida, Uttar Pradesh; 31 January 2009.
- Chaired session in Annual Conference of India Association of Palliative Care, AIIMS, New Delhi; 14 February 2009.
- Chaired session in Indo–US CME on ‘Emergency and trauma’, AIIMS, New Delhi, 1 March 2009.
- Panelist in Panel Discussion on ‘Cardiac patient coming for non-cardiac surgery’, Society of Cardiac Anaesthesiologist of Delhi & NCR, AIIMS, New Delhi; 22 March 2009.

Professor Anjan Trikha

- ‘What is new in Sepsis?’, Annual Conference of Indian Society of Anaesthesia, Delhi Branch, New Delhi; April 2008.
- ‘Preservative free clonidine: How can it change the anaesthesia practice?’, Teleconference between anesthesiologists from Delhi, Meerut, Raipur, Amritsar, and Jaipur; April 2008.
- ‘Recent advances in management of ARDS’, Annual North zone conference of Indian Society of Anaesthesiologists, Srinagar, Kashmir; July 2008.
- ‘Non-invasive cardiac output monitoring in ICU’, National Conference on ‘Anaesthesiology and critical care’, Armed Forces Command Hospital, Lucknow; August 2008.
- ‘Anaesthesia implications in patients with chest drains and broncho pleural fistula’, EUROCAPS 2008, UCMS & GTB Hospital, Delhi; September 2008.
- ‘Anaesthesia and tracheostomy’, EUROCAPS 2008, UCMS and GTB Hospital, Delhi; September, 2008.
- ‘One lung ventilation’, EUROCAPS 2008, UCMS and GTB Hospital, Delhi; September 2008.
- ‘Recovering C-section patient–better and faster’, 1st National Conference on ‘Obstetric Anaesthesia’, Chennai; October 2008.
- ‘Management of sepsis in trauma’, International Conference of Indian Society of ‘Trauma and acute care’, New Delhi; November 2008.

- ‘Antibiotics in the ICU—a continuing enigma’, Medicine Update (Delhi Chapter), November 2007.
- ‘Free bees from medical industry are justified’, Debate session during the monthly meet of the Indian Society of Anaesthesiologists, ICMS and GTB Hospital, Delhi; February, 2009.

Professor S. Rajeshwari:

- ‘Anaesthetic Considerations’, **Workshop** on ‘Bariatric surgery’; March 2008:
- ‘Bariatric surgery—anaesthetic considerations’, Doordarshan Live Telecast; 3rd March 2008:
- ‘Cushing’s syndrome, emergency drugs acid-base disorders’; April, 2008.
- ‘ECGs, PFTs, acid-base disorders’, DNB Live Telecast; April 2008.
- ‘Management of obstetric emergencies’, BAPU (Balaji Anaesthesia Postgraduate Update): Post Graduate Assembly, Tirupati; 5 September 2008.
- Paper Presentation on ‘Comparison of 2% lignocaine gel with fentanyl for pediatric cataract surgery’, XXVII Annual ESRA Congress, Genoa, Italy; 23 & 27 September.
- Paediatric anaesthesia: General considerations; management of neonatal surgical emergencies; management of MMC, cleft lip and cleft palate’; Post Graduate Assembly India North, 23 October 2008.

Dr Virender K Mohan

- ‘Regional anaesthesia equipments, spinal/epidural anaesthesia, neuromuscular junction monitoring, TENS and Ultrasound’, All India Institute of Medical Sciences, New Delhi; 12–14 April 2008.
- ‘Non-interventional management of neck pain’, 14th Annual Conference of Indian Society for Study of Pain (ISSPCON 2009), Hyderabad; February 2009.

Dr Rashmi Ramchandran

- ‘Physiology of ventilatory support’, Workshop on ‘Basics of mechanical ventilation’, Jawaharlal Nehru Hospital Research Centre, Bhillai; 28–29 March 2009.
- ‘Sedation and analgesia in ICU’, Workshop on ‘Basics of mechanical ventilation’, Jawaharlal Nehru Hospital and Research Centre, Bhillai; 28–29 March 2009.
- ‘Fiber-optic Intubation in Airway’, MAMC; 13–14 February 2009.
- Course Co-coordinator in ‘Trauma-2009’, International conference CME cum Live Workshop and Inaugural Conference of the International Society of Acute and Trauma Care (ISTAC); 28–30 November 2008.

Dr Vimi Rewari

- ‘ARDS—past, present and future’, 9th Annual North Zone Conference of Indian Society Zone Conference of Indian Society of Anaesthesiologists, Srinagar; 26–27 July 2008.

- ‘Glutamine supplementation in ICU’, Indian Society of Anaesthesiology (Monthly Meeting), AIIMS, New Delhi, 12 September 2008.
- ‘Anaesthesia for Gynecological Endoscopy’, Workshop on ‘Minimal invasive gynaecology’, AIIMS, New Delhi; 11 February 2009.
- ‘Basics of a ventilator’, Workshop on ‘Mechanical ventilation’, JLN Hospital and Research Centre, Bhillai, Chattisgarh; 28–29 March 2009.
- ‘Modes of ventilation’, Workshop on ‘Mechanical ventilation’, JLN Hospital and Research Centre, Bhillai, Chattisgarh; 28–29 March 2009.
- ‘Ventilation in patients with Asthma’, Workshop on ‘Mechanical ventilation’, JLN Hospital and Research Centre. Bhillai, Chattisgarh; 28–29 March 2009.

RESEARCH

Funded Projects

Nil

Departmental Projects

Completed

1. A comparative study to assess the effect of oral decontamination with 0.12% Chlorhexidine solution vs. H2O2 solution in normal saline in a ratio of 1:8 on the incidence of ventilator associated pneumonia (VAP) and oral microbial flora in Mechanically ventilated patients
2. Percutaneous dilatational tracheostomy: Griggs guide wire dilating forceps technique Versus controlled rotating dilation technique – A prospective randomized study
3. Comparison of cardiac output and stroke volume using esophageal Doppler, Arterial pulse wave contour and thoracic impedance in critically ill patients
4. Effect of glutamine supplementation in critically ill patients
5. Peri-operative entropy in paediatric day care surgery
6. To evaluate the effect of epidural volume extension in combined spinal epidural anaesthesia
7. Efficacy of paravertebral block as analgesic technique for laparoscopic cholecystectomy
8. Paediatric internal jugular vein cannulation: Comparison of Real-Time Ultrasound Guided and Conventional Landmark Technique-chief investigator
9. Role of radiofrequency ablation in the treatment of symptomatic lower limb varicosities 2008-co-investigator
10. Effect of Pregabalin on pre-operative anxiety and postoperative pain after total Abdominal hysterectomy—a dose ranging study

11. Evaluation of stroke volume variation as predictor of fluid responsiveness using pulse contour analysis device (FloTrac/Vigileo) in mechanically ventilated patients
12. Comparison of nitroglycerine and diltiazem as adjuvant in intravenous regional anaesthesia

Ongoing

1. Paediatric internal jugular vein cannulation: Comparison of real-time ultrasound guided and conventional landmark technique
2. Effect of Pregabalin on pre-operative anxiety and postoperative pain after total abdominal hysterectomy –A dose ranging study
3. Evaluation of stroke volume variation as predictor of fluid responsiveness Using pulse contour analysis device (FloTrac/Vigileo) in mechanically ventilated patients
4. Percutaneous microballoon comparison of Gasserian ganglion in classical Trigeminal neuralgia: Outcome and complications
5. Low dose hyperbaric bupivacaine in combination with intrathecal clonidine for unilateral knee arthroplasties
6. Ketamine as an adjunct with bupivacaine in paravertebral analgesia for breast surgery
7. Intrathecal morphine for postoperative pain relief in children: A comparison of two doses
8. Effect of Fentanyl pretreatment for alleviation of perineal symptoms after administration of Intravenous Dexamethasone sodium phosphate in the preoperative period
9. Incidence of accidental venous cannulation during epidural catheter placement after prior epidural injection of normal saline and head down position
10. Feasibility and comparison of technique of ultrasound guided central venous catheter placement via internal jugular vein in three different patient position – conventional (15o Trendelenburg), semi sitting (30 head up) and left lateral position
11. Safety and efficacy of low dose spinal anesthesia in patients undergoing laparoscopic hernia repair
12. Internal jugular vein cannulation: A comparison of three techniques

Collaborative Research

1. Phenotypic and genotypic characterization of clinical isolates of candida species
2. Comparative clinical proteomics and identification and characterization of new proteins
3. A study to assess quality of sleep and factors affecting quality of sleep in hospitalized patients
4. A descriptive comparative study to assess the prevalence of Burnout syndrome and probable causative factors among nurses working in selected intensive care units versus general wards of AIIMS

5. To evaluate the postoperative pain and other postoperative variables/complications with different surgical techniques of tonsillectomy (with ENT Department)
6. Outcome of laparoscopic sleeve gastrectomy in morbidly obese patients (with Surgery Department)
7. Assessment of factors affecting safety in patients undergoing operations in general dsurgery (with Surgery)
8. A study of phenotypic and phenotypic characterization of Asian Indian children with Craniosynostosis (with Paediatric Surgery)
9. Quantitative estimation of indices for components of balanced anesthesia using electroencephalographic signals from sub-human primates (with Centre for Biomedical Engineering, IIT, Delhi)
10. Development of an anesthesia delivery work station (with Central Scientific Instruments Organization, Chandigarh)

PUBLICATIONS

Journals

1. Chandralekha, Trikha A, Gupta P. A North Indian Dengue Outbreak 2006. *Journal of Royal Society of Tropical Medicine and Hygiene* 2008;**102**:143–7.
2. Gandhi R, Batra RK, Saxena A. Excision of a teratomatous ‘parasitic twin’ in an infant with uncorrected complex cyanotic heart disease. *Anaesth Intensive Care* 2007;**35**:810–12.
3. Batra RK. Anaemia and Anaesthesiologist, *Editorial. Journal of Postgraduate Medical Education, Training and Research* 2008;**3**:1–6.
4. Batra RK, Roy K. Anaesthesia for children with malformation syndromes. *Journal of Postgraduate Medical Education, Training and Research* 2008;**3**:36–46.
5. Batra RK, Garg R. Cardio-pulmonary resuscitation: Advanced life support –review article. *Journal of Postgraduate Medical Education, Training and Research* 2008;**3**:27–32.
6. Batra RK, Garg R. Anaesthesia for laparoscopic and otherendoscopic procedures. *Journal of Postgraduate Medical Education, Training and Research* 2008;**3**:38–55.
7. Manikandan R, Batra RK, Aggarwal M. Anaesthetic management of an elderly obese patient with Parkinson’s disease for incidental surgery—a case report (correspondence) *Journal of Postgraduate Medical Education, Training and Research* 2008;**3**:
8. Elakkumanan LB, Khanna P, Batra RK. Atypical ECG causing confusion during induction of Anaesthesia in a Neonate with Down’s syndrome and atrial septal defect. *Ind J Anaesth* 2008;**52**:605–6.
9. Pandey R, Garg R, Chandralekha, Darlong V, Punj J. Vaccination and urgent surgery in children: Anesthetic concerns. *Acta Anaesthesiologica Taiwanica (Acta Anaesthesiol Taiwan)* 2008;**46**: 199–200.

10. Pandey R, Garg R, Nath MP, Shakthi RP, Punj J, Darlong V, *et al.* Eisenmenger's syndrome in pregnancy: Use of Proseal Laryngeal Mask Airway (PLMA) and epidural analgesia for elective cesarean section. *Acta Anaesthesiologica Taiwanica* 2009;
11. Pandey R, Garg R, Chandralekha, Jyoti B, Elakkumanan LB, Chaitra M, *et al.* Laryngoscope and Bougie aided correct placement of double lumen tube in difficult airway. *J Cardiothorac Vasc Anesth* 2008;
12. Pandey R, Elakkumanan LB, Garg R, Jyoti B, Mukund C, Chandralekha, *et al.* Brachial plexus injury after robotic assisted thoroscopic thymectomy. *J Cardiothorac Vasc Anesth* 2008;
13. Punj J, Darlong V, Pandey R, Chandralekha. Thirty five franklin size double lumen tube may not be suitable for tall patients.
14. Sinha R, Subramaniam R. Failed laryngeal mask airway insertion another technique. *Paediatric Anaesth* 2008;**18**:571–72.
15. Sinha R, Roy K, Nanda S, Subramaniam R. Anaesthetic management of a child with congenital heart disease and pulmonary artery banding for ophthalmic surgery. *Paediatric Anaesth* 2008;**18**:994–6.
16. Chhabra A, Subramaniam R. Sudden appearance of idioventricular rhythm during Inhalational induction with halothane in a child with congenital cataract. *J Postgrad Med* 2008;**54**:537–9.
17. Sinha R, Bose S, Subramaniam R. Tumor lysis under anaesthesia in a child. *Acta Anaesthesiol Scand* 2009;**53**:131–3.
18. Sunder R, Chandrashish C, Handa K, Subramaniam R. Operating laryngoscope in a failed intubation scenario. *Paediatric Anaesth* 2009;**19**:274–5.
19. Sinha R, Subramaniam R, Chhabra A, Pander R, Nandi B, Jyoti B. Comparison of topical lignocaine gel and fentanyl for perioperative Analgesia in children undergoing cataract surgery. *Paediatr Anaesth* 2009;**19**:371–5.
20. Elakkumanan LB, Rewari V, Khanna P. An unusual cause for oropharyngeal leak during use of 2.5 size ProSeal LMA. *Paediatric Anaesth* 2008;**18**:1229–30.
21. Rewari V, Singh S, Trikha A. Laparoscopic cholecystectomy in a morbidly Obese patient with Chiari I malformation and craniocervical anomalies. *J Clin Anesth* 2008;**20**:372–5.
22. Chakravarty C, Rewari V, Talwar P, Kumar A, Manikandan R. Cobra perilaryngeal airway as a rescue device for failed rapid sequence intubation. *Acta Anaesthesiology Scand* 2008;**52**:572.
23. Rewari V, Trikha A. Authors' reply: Atropine fever! Is it an anesthetic dilemma? *Paediatr Anaesth* 2008;**18**:439–40.
24. Pandey R, Garg R, Darlong V, Punj J, Arvind K, Arora MK, *et al.* Anesthetic management of thoracic type of complete Ectopia cordis—a case report. *Paediatr Anesth* 2008;**19**:1137–9.

25. Pandyr R, Garg R, Punj J, Darlong V. Perianesthetic management of Generalized congenital Cutis Laxa Syndrome associated with pulmonary stenosis undergoing inguinal hernia repair. *Paediatr Anesth* 2008;**18**:907–9.
26. Sethi D, Chhabra A. Seizure disorder leading to apnoea and bradycardia in a 9-year-old child in the immediate postoperative period. *Paediatr Anesth* 2008;**18**:1211–12.
27. Chhabra A, Pawar DK, Khanna P, Sokhal N. Intraoperative dislodgement of an internal Jugular central line with an undisturbed skin fixation. *Paediatr Anesthesia* 2008;**18**:1130–1.
28. Chhabra A, Subramaniam R. Sudden appearance of idioventricular rhythm during inhalational Induction with halothane in a child with congenital cataract. *J Postgrad Med* 2008;**54**:337–9.
29. Chhabra A, Garg R. Nasogastric tube insertion through a nasopharyngeal airway in patients with failed intubation through the nares. *Indian Journal of Anaesthesia* 2008;**52**:59–62.
30. Sharma P, Julka A, Gadia R, Chhabra A, Dehran M. Evaluation of single-stage adjustable Strabismus surgery under conscious sedation. *Indian J Ophthalmol* 2009;**57**:121–5.
31. Trikha A, V Rewari. Sedation, analgesia and muscle relaxation in ICU. *Indian Journal of Anaesthesia* 2008;**52**:645–655.
32. Lenin BE, Prasad G. Macintosh balloon technique-detection of epidural space. *Journal of Anaesthesia Clinical Pharmacology* 2008;**24**:361.
33. Pandey R, Gupta P, Garg R, Darlong V, Punj J. Renal cell carcinoma encasing and invading inferior vena cava; Anaesthetic concerns. *The Internet Journal of Anesthesiology* 2008;**16**:
34. Darlong V, Pandey R, Punj J. Anesthesia for Ontological ENT surgeries: Review. *The Internet Journal of Anesthesiology* 2009;**20**:
35. Trikha A. A baby is born—editorial. *Obstetric Anesthesia Update*; 2008;**1**:1.
36. Trikha A. CPR in pregnant patients—editorial. *Obstetric Anaesthesia Update*; 2008;**1**:1.
37. Trikha A. Need for dedicated obstetric intensive care units—editorial. *Obstetric Anaesthesia Update* 2009;**2**:1.

Chapter in Books

1. Batra RK, Sharma A. Pediatric anesthesia—general considerations in pediatric surgery. 1st ed. In: Gupta DK, Sharma S, Azizkhan RG. New Delhi: Jaypee Brothers; 2008:103– 22.
2. Subramaniam R. Anesthetic management of the critically ill obstetric patients. In: Mishra MG, Sinha J (eds). *Critical Care in Obstetrics*. 1st ed. New Delhi: Jaypee Brothers; 2009:254–78.
3. Chhabra A. Preoperative evaluation of patients. In: Subramaniam R. *A primer of anesthesia*. New Delhi, Ahmedabad, Nagpur: Jaypee Brothers.

Book

- Subramaniam R. *A primer of anesthesia*. 1st ed. New Delhi: Jaypee Brothers; 2008:1–325.

PATIENT CARE

The following facilities are available in the department:

1. Pre-anaesthesia clinic (PAC), 3 days in a week (Monday, Wednesday, Friday), 2–5 pm.
2. Pain clinic, 3 days in a week (Monday, Wednesday, Friday), 2–5 pm.
3. Interventional pain management procedures in operation theatre on Thursday.

Number of operations/procedures done

1. Main Operation Theatre

General surgery	2,779
Gastrointestinal surgery	451
Urology	1,155
Otorhinolaryngology	1,097
Gynaecology	1,091
IVF	92
Paediatric surgery	1,556
Dental surgery	134

2. Peripheral Operation Theatre

Maternity OT	1,946
Orthopaedics	2,219
Dr R.P. Centre for Ophthalmic Surgery	5,083

3. Interventional Pain Management Procedure **465**

4. Procedures done under GA in Peripheral areas

Modified ECTs (Psychiatry OPD)	466
CECT/MRI	1,467
Paediatric USG (RPC)	448
DSA	31
ESWL	4

AB8/ICU

Total number of patients admitted	243
Number of patients discharged	169
Number of Deaths	36

AB8 EMERGENCY DUTY

Emergency operations done	3167
Emergency calls attended	2530

(from wards, peripheral ICUs and Casualty)

OPD CLINICS

Total number of patients attended the clinic:

Pre-anaesthesia clinic	10,682
Pain Clinic	3704

Voluntary community services

Dr Maya Dehran provided voluntary medical community services at the Bhatti Centre in Radha Soami Satsang, New Delhi for 17 days. She also provided first-aid services, resuscitation and critical care till the patients were shifted to a major hospital; Governing Body Member and advisor to council in the Centre of Social Research (NGO) and Women Power Connect.

AWARDS AND HONOURS

Dr Chandralekha was nominated as Executive Member to Bureau of Indian Standards (BIS) and Chairperson of Anaesthetic, resuscitation and allied equipment sectional committee MHD-11; Chairperson to Academic Committee of Indian College of Anaesthesiologists; Trust member and Governing Council Member of Indian College of Anaesthesiologists.

Dr Ravinder Kumar Batra is Chairman Ethic Subcommittee, AIIMS, New Delhi. He was selected as Expert for National Board of Examinations for Inspection of DNB Anaesthesiology for DNB Accredited Institute; Expert for National Board of Examinations for Inspection of FNB Critical Care for National Board of Examinations Accredited Institute; Expert for finalization and standardization of the day to day teaching schedule for training of MBBS doctors in Life Saving Anaesthetic Skills for Emergency Obstetric Care; Expert-Group Member of ‘Committee for decision for using unethical means during National Board of Examinations’; Expert-Group Member of ‘Thesis Review Committee’ for National Board of Examinations; Expert-Group member for preparing Course and Curriculum for the training of MBBS Doctors in Obstetrics and Anaesthesia Skills for UTs of Lakshadweep and A & N Island; Member of the Screening Committee to screen the applications of Joint Director (Nob-Medical), NBE, on 12th Feb, 2009 at New Delhi.

Dr Anjan Trikha was nominated for the post of Vice President and editor of the Association of Obstetric Anaesthesiologist. He was also invited to be the founder member of the ‘Establishment Committee’ of the Indian College of Anaesthesiologists.

Dr Rashmi Ramachandran was elected Member of Hospital Infection Control Core Committee.

Dr Anjolie Chhabra was appointed Chairperson for judging poster/free paper section at the International Anesthesia and Critical care review at DMC Ludhiana, 15–16 November 2008.

9.2 Anatomy

Professor and Head

Rani Kumar
(Dean AIIMS from March 2009)

Professors

Shashi Wadhwa

Raj D. Mehra

T.S. Roy

Additional Professors

A. Shariff

Pushpa Dhar

S.B. Ray

Associate Professors

T.K. Das
(Electron Microscopy)
Renu Dhingra

Rima Dada

T.C. Nag

Arundhati Sharma
(Genetics)
(Electron Microscopy)
Ritu Sehgal

EDUCATION

Undergraduate

The department conducts MB,BS, BSc (Honours.) Nursing, B.Sc. Nursing (Post Certificate), B.Sc. Ophthalmic, Radiographic technique and speech and hearing therapy training courses. A booklet on Learning Objectives for Gross Anatomy was compiled and printed for distribution to the undergraduate students on admission. Formative multiple choice questions have been prepared on various topics in Gross Anatomy, microanatomy, developmental anatomy and the undergraduate students have regularly undertaken the self-assessment.

Postgraduate

Besides giving training to the department MD, MSc and PhD anatomy students,, the department conducted course on Human Genetics for the PG students of the Department of Biotechnology, AIIMS. The faculty taught human genetics (both practical and theory) to these students. The faculty delivered series of lectures to MSc students in neurosciences, medical genetics and embryology at Jiwaji University Gwalior. The faculty also delivered lectures on ‘Anatomy for postgraduates during teleconference’, IGNOU on Gyan Darshan National Board of Examination.

Short and long-term training

Four MB,BS students from AIIMS completed Summer Research training in Genetics and neuroscience and submitted short-term projects under *Kishore Vagyanik Puruskar Yojna* (KVPY) and of these two students were selected/awarded this fellowship. B.Tech students from Chennai University and M.Sc (Biotechnology) students from Amity University worked for summer training in basic cytogenetic and Molecular techniques in ophthalmic disorders. Two MSc students from Jiwaji University, Gwalior were trained in neuroanatomical techniques. The department provided training to six WHO fellows in genetics for a period of three months in molecular genetic, basic cytogenetics and prenatal diagnostic techniques for detection of chromosomal disorders using CVS, amniotic fluid and cord blood samples.

One scientist from Myanmar was trained in plastination, genetics, and electron microscopic techniques. The department has upgraded the eLearning facility, which provides facilities to manage the UG and PG courses and coordinate the departmental activities like the Journal Club presentations and seminars. The PGs and PhD Students are also using the eLearning facility for scientific literature search and activities related to their thesis and research.

Continuing Medical Education

The department organized a meeting of the Delhi Association of Morphological Sciences (DASMOS) on 7th March 2009, which was attended by faculty and students of all five medical colleges of Delhi. The postgraduate students of the department presented three scientific papers.

Lectures delivered

Professor Rani Kumar

- “Knowledge of Anatomy—A must for intervention”, “in 16th International Conference of Indian Association of Palliative Care, New Delhi, on 12th February, 2009.
- “Development of Cardiovascular System”, in Reorientation training programme for teachers of Sharir Rachna, organized by National Institute of Ayurveda, Jaipur, on 23 February, 2009.

Professor S. Wadhwa

- Delivered a guest lecture on “Electron Microscopy in Medical Science” in the CME, held at BHU, Varanasi; on 26 December, 2008.

Dr. T. S. Roy, Dr. S. B. Ray and Dr. R. Dhingra

- Delivered lectures on various topics in gross and developmental anatomy during teleconference, organized by National Board of Examination, IGNOU on Gyan Darshan; 23 January 2009.

Dr. P. Dhar

- delivered a lecture on ‘Impact of Arsenic Toxicity on Biological System’, at 9th Annual Meeting of ICFMT, at Amity University; (11 October 2008).
- ‘Sodium arsenite exposure during rapid brain growth period alters calcium binding protein (CaBP) expression in rat cerebellum’, at 28th Annual Conference of STOX and International Symposium on “Monitoring & Modulating Global Resources of Environmental & Food contaminants: Nature versus chemicals”, at Guru Angad Dev Veterinary and Animal Sciences University, Ludhiana; (October., 2008.)

Dr Rima Dada

- ‘Genetics of male infertility’, organizing faculty at National workshop on ‘Molecular cytogenetics and rapid prenatal diagnosis by FISH’, Department of Reproductive Biology, AIIMS 3–8 November 2008 Genetics of Male Infertility.

Professor Raj Mehra

- Delivered invited lecture on ‘Electrogen regulates synaptic plasticity in hippocampus through activation of ERK/MAPK signaling pathway’, International symposium on ‘Molecular aspects of brain aging and neurological disorders’. Guranank Dev University, Amritsar, November, 2009.

- Delivered invited lecture ‘Oxidative stress and its impact on male and female fertility’, CME on ‘Oxidative stress and its role in reproductive function’, Indian Fertility Society; 1 October 1st 2008.
- Delivered lecture on ‘Vitrification and alterations in germ cell morphology and impact on ART’, at live workshop on ‘Vitrification at Army Research and Referral Hospital’, on 8th March 2008 This was organized by Indian Fertility Society; 8 March 2008.
- Delivered invited lecture on ‘Genetic alterations in women with Premature Ovarian failure’ at National Symposium on ‘Recent advances in female reproductive health’, organized by Department of Endocrinology, at CDRI, Lucknow; on 7th December 2008.

Dr Renu Dhingra and Dr Ritu Sehgal were appointed as Resource faculty in “National workshop on Assessment Methods for learning Evaluation in Basic medical Sciences”, AIIMS, New Delhi; September 22–24 September, 2008.

Dr Renu Dhingra

- Delivered a guest lecture on “Anatomy of Temporal bone for ENT surgeons”, in Surgical workshop and Otolaryngology update, organized by Department of Otolaryngology, AIIMS, New Delhi; from 17– to 19th August 2008.
- Delivered a guest lecture on “Plastination : A new hope for academic institutions”, in Reorientation training programme for teachers of Sharir Rachna, organized by National Institute of Ayurveda , Jaipur.

Dr. A. Sharma

- Attended Bioinformatics workshop on “Introduction to Bioinformatics”, organized by Bio-Medical Informatics Centre, Department of Biophysics, AIIMS; 2nd –to 5th February; 2009;.
- Faculty Resource Person and delivered a talk on “**Importance of Prenatal diagnosis of Genetic disorders and awareness in the Indian Scenario**”, at the “CME on ‘Clinical Genetics’ ,” organized by Departments of Anatomy, Obstetrics and Paediatrics, LLRM Medical College, Meerut; on 28th February, 2009.
- Delivered a talk on ‘Prenatal diagnosis of chromosomal aberrations by conventional cytogenetics’, Workshop on ‘Molecular Cytogenetics and prenatal diagnosis by FISH’, organized by Department of Reproductive Biology, AIIMS; from 3rd – 8th November 2008.

Dr .Ritu Sehgal

- Worked as Resource Faculty for National Workshop on ‘Assessment Methods for Learning Evaluation in Basic Medical Sciences’, organized by Department of Physiology, AIIMS; (Check above)
- Participated in the workshop on “Ethics in Healthcare & Research”, (Aug 7-9, 2008) at KL Wig CMET, AIIMS, New Delhi; 7–9 August 2008.
- National Workshop on “Teaching Learning Methods in Health Professions Education”, (Nov 10-12, 2008) at KL Wig CMET, AIIMS, New Delhi; 10–12 November 2008.

National and International Conferences

Lectures delivered

Professor Rani Kumar

- Attended 14th International conference on ‘Plastination’, Heidelberg, Germany; from 20–26th July 2008.
- Attended 56th NATCON of Anatomical Society of India, Banaras Hindu University, Varanasi; from 26th Dec to 29th December 2008 at BHU Varanasi.

Professor Shashi Wadhwa

- Professor Shashi Wadhwa participated in the 74th Annual Meeting of the Indian Academy of Sciences at IIT, New Delhi; from 31 October – 2nd November. 2008.
- Participated and chaired a session and judged the best paper presented at an award session of the 56th National Conference of the Anatomical Society of India, held at Varanasi; on 26 – 27th December, 2008.

Professor Raj D. Mehra

- Dr. Mehra participated in the International conference of Translational Pharmacology and 41st conference of the Indian Pharmacology Society. She chaired the Poster Awards, AIIMS, December, 2008.
- Chaired the symposium on ‘Molecular aspect of brain aging and neurological disorder’. Meeting of the Society for neurochemistry, Amritsar, december, 2008.
- Delivered a lecture on ‘Experimental evidence of therapeutic relevance of estrogen and estrogen like compounds postmenopause’, and chaired a session on ‘clinical anatomy’, National Conference of the ASI, Varanasi; December, 2008.
- Participated in the International Symposium on ‘Tribal health’ and chaired the session on “Non-communicable diseases”, Regional Medical Research Center for Tribal’s (RMRCT), Jabalpur, February 2009.
- Participated in the Ranbaxy Science Foundation symposium on ‘Hormonal receptors and women’s health’. She chaired the session on ‘Hormonal receptors in other medical conditions’, AIIMS, March 2009.

Professor T. S. Roy

- Prof. T.S.Roy participated and chaired a session on Acute pancreatitis in the Asia Pacific Digestive week (APDW), New Delhi; 13–16th September, 2008.
- Dr.T.S.Roy attended and presented a poster in Neuroscience 2008, 38th Annual Meeting of the Society for Neuroscience, Washington DC; Nov 15–19th, November 2008.
- He also presented a research paper in the 56th Annual Meeting of the “Anatomical Society of India, Varanasi; December. 27–29th 2008.

Dr. P. Dhar

- Attended International Conference. of South Asian Congress of Forensic Medicine, Forensic Science and Toxicology and 9thth Annual Meeting of ICFMT at Amity University; . (Oct. October 2008)
- Attended the 28thth Annual Conference of STOX and International Symposium on ““Monitoring and modulating global resources of environmental and Food contaminants: Nature versus chemicals.””, at Guru Angad Dev Veterinary and Animal Sciences University, Ludhiana; October 2008. and Also chaired the Scientific Session for Award Papers;.
- Participated in the 7th Annual Congress of the Asia Pacific of Medical Toxicology (APAMT), at Chandigarh; December 2008.
- Participated in the 41st Annual Conference of Indian Pharmacological Society and International. Conference on Translational Pharmacology at AIIMS; October 2008.
- Participated in the 56th National Conference of Anatomical Society of India, BHU, Varanasi; (December. 2008).

Dr. S. K. Basu Ray

- Presented papers at the National Conference of the Anatomical Society of India and the Annual Conference of the Indian Pharmacological Society.
- Chaired a scientific session on ““Medical Education””, at the 56thth National Conference of the Anatomical Society of India, Varanasi, Uttar Pradesh.
- Invited as guest Faculty at the 16th International Conference of the Indian Association of Palliative Care, at AIIMS, New Delhi.
- Invited to the National Convention on ‘Testing and Evaluation for Hindi’ organized by the Central Institute of Indian Languages, Mysore.

Dr. Rima Dada

- Delivered invited lecture on ‘Diagnostic and Prognostic implications of mt / nuclear mutations in couples opting for ART/IVF’ at INDO –US meeting on ‘Mitochondrial Medicine and Research’, at Centre of Biotechnology, Manipal University;, Nov 12–13th November 2008.
- Delivered Invited Lecture on ‘Mitochondrial genetics in male infertility’, Asian Congress of Urology, organized by Urology Department of Urology, AIIMS;, 2 October 2008.
- Delivered invited lecture on ‘Insight into genetic and biochemical aspects of male infertility at Androcon’, at Biotechnology Department, Mumbai University; on 5th December 2008. Also chaired session during this meeting.
- Delivered invited lecture on ‘Molecular studies in infertility—Their role in work- up of infertile couples’, at International Congress on ‘Bio-immunoregulatory mechanism associated with reproductive organs: Relevance in fertility and sexually transmitted infections’, organized by NII;, 11 February 2009.
- Attended Human Genome meeting HGM2008 (satellite Symposium) on ‘Clinical genomics’, India Habitat Centre, New Delhi; on 25th September 2008 at India Habitat Centre

- Presented 4 posters at HUGO meeting, Hyderabad; from 27–29th September 2008 at Hyderabad
- Presented 3 posters at ASIA ARVO meeting, at Hyderabad; in January 2009.

Dr. Arundhati Sharma

- The Human Genome Organization’s (HUGO) Satellite Symposium on ‘Clinical Genomics’, Sponsored by ICMR, New Delhi; held on 25th September 2008, New Delhi.
- The Thirteenth International Conference of HUGO – The Human Genome Organization (HUGO) and HGM2008, meeting held in the Hyderabad International Convention Centre, Hyderabad;, India, organized by HUGO – the Human Genome Organization from 27–30 September, 2008.
- North India Conference on ‘Fetal medicine—prenatal diagnosis and therapy’, organized by Delhi Society for Prenatal Diagnosis and Therapy (DESPAT), at Sir Ganga Ram Hospital and AIIMS, New Delhi;. 15–16 November 2008.
- Asia-ARVO – 2009, Meeting held at Hyderabad International Convention Centre, Hyderabad;, India, 15–18 January, 2009.
- International Symposium on ‘Ethics, culture and population genomics’ and 34th Annual Conference of the Indian Society of Human Genetics, held at Indira Gandhi National Centre for Arts, New Delhi;. 17–20 March 2009.

Dr. T.C. Nag

Participated in the XVIII International Congress of Eye Research, Beijing, China;, September 24–29 September, 2008.

Dr. Renu Dhingra

- Attended a workshop on “‘Introduction to biomedical—informatics’”, organized by ICMR and Department of Biophysics, AIIMS, New Delhi;. 2–5 February 2009.
- Attended the 56th NATCON of Anatomical society of India; BHU, Varanasi; from 26th Dec to 29th December 2009 at BHU Varanasi.

Dr. Ritu Sehgal

delivered invited lectures ion ‘Anatomy and Eembryology’ for the RCOG North Zone Postgraduate Course, at Amity University;, August, 2008.

RESEARCH

Funded Projects

Completed

1. Mutation analysis of 5q31 – linked Autosomal dominant corneal dystrophy in north Indian patients. Arundhati Sharma. Funded by AIIMS (2005–2008). Funds: Rs. 1.9 lakh.

Ongoing

1. Influence of prenatal chronic noise exposure on brain stem auditory nuclei, hippocampus and spatial memory in chicks. (PI Shashi Wadhwa., Funded by DBT (2008–2011). (DBT/PR10651/Med 30/102/2008) Funds: Rs 65.49 lakhs.
2. Influence of prenatal auditory stimulation on the development of synaptic proteins, brain derived neurotrophic growth factor and spatial memory in chick hippocampus. (PI Shashi Wadhwa., Funded by DBT (2006–2009). (BT/PR6771/BRB/10/448/2005) Funds: Rs 18.43 lakhs.
3. Prenatal auditory sound stimulation: Effect on spatial memory and expression of synaptic proteins in chick hippocampus. (Collaborative: Co PI; Funded by CSIR (2006–2009) Funds: Rs 15 lakhs.)
4. Studies on ovariectomy induced anatomico-chemical changes in rat cerebellum and their response to estradiol and tamoxifen therapies. PI: Dr.R.D. Mehra., Funded by ICMR funded (2008–2011), Funds: Rs. 5.64 lakh.
5. Brain aging and neurodegeneration: Neuroprotective and biomodulatory roles of estrogens and glucocorticoids (PI Dr. R.D. Mehra. Funded by Indo-Hung. Collaborative research project) (Funded by DST funded(2007–2009). Funds: Rs. 3.9 lakh.
6. Prenatal Development and Maturation of Human Inferior Colliculus. (PI:Dr.T.S. Roy. Funded by funding agency: DST (2007–10). , Total amount sanctioned: Funds: Rs 23.88 lakh.
7. Development of the inferior colliculus—a stereological morphometric study. (SRF project). Funded by ICMR, (2007–2009).
8. A study on the novel analgesic effect of intraspinal loperamide in a murine model of postsurgical pain. S.B.Ray. Funded by ICMR the Indian Council of Medical Research for 3 years (2008–2011). Funds: Rs 26.76 lakh.
9. Genetic and DNA fragmentation study in infertile couples opting for ART and couples experiencing recurrent IVF/ICSI failure. Rima Dada. Funded by ICMR (2008–2010). Funds: Rs .5 lakh
10. Analysis of Mitochondrial DNA Mutations in pathogenesis of spermatogenic arrest. Rima Dada. Funded by ICMR (2007–2010). Funds: Rs. 800,000 lakh.
11. Mutational analysis of corneal dystrophies in north Indian patient population. Arundhati Sharma. Funded by Department of Biotechnology (2006–2009). Funds: Rs. 36 lakhs. (Co-PI)
12. Congenital Adrenal hyperplasia—genotype phenotype correlation. - Arundhati Sharma .- Funded by Department of Biotechnology (2008–2011)., Funds: Rs 30 lakhs.s. (Co-PI)
13. Genetic Parameters of Neuroblastoma: A study on Fine Needle Aspiration Cultures. Arundhati Sharma., Funded by AIIMS Funded, (2008–2010). Funds: Rs 2.0 Lakh. (Co-PI)
14. Screening of Von-Hippel Lindau gene for germline mutations in intracranial aneurysms. A prospective study. – Arundhati Sharma., Funded by AIIMS Funded, (2008–2009). Funds: Rs 1.5 lakhs (Co-PI).

15. To evaluate possible presence of mutations in VSX1 gene in Keratoconus. - Arundhati Sharma., Funded by AIIMS (2008–2010). Funds: Rs 2.0 Lakhs. (PI)
16. Role of circulating angiogenetic factors in the pathogenesis of preeclampsia . Renu Dhingra. Funded by AIIMS. Funds: Amount Rs 75000., PI: Dr Renu Dhingra Co PI : Dr Rani Kumar and Dr Neerja Bhatla.
17. Role of circulating sFlt-1 in the pathogenesis of pre-eclampsia. (SRF project). Funded by ICMR (2008).
18. Cardiovascular effects of selective Oestrogen receptor modulators administered alone and in combination with Parnaparin: A comparative histological study in ovariectomized rats. Ritu Shegal. Funded by AIIMS (2008–2010)., Funds: Sanctioned amount: Rs 1 lakh, PI: Dr. Ritu Shegal.
19. Photoreceptor changes in the aging human retina and their possible link with oxidative stress. T. C. Nag. Funded by DBT for 1 year (2008–2009). Funds: Rs 10 lakh.

Collaborative

1. European Commission funded “ASSIST” Project, EU-FP6. (Dr.R.D. Mehra with Professor N.K. Mehra as the Principal investigator, 2007–2010).
2. Mutation spectrum of the CYP1B1 gene in North Indian, Primary Congenital Glaucoma patients., Funding agency: AIIMS (2006–2008), with RP Center, Total amount Funds Rs: 2 lakh. Duration: 2006-2008, Co PI Rima Dada, PI Tanuj Dada.
3. Mutation analysis in congenital and developmental glaucoma and development in North Indian Population. Funded by DBT (Duration: 2006–2008). Funds: Rs 12 lakh., Co PI Rima Dada, PI Tanuj Dada.
4. Mutation spectrum of the CYP1B1 gene in North Indian , Primary Congenital Glaucoma patients., Rima Dada. Funded by AIIMS (2006–2008). Funds: Rs 2 lakh.
5. ICMR Phase III clinical trial with intravasal injectable Male contraceptive RISUG.- Co PI Rima Dada. Funded by AIIMS.
6. OXPHOS mutations in infertile Indian men., Rima Dada. Total amount: 2,00,000, Funded by AIIMS (2006–2008).

Departmental Projects

Ongoing :

1. Hippocampal regulation of immune mechanism.
2. Development of the human auditory system
3. Age changes in the human oculomotor nerve
4. Age changes in the human cochlear nerve
5. Morphology of the fetal and adult human pancreatic duct system

6. Effect of lipoic acid as an antioxidant supplement on arsenic induced toxicity in developing rat hippocampus
7. Effect of sodium arsenite exposure during early postnatal period on rat testis
8. Effect of arsenic exposure on rat liver during early postnatal period.
9. Glial changes in aging human optic nerve

Completed

1. Effect of prenatal sound on the morphology of auditory and visual thalamic relay nuclei of domestic chick; . Departmental project completed in July 2008. Dr. S. Wadhwa.
2. Effect of prenatal chronic intense sound exposure on medio-rostral neostriatum/ hyperstriatum ventrale region of chick forebrain: A morphometric study. Departmental project completed in ; January 2009. Dr. S. Wadhwa.
3. Effects of arsenic exposure during early postnatal period on the rat hippocampus; (2007.)
4. Effects of arsenic exposure during early postnatal period on rat testis—A morphological study; (2008). Dr. P. Dhar.

Collaborative Projects

Ongoing

1. Chromosomal aberrations in Oculoplastic syndromes. Dr Rima Dada. (with Dr Neelam Pushker-RPC)
2. ROS and DNA damage assessment pre and post varicocelelectomy. Dr Rima Dada. (with Dr Rajiv Kumar-Urology)
3. Chromosomal aberrations and molecular study in BPES. Dr Rima Dada. (with Dr Bhavna Chawla-RPC)
4. Cytogenetic study in Myelodysplastic Syndromes. Dr Rima Dada. (with Dr Renu Saxena-Haematology-IRCH)
5. Mitochondrial mutation analysis and cytogenetic study in Keratoconus. Dr Rima Dada. (with Dr Tityal and Dr N Sharma in RPC)

PUBLICATIONS

Journals

1. Chatterjee T, Panigrahi I, Mahapatra M, Pati HP, Kumar R, Naithani R, Wadhwa S, Choudhry VP, Saxena *Ret al.* Hairy cell leukemia: Clinical, pathological and ultrastructural findings in Asian-Indians. *Indian J Cancer* 2008;**45**: (2) Apr-Jun: 41–44, 2008.
2. Chaudhury S, Nag TC, Wadhwa S. Effect of prenatal auditory stimulation on spatial orientation of chicks and expression of PSD- 95 in the hippocampus. *Society. for Neuroscience* 2008 Nov. 16; **127**:.4, p 11.
3. Chaudhury S, Nag TC, Wadhwa S. Calbindin D-28K and parvalbumin expression in embryonic chick hippocampus is enhanced by prenatal auditory stimulation. *Brain Res* . Jan 200829; **1191**: 96–106, 2008.

4. Chaudhury S, Nag TC, Wadhwa S. Effect of prenatal auditory stimulation on numerical synaptic density and mean synaptic height in the posthatch day 1 chick hippocampus. *Synapse* 2009;**63**:152–159, 2009.
5. Dada R, R Kumar R, M B Shamsi MB, M Tanwar M, D Pathak D, S Venkatesh S, *et al.* Genetic screening in couples experiencing recurrent assisted procreation failure., *Indian Journal of Biochemistry and Biophysics* 2008;, Volume **45**: Feb 2008, 611–615.
6. Desai A, Jha O, Iyer V, Dada R, Kumar R, Tandon N. Reversible Hypogonadism in Bradet Biedl Syndrome. *Fertil Steril.* 2009 Mar 25. [Epub ahead of print]
7. Dhar P, Dixit S, Mehra RD., Role of alpha-lipoic acid (ALA) in amelioration of arsenic induced behavioral, biochemical and morphological alterations in rats. *Indian Journal of Pharmacology.* 2008;**40(2)**: 163. (Abstr.) Add Journal
8. Dhar P, Dixit S, Mehra RD. Exposure to sodium arsenite during Rapid Brain growth (RBg) period reduces Calcium Binding Protein Expression in rat hippocampus. *J. Anat. Soc. India,* 2008;**57 (1)** : 85.(Abstr.) Add Journal.
9. Dhar P, Lall K. An atypical anatomical variation of palmar vascular pattern. *Singapore Med J.* 2008;**49(9)** : 245–49.
10. Jain S, Kauser H, Pal A, Roy S, Mathur R, Wadhwa S. Effect of prenatal auditory stimulation on postnatal learning and isolation induced stress in domestic chick. *Society. for Neuroscience* 2008 Nov. 16; **122**:.19, p 8.
11. Kaler S, Dhar P, Mehra RD. Effects of Arsenic Exposure during rapid brain growth period (RBGP) on dentate gyrus of rat hippocampus: A morphological and morphometric Study. *J. Anat. Soc. India,* 2008; **57 (1)**: 62–63 (Abstr.) Add Journal.
12. Kumar P., Varshney M. K, Raj Mehra R., : Mitochondria as therapeutic target of estrogen mediated neuroprotection. *Indian Journal of Pharmacology,* vol. **40** (Suppl. 2):, S 112.
13. Kumar R, Tanwar M, Ammini AC, Kumar R, Gupta NP, Sharma RK, Dada *Ret al.* Robertsonian translocations and their role in pathogenesis of recurrent IVF failure. *Med Sci Monit.* 2008 Dec;**14(12)**:617–20.
14. Kumar R, Shamsi M B, Mohd Idris Gaznavi MI, M Jena M, Kucheria K, Kumar R, Sharma R K, Dada *Ret al.* Structural chromosomal anomalies and their association with reproductive failure. *Obs and Gynae Today;* **3**:,152–154.
15. Mehra R. : Estrogen therapy improves neuronal cytoarchitecture, apoptotic index and estrogen receptor regulation in hormone depleted adult and in aged rat hippocampus. *Indian Journal of Pharmacology* 2008;, vol. **40** (Supply 2):, S 112. (2008)
16. Neerja R., Dhingra R, Bhatla N, and Kumar R. Morphological and histological changes in placentas of pre-eclamptic patients. 2009, 45(3): 221-23.
17. Ojha S.K., Nandave M., Arora A., Mehra Raj D., Joshi S., Narang R. and Arya D.S. *et al.*: Effect of commiphoramukul extract on cardiac dysfunction and ventricular function in isoproterenol-induced myocardial infarction. *Indian. J. of Experimental Biology,* 2008; **46**: 646–652 (2008).

18. Paliwal P, Sharma A, Sharma N, Tandon R, Sen S., Titiyal J S, Vajpayee R B *et al.* 'Genetics of corneal dystrophies'. *Delhi Ophthalmology Society Times*, 2008;, **14:4**; 49–53.
19. Ray S. Basu RS, and Mehra Raj D.: Potentiation of opioid induced Analgesia by L-type calcium channel blockers: Need for clinical trial in cancer pain. *Ind. Journal of Anesthesia*, 2008; **52 (4)** : 367–72 (2008).
20. Ray SB, Mishra P, Verma D, Gupta A, Wadhwa S. Nimodipine is more effective than nifedipine in attenuating morphine tolerance on chronic co-administration in the rat tail-flick test. *Indian J Exp Biol* 2008;**46**:219–228.
21. Ray SB, Yaksh TL. Spinal antinociceptive action of loperamide is mediated by opioid receptors in the formalin test in rats. *Neurosci Lett* 2008;**448**:260–262.
22. Roy TS, Gupta R, Ray B, Sharma S. Ontogeny of the human pancreatic duct, stellate, centroacinar cells and undifferentiated cells. *Pancreas*, 2008;, **37(3)**:341.
23. Shamsi MB, Venkatesh S, Tanwar M, Talwar P, Sharma RK, Dhawan A *et al.* DNA integrity in men with low antioxidant levels. *Mutation Research*, March 2009;. (Epub)
24. Shamsi MB, Venkatesh S., Tanwar M., Talwar P., Sharma RK., Mukherjee S., Kumar R., Gupta NP., Dada *Ret al.*, Characterization of sperm chromatin quality by Comet assay. *Perspective in Cytology and Genetics* 2007;,**13**:(255–262).
25. Shamsi M.B., Kumar R and Dada R., Evaluation of nuclear DNA damage in human spermatozoa in men opting for assisted reproduction., *Indian J Med Res* 2008;**127**., February 2008, pp 15–123. [PMID: 18403788]
26. Shamsi MB, Kumar R, Bhatt A, Bamezai RNK, Kumar R, Gupta NP, *et al.* Mitochondrial DNA mutations in etiopathogenesis of Mmale infertility., *Indian J Urol*, 2008;**24**:150–154.
27. Shamsi MB, Venkatesh S, Tanwar M, Talwar P, Sharma RK, Mukherjee S, *et al.* Sperm DNA integrity analysis and correlation with seminal antioxidant levels in men with idiopathic infertility : Importance of prescreening in couples opting for ART. *Obs and Gynae Today* 2008;Vol **XII**: No. 9 September 2008 pp 388–390.
28. Sharma A, Paliwal P, Dadhwal V, Sharma Y, and Deka D. 'Rare finding of 2n/4n mixoploidy in mother and fetus with severe immune hydrops'. *Cytogenetic and Genome Research*, 2009;: **124**;: 90–93.
29. Sharma V, Nag TC, Wadhwa S, Roy TS. Stereological investigation and expression of calcium-binding proteins in developing human inferior colliculus. *J Chem Neuroanat.* 2009; Mar;**37(2)**:78–86.
30. Tanwar M , Venkatesh S., Shamsi M.B., Kumar M., Pathak D., Kumar R., *et al.*, Infertility –Yq microdeletion and implications in assisted procreations. *Perspective in Ccytology and Genetics* 2007;,**13**:(273–87).

31. Tanwar M, Kumar R, Kumar M, Dada T, Singh G, Sihota R, *et al.* and Dada R. Reiger Syndrome with multiple chromosomal breaks. *British Medical Journal* (Case Reports), Feb 20 09. (, Online)
32. Varshney M K, Dhar P, Nyakas C, and Mehra Raj:. An overview into the role of estrogen in cerebellar synaptic plasticity and neuroprotection. *Trabajos Del Instituto Cajal, TOMO 2009; LXXXII*.; 296..(2009)
33. Venkatesh S., Kumar R., Shamsi M.B., Tanwar M., Kumar M., Pathak D., *et al.*, Mitochondrial ATPase Gene mutations associated with low antioxidant levels in idiopathic asthenozoospermic Indian men..., *Perspective in Ccytology and Genetics* 2007;.,**13**:(263—272).
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35. Venkatesh S., M.B. Shamsi MB, R. Dada R. Re: Attenuation of oxidative stress after Varicocelectomy in subfertile patients with varicocele.: S.S. Chen, W. J. Huang, L. S. Chang and Y.-H. Wei. *J Urol* 2008; **179**:639–642 (*The Journal of Urology* 2009;., Volume **181**., Issue 4, April 2009, Pages 1964—1966). PMID: 19246058
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Abstracts

1. Bhat A, Kumar R, Venkatesh S, Kumar M, Dada R. Mutation in ATPase gene regulating oxidative phosphorylation in sperm mitochondria and low seminal antioxidant levels in idiopathic asthenozoospermic men. Poster number 382, Page number 192. *Proceedings of the Human Genome meeting* 2008, held at Hyderabad on 27—30 September 2008.
2. Chaubey R, Sazawal S, Dada R, Gupta RK, Pathak D, Mir R, *et al.* Isochromosome (9q) as the sole chromosomal anomaly: A rare finding in MDS . Abstract No 136. *American Society of Clinical Oncology* 2008.
3. Dada R, Kumar R, Venkatesh S, Shamsi MB, Bamezai RN, Sharma RK, Analysis of sperm and blood mt DNA mutations in infertile oligoasthenozoospermic (OA) men. Poster number 392, Page number 195. *Proceedings of the Human Genome meeting* 2008, held at Hyderabad on 27-30 September 2008.
4. Dada R, Venkatesh S, Shamsi M B, Kumar R, Kumar, Gupta N P. Diagnostic and prognostic implications of nuclear and mitochondrial mutations in couples opting for ART . *Indian Journal of Urology* 2008;Vol. **24** (Supplement 2) Oct 2008. (p 77)
5. Dada R., Kumar R., Shamsi M B, Venkatesh S. Diagnostic and prognostic implications of nuclear and mitochondrial mutations in couples opting for ART, Abstract Number P01.370. *European Journal of Human Genetics* 2008;Volume **16** (Supplement 2) 49.

6. Dhingra R., Ilavenil K, and Kumar R. Effects of cold and room temperature impregnation on morphological features of heart during plastination. Printed in proceedings of 14th International conference on Plastination, Heidelberg, Germany; 20-26th July 2008, Pg 11.
7. Dudeja S, Kumar M, Tanwar M, Venkatesh S, Kumar R, Malhotra N, *et al.* Identification of a novel deletion in a couple with recurrent spontaneous abortions. *ASHG -2008:* , page-223.
8. Dudeja S., Venkatesh S., Kumar R, Shamsi MB, Kumar R, Dada R. Ultrastructural defects in spermatozoa of men attending the infertility clinic. *Fertility and Sterility*, 2008;Volume **90**:, Supplement 1, September 2008, Page S463.
9. Gupta R, Sharma S, Roy T.S.(2008). The Untroacinar cells of the human pancreas. Abst No.68, p 21. Proceedings of the National Conference of the Anatomical Society of India;, Varanasi; 27–29 December, 2008.
10. Jacob TG, Gupta R, Sharma S, Roy T.S.(2008). Does the duct system of the human pancreas contain progenitor of insulin containing cells. *Proceedings of the National Conference of the Anatomical Society of India*, Varanasi; Dec.27–29, 2008.
11. Jana R, Shariff A (Presented a paper orally) – “Morphological changes in Myenteric Plexus of rat colon in chronic stress”, in “56th National Conference of the Anatomical Society of India, “ held in Banaras Hindu University, Varanasi; from 27th to 29th December, 2008: 6., (Oral Presentation – 18) Page No.6.
12. Jana R, Dada R. (Presented a poster) –” Aberrant nerve supply of the flexor muscles of Aarm—Case report (Poster presentation),” in “ 56th National Conference of the Anatomical Society of India, “ held in Banaras Hindu University, Varanasi; from 27th to 29th December, 2008: 106. (Poster Presentation P-346) Page 106.
13. Jana R, Shariff A. (Presented a porter) – “Effect of chronic stress on nitregeric and cholinergic neurons of ENS in rat colon”, in International Conferences on Advances in Neurosciences &and XXVI Annual Meeting of Indian Academy of Neurosciences”, held in Cochin University of Science &and Technology, Kerala; from 12th to 14th December, 2008:107. (*Anal of Neurosciences, JIA of Neurosciences*) Page-107.
14. Kumar M, Dada R, Tanwar M, Pathak D, Malhotra N, Mittal S., Centric Fission of chromosome 5 in a couple with recurrent spontaneous abortions. Poster number 416., Page number 201. *Proceedings of the Human Genome Meeting 2008*, held at Hyderabad; on 27--30 September 2008: 201.
15. Kumar M, Sharma A, Pathak D, Ammini AC, Kriplani A, Dada R. Cytogenetic study in premature ovarian failure. International Symposium on ‘Ethics, culture and population Genomics’ and 34th Annual Conference of the Indian Society of Human Genetics, held at Indira Gandhi National Centre for Arts, New Delhi;, 17th to 20th March 2009.
16. Kumar M, Tanwar M, Dada T, Sihota R, Yadav U, Dada R. Deletion of chromosome 10 and pericentric inversion of chromosome 9 in congenital lower lid entropion. Meeting of Indian Eye Research Group, Aravind Eye Institute, Madras, July 28-28, 2008.

17. Kumar M, Tanwar M, Pushkar N, Gupta P, Dada R. Novel 3q26-28 Deletion in Blepharophimosis, Ptosis, and Epicanthus Inversus Syndrome (BPES). *Asia-ARVO*; January 15—18, 2009; page- 63.
18. Kumar M, Venkatesh S, Pathak D, Sharma R K, Dada R.. Unique 2, 17 autosomal translocation in an infertile man ASHG 2008. *AJHG* 24(11):72
19. Kumar R, Dada R, Kumar M, Pathak D, Shamsi MB, Venkatesh S . Diagnostic and Prognostic Implications of Nuclear and Mitochondrial Mutations in Couples Opting for ART. American Society of Reproductive Medicine. 2008. published in *Fertility and Sterility* 2008.
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21. Kumar R., Ilavenil K, and Dhingra R. Comparison of gross morphological features in freshly and old embalmed human hearts using plastination. Printed in Proceedings of 14th International Conference on Plastination, Heidelberg, Germany; 2008; ,Pg 16, 20—26th July 2008; 16.
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23. Paliwal P and Sharma A. ‘Amniocentesis for prenatal diagnosis of chromosomal anomalies: an AIIMS experience’. International Symposium on ‘Ethics, Culture and Population Genomics’ and 34th Annual Conference of the Indian Society of Human Genetics, held at Indira Gandhi National Centre for Arts, New Delhi; 17—th to 20th March 2009.
24. Paliwal P, Dadhwal V, Deka D, Kriplani A, Jain S, Malhotra N *et al.* ‘Importance and Awareness of Cytogenetic analysis in a hospital set-up’. International Symposium on ‘Ethics, Culture and Population Genomics’ and 34th Annual Conference of the Indian Society of Human Genetics, held at Indira Gandhi National Centre for Arts, New Delhi; 17—th to 20th March 2009.
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27. Paliwal P, Sharma A, Tandon R, Sharma N, Sen S, Gupta J, *et al.* ‘Molecular genetic, histopathological and clinical examinations for genotype-phenotype analysis in patients with TGFBI-linked corneal dystrophies’ 13th annual HUGO conference, held at Hyderabad; from 27—30 September 2008.

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Books/Chapters in Books

1. Kumar Rani “ Textbook of Human Embryology.”, 1st Edition, Published by New Delhi: I.K. International Publishing House Pvt. Ltd;., New Delhi, 2008.
2. Roy T S, Mishra S, Ray B, Sharma N. Maturation of the human auditory pathway during prenatal and early postnatal period. In: Eswaran H, Chatterjee Singh N (eds). *Advances in developmental neuroscience and imaging*. Eds: Eswaran H, Chatterjee Singh N, New Delhi: Anamaya Publications;., New Delhi, Chapter 7, pages: 84–90, 2009.
3. Sharma A. Cell cycle and basic genetics. In: Dr Kumar R (Author). *Textbook of Human Embryology*. 1st ed., Author: Dr Rani Kumar. New Delhi: I.K. International Publishing House;., 2008:.. pages:269–282.
4. Wadhwa S, Nag T C. Prenatal auditory stimulation: Comparison of the developmental changes in the chick auditory system and hippocampus. In: Eswaran H, Chatterjee SN (eds). *Advances in developmental neuroscience and imaging*. Eds: Eswaran H, Chatterjee Singh N, New Delhi: Anamaya Publications; 2009:., New Delhi, Chapter 6, pages: 74–83, 2009.

PATIENT CARE

Genetic Diagnostic and Counselling Services

Offering genetic diagnostic and counselling services to patients from several clinical departments and also helped Delhi Police in sex identification of unidentified bodies.

Cytogenetic analysis

Male infertility	123
POF	52
ART failure	96
Endocrinological disorders and genital ambiguity	24
Oculoplastic syndromes	41
MDS-myelodysplastic syndrome	16
Chromosome analysis	346
Amniotic fluid/cvs/cord blood	80

Embalming of dead bodies

For transportation	627
For teaching/research	13
Fluorosis Diagnostic Laboratory: Fluoride estimation	
Urine	58
Blood/serum	46
Drinking water	95

AWARDS AND HONOURS

Professor. Shashi Wadhwa served as Expert Committee member for selection of awardees to the prestigious Shanti Swarup Bhatnagar Prize of CSIR in Medical Science and DST BOYSCAST Fellows for 2008. She also served as Advisory Panel member for election of NAMS Fellows in Anatomy for 2008. Her biographical sketch appeared in 'Lilavati's Daughters' – The women scientists of India, 2008 Eds. Rohini Godbole and Ram Ramaswamy, published by the Indian Academy of Sciences

Dr. S.B. Ray awarded the “International Fellowship for Biomedical Scientists” by the Indian Council of Medical Research for doing research work at the Department of Anaesthesiology in University of California at San Diego, USA for 3 months.

Dr. Sonali Kataria., was awarded ‘*ICGP Junior Investigator Award*’” by the International Society of Geriatrics and Psychoneuroendocrinology for her paper entitled “‘Estrogen therapy reduces senile neurodegenerative changes in female rat subiculum’”, Sydney, July 2008.

Mr. Mukesh, Ph.D. student was awarded IBRO-Italian Neuroscience Society Fellowship for participation in the conference on ‘*Steroids and Nervous System*’, for his paper entitled “‘An overview into the role of estrogen in cerebellar synaptic plasticity and neuroprotection’”, Torino, Italy, February. 2009.

Sraboni Chaudhury, Ph.D. student was awarded ISN-CAEN Travel Award to visit the Functional Neuroscience Laboratory, Department of Life Science, The Open University, and Milton Keynes to work with Professor. M. Stewart w.e.f 06.07.2008 – 05.09.2008. She was also recipient of the travel award from Swiss Society for Neuroscience to attend FENS Forum 2008, held at Geneva, Switzerland, from 12–17 July, 2008 as well as the CIMO, Finland grant to visit Prof. Eero Castern, University of Helsinki, Finland for 3 months from 16.10.2008-15.01.2009. Through the IBRO-SfN travel award she attended the 38 Annual meeting of SfN, Washington DC, held from 15–19 November 2008 at Washington DC.

Dr Rima Dada received ICMR international fellowship for young biomedical scientists. She visited Cleveland Clinic as Visiting Scientist.

SIGNIFICANT EVENTS

Professor R. Kumar

Was appointed as Chairperson, Hospital Management Board, AIIMS w.e.f 8th July, 2008. She was also appointed as Dean, AIIMS w.e.f. 25th March, 2009. Professr Rani Kumar continues to be Chairperson of Curriculum Committee Phase-I MBBS teaching, professional examinations for UGs and PGs of Anatomy, Member of the editorial Board of Journal of Anatomical Society of India, Member of Publication Advisory Committee of National Academy of Medical Sciences, was President of DASMOS, Delhi, was appointed as external expert for selection of faculty positions in Anatomy at various Colleges in India.

Professor Shashi Wadhwa continued to function as member of Planning and Monitoring Board, Selection Committee, Assessment Committee, and SAC of National Brain Research Centre at Manesar, Haryana and attended the various Committee meetings. as expert member She went to JNU for selections on DST project on 23rd May 2008. She reviewed research papers submitted to J. Biosciences and J. Anatomical Society of India. She also reviewed neuroscience research projects and annual project reports for ICMR, DST and DBT. She also continued to be a member of the editorial board of J. Biosciences, J. Anatomical Society of India and Annals of Neurosciences. Professor. Shashi Wadhwa was appointed on various committees of AIIMS: as Chairperson of research subcommittee and teaching schedule committee; as member of Institutional committee for stem cell research and therapy, patent committee, implementation committee for AIIMS extension at Jhajhar, Haryana and subcommittee for institute travel grant.

Professor Raj D. Mehra was invited to participate in a “*Health Shibir*” organized by IAM Chanderpur (Maharashtra), where she delivered a lecture and participated in educating the community on the importance of Blood and blood components and of some blood associated hereditary congenital diseases prevalent in the area, April 2008. Dr. Mehra visited Helmholtz Center for Infection Research in Braunschweig, Germany for discussions on European Union funded “*ASSIST*” project, June 2008. She also visited Semmelweis University Budapest under the Indo-Hungarian Collaborative Research Project for undertaking project related behavioural studies and discussions , July 2008. Dr.Mehra was nominated as a member of the Adhoc Progress Review Expert Group of DBT, December. 2008. She was also nominated to evaluate the progress of the DBT research project at the Department of Neurosciences , Jiwaji University Gwalior, January., 2009. She reviewed neuroscience research projects for ICMR, DBT and DST and research papers for publication in Brain Research, Neurosciences Letters and Annals of Neurosciences. She also nominated as the Chairperson of Window AC Committee and member of Research Committee and Animal Ethics Committee of AIIMS.

Professor T.S. Roy continued to be a member of the editorial board of Pancreas. He reviewed manuscripts for the journal, Clinical Anatomy, Pancreas, National Medical Journal of India and Neuroscience Letter. Professor. T.S. Roy was member of the expert committee for establishment of AIIMS like Medical Iinstitutions in India, under the Pradhan Mantri Swastha Suraksha Yojna.

Dr. A. Shariff

On foreign assignment

Dr. S.K. Basu Ray was an expert in a Teleconferencing session organized by the National Board of Examination, New Delhi. He also appeared as an expert in a television programme on “‘Body Donation’” organized by Live Media, Delhi.

Dr. P. Dhar delivered the Presidential address at the 56th Annual Conference of Anatomical Society of India BHU, Varanasi, (December., 2008) ; was awarded ‘Valuable Contribution as Faculty’ at 16th International Conference. of Indian Association of Palliative care (13-15 February, 2009) at AIIMS, New Delhi; as joint secretary of DASMOS, organized DASMOS-09 in the Department of Anatomy (March, 2009); was invited for participation in Third National Convention on Testing and Evaluation (18–20th February. 09) at Indian Institute of Mass Communication, New Delhi, conducted by National Testing Service- India; and Joint UNESCO-CPR-ZHCES(JNU) Ethics Education Workshop on 21.3.09 at Centre for Policy Research (CPR) New Delhi; Chaired the session for Memorial Orations and appointed judge for Dr. P.C. Bansal Memorial Gold Medal award at 56th Annual Conference of Anatomical Society of India, (December. 2008); Continued to be Member – Curriculum Committee Phase –I, MBBS (AIIMS); became Life Member of STOX and APAMT.

Dr. Rima Dada became member of Editorial Board of *Journal of Paediatric, Neurology* and *Online Journal of Health and Allied Sciences, The open Andrology Journal, Indian Journal of Practicing Doctor*. Dr Rima Dada reviewed articles for Fertility and Sterility, Expert Reviews in Gynaecology and Obstetrics, *Asian Journal of Andrology, Indian Journal of Medical Research, Andrologia, Indian Journal of Urology, Food and Chemical Toxicology, British Medical Journal Case reports, Microscopy research and Techniques, Indian Journal of Biochemistry and Biophysics*. She is a Member of ICMR task force on male Infertility. She worked as reviewer for projects submitted to ICMR. She appeared on TV on Star Plus in a programme to highlight effect of lifestyle on male reproductive health.

The article on role of oxidative stress on outcome of ART appeared in Amar Ujjala. Dr Rima Dada was nominated as member of ARVO and ASIA ARVO. Dr Dada was also nominated as member of Society of Reproductive Biology and Comparative Endocrinology

Dr. Arundhati Sharma was selected as National Faculty and panelist in the Panel discussion on ‘Prenatal Cytogenetics and Molecular Genetics Advances’: at North India Conference on ‘Fetal Medicine – Prenatal Diagnosis and Therapy’, organized by Delhi Society for Prenatal Diagnosis and Therapy (DESPAT), 15th and 16th November 2008. She was appointed as **one of the three judges** for the young scientists awards session at the International Symposium on ‘Ethics, Culture and Population Genomics’ and 34th Annual Conference of the Indian Society of Human Genetics held at Indira Gandhi National Centre for Arts, New Delhi, 17th to 20th March 2009. She was an External expert on the Post Graduate Board of Studies in Biochemistry and Genetics (P.G. BOS), of M. D. University, Rohtak.

Dr. R. Dhingra was Appointed as member of Teaching Schedule Committee for the MBBS first year students and was also Appointed as member secretary for Delhi association for morphological sciences.

Dr T. C. Nag continued to be a member of International Society for Eye Research.

VISITING SCIENTIST

1. Dr Michael Stewart, Open University, Milton Keynes, UK delivered a lecture on “Morphological basis of hippocampal plasticity following stress and learning: Electronmicroscopic studies.” on October 2008.
2. Professor. Csaba Nyakas, and Dr. Klara Felszeghy and Dr. Edina Wappler visited the Department under Indo-Hungarian collaborative research project, in November .2008 and March, 2009, respectively.

9.3 Biochemistry

Professor and Head

Subrata Sinha

Professors

Neeta Singh

Ranju Ralhan

(Voluntary retirement on 27 December 2008)

D.N. Rao

Nibhriti Das

S.S. Chauhan

Additional Professor

M.R. Rajeswari

Associate Professors

P.P. Chattopadhyay

Kalpana Luthra

Assistant Professors

Alpana Sharma

Kunzang Chosdol

N.C. Chandra*

EDUCATION

Undergraduate

The department continues with its undergraduate UG teaching programmes which include MB,BS (two semesters), Nursing (one semester) and B.Sc. (Hons) Nursing (one semester). Student's feedback on the teaching-learning of Biochemistry and feedback on examinations to the students had been regularly incorporated in the Biochemistry teaching schedule for the medical undergraduates. New problem-based modules had been introduced for the second semester to strengthen the concepts in immunology and water electrolyte balance along with. Bench level exercises in basic immunological techniques.

Postgraduate

These include Seven M. Sc. (Ist year and IIIrd year) students and seven M. D. students. The department also has 43 Ph. D. students.

Short-term training

Summer training in research was provided to MB,BS students from AIIMS. Fifteen MB,BS (1st year) students have conducted projects work for the KVPY Scheme of the DST in different laboratories of the department and four students have been awarded the fellowships. Fifteen students from India received short-term training. The Department also imparted short-term training (one month) to two M.Sc. students from BPKIHS, Dharan, Nepal in molecular biology and advanced immunological techniques..

Continuing Medical Education

Dr. Neeta Singh delivered the following lectures on: "Cell signaling and therapeutics", at Venkateshwar College, New Delhi; on 11th November 2008; HPV and cervical cancer", at Venkateshwar College, organized by Women Ddevelopment Ccell, New Delhi; on 2nd December 2008. Dr Singh chaired a session at the 77th Annual Meeting of SBC onand 'Impact of basic and translation research in medicine agriculture and industry, SBC, Chennai, held from 18th – 20th December

2008; at Chennai.,Chaired a session at the International Symposium on ‘Novel strategies for targeted prevention and treatment of cancer’, held at JNU, New Delhi, from 19th – 20th December 2008; ‘.,”HPV and cervical cancer”’, at SRM Medical College, Chennai, held on 10th January 2009; at Chennai.,Chaired a session at 28th Annual Convention of Indian Association for Cancer Research and on ““Emerging challenges and approaches in cancer biology””, Bangalore, held from 21st – 24th February 2009; at Bangalore. , Chairperson for a session at the ““Ovarian Cancer””, AIIMS, New Delhi, Symposium held from 27th – 28th March 2009 at AIIMS, New Delhi.

Dr Nibhriti Das delivered lectures at .

National Workshop on Assessment Methods for Learning Evaluation in Basic Medical Sciences, 22--24 September, 2008 organized by the Departments of Basic Sciences at the AIIMS workshop on ‘assessment strategies in medical education’ organized by KL Wig CMET, AIIMS on 18 October, 2008.

National and International Conferences

Dr Subrata Sinha

- delivered the Invited lectures on ‘Molecular Analysis of gliomagenesis’, in the International Symposium on ‘Perspectives in cell signalling and molecular Medicine’, Kolkata; on 29th November 2009.

Dr Neeta Singh

- Idelivered the following invited talks on ““HPV and cervical cancer pathogenesis (Poster)””, at the Annual AACR meeting- 2008, held at San Diego, USA; from 12th – 16th April 2008.
- ‘(Poster),”Induction of apoptosis by curcumin and its therapeutic efficacy in human squamous cell lung carcinoma H520 cells”’, at the Cancer Congress of UICC (Poster), held from 27th – 31st August 2008 at Geneva, Switzerland.; 27–31 August 2008 (Poster),
- ““Biochemical risk factor determinants””, at the 21st Round Table Conference on ‘Life Sstyle and Cancer’, of Ranbaxy Science Foundation, AIIMS, New Delhi; held on 28th November 2008.
- ‘at AIIMS, New Delhi.,”Analysis of HPV-16 E6/E7 and L1 mutations in cervical cancer isolates from different regions of India’,” at the International Symposium on ‘HPV associated cancer; translating research into cancer prevention and medicine’, held at Trivandrum; from 1st – 3rd November 2008
- ““Effect of curcumin on cisplatin and radiotherapy in human cervical cancer cells’,” at the 77th Annual Meeting of SBC and impact of basic and translation research in medicine agriculture and industry’, Chennai; held from 18th – 20th December 2008.
- ““Evaluation of therapeutic role of curcumin in cervical and lung cancer””, at the International Symposium on ‘Novel strategies for targeted prevention and treatment of cancer’, held at JNU, New Delhi; from 19th – 20th December 2008.

Dr D.N. Rao

- delivered following Invited talks during IIS Annual conference, held at Bhubaneshwar 2008., XIX National Congress of Veterinary Parsitology; 2008.,

- Biotechnology meet at Andhra University, Vishakapatnam, Srivenketeshwara University, Tirupati and Utranchal University, Dehradun and Indo-Brazil DST meeting, held at Rio-Brazil. November,

Dr Nibhriti Das

- Invited talks on ‘Expression and significance of complement receptor 1 in SLE’, delivered the following invited talks at the University of Maryland. USA; June 11, 2008.
- Expression and significance of complement receptor 1 in SLE and papers presented in Federation of Clinical Immunology Society 2009, San Francisco; June 11–14 June, 2009.
- XV International Symposium on Atherosclerosis 2009, Boston, MA USA; June 14-18, 2009.
- XXI International Complement Workshop; Basel, Switzerland; 28 September – 2 October 2008.
- Keystone Symposia on ‘Molecular and Cellular Biology’, Alpbach, Austria; 8–13 June 2008.

Dr M R Rajeswari delivered invited lectures

- Invited lectures on : on ‘Cell-free circulating DNA in plasma in health and neurological disorders SCA-12 and FRDA’, at International Conference Neurocon- 2009, 8th Feb, 2009 at Kolkata.
- ‘Deoxy-oligonucleotides as therapeutics in cancer’, Golden Jubilee Celebrations & National symposium on ‘Recent trends in organic and Medicinal Chemistry’, at National Institute of Technology, Warangal; 16 January 2009.
- ‘Proteomics in medicine’, Current trends in Bioinformatics teaching and research; 18th February, 2009.

Dr Kalpana Luthra

- delivered Invited lectures speaker at workshop on ‘How to plan a research project and write a proposal’ for PG students, AIIMS, New Delhi; October 2008.,
- ‘MCQs— as assessment tool’ for residents and PGs in department of Physiology, AIIMS, New Delhi’, Aug 20, 2008.
- Resource faculty for National workshop on ‘Assessment methods for learning evaluation in Basic Medical Sciences’; September 2008.

Dr Alpana Sharma

delivered invited talk on ‘Problem Based Learning’, at National Workshop on ‘Teaching, learning Methods in Health Professions’ Education’, at AIIMS, New Delhi and in IACR 2009 conference at Bangalore.

Dr N. C. Chandra

Poster presented at 7th International Symposium on ‘Multiple risk factors in cardiovascular diseases: — prevention and intervention — health policy. Venice Convention Center, Venice, Lido, Italy; 22–25 October 2008.

RESEARCH

A. Funded Projects

Completed

1. Ligand based selection from combinatorial libraries for generating recombinant antibodies to the Placental (oncofetal isozyme of Alkaline Phosphatase; characterization and validation in clinical cancers. Subrata Sinha. Funded by DBT for 3 years (2005 –2008). Funds: Rs. 25.63 lakh.
2. Mitochondria in apoptosis and human cancer. Neeta Singh. Funded by ICMR for 3 years (2005-- 2008). Funds: Rs. 9.43 lakh.
3. Development of a HPV candidate vaccine/s preparation of clinical trial site/cohort for vaccine testing. Neeta Singh, Funded by DBT for 3 years (2005 –2008). Funds: Rs. 84.98 lakh.
4. Developing new generation peptide based vaccine using F1 and V antigen of Y. pestis., D .N. Rao. Funded by DST (2005--2008). Funds: Rs. 24 lakh.
5. To evaluate the correlation between levels of cytokines (IL-6, IL-8, IL-10) in seminal plasma in different groups of infertile men and correlation with sperm morphology, functions and bacterial infection in semen. D.N. Rao. Funded by ICMR for 3 years (2005--2008). Funds: Rs. 15 lakh.s
6. Expression and modulation of Complement Receptors: Significance in the pathophysiology and prognosis of autoimmune disorders. Nibhriti Das. Funded by CSIR for 3 years (2005--2008). Funds: Rs. 14.52 lakh.s
7. Characterization of the Positive Regulatory Region of the first exon of Human Cathepsin L gene. S.S Chauhan. Funded by DST for 3 years (2005--2008),. Funds: Rs. 22.30 lakh.
8. Hypoxia and CpG island methylation of selected loci in tumor cell genome: modulation of methylation and subsequent effect on cell proliferation and chemotherapeutic response P. Chattopadhyay. Funded by ICMR for 3 years (2005--2008). Funds : Rs.: 19 lakh.
9. Effect of tumour specific Hsp90 inhibitor geldanamycin, on CpG island methylation and survival of hypoxic glial tumor cell lines. P. Chattopadhyay. Funded by CSIR for 3 years (2005--2008). Funds : Rs.: 9.0 lakh
10. Differential cell response of goat granulosa cells to LH or hCG stress in cell culture system: To analyze the signaling transduction pathway in the two. Kalpana Luthra. Funded by ICMR for 3 years (2005--2008). Funds: Rs: 11.49 lakh.
11. Genetic polymorphism of cholesterol ester transfer protein in hyperlipidemic patients: Aa case control study. Kalpana Luthra. Funded by ICMR for 3 years (2006--2009). Funds: Rs.: 13.13 lakh.
12. To study the role of insulin, Estradiol and Epidermal growth factor on the transcriptional regulation of LDL-receptor (LDLR). N.C. Chandra. Funded by AIIMS (2005--2008). Funds: Rs. 1.0 lakh

Ongoing

Principal Investigators

1. Therapy of infectious and chronic diseases: Targeted gene delivery and long-term specific modulation of gene expression. Subrata Sinha. Funded by DBT for 5 years (2006 –2011). Funds: Rs. 101.89 lakh.

2. Funds for Improvement of S and T Infrastructure in Universities and Higher Educational Institutions (FIST). Subrata Sinha. Funded by DST for 5 years (2005 –2010). Funds: Rs. 115 lakh.
3. Development of a Human Papillomavirus Vaccine prototype. Neeta Singh. Funded by DBT for 3 years (2005 –2009). Funds: Rs. 36.49 lakh.
4. A study of molecular & biological factors in pathogenesis of ovarian cancer. Neeta Singh. Funded by ICMR for 3 years (2007– 2009). Funds: Rs.: 14.68 lakh
5. Chronic immune activation associated with leprosy: role of hypo-responsiveness and anergy. D. N. Rao. Funded by CSIR for 3 years (2007–2010). Funds: Rs.15 lakh.
6. Immuno capture based diagnostic assay for the detection of *Plasmodium falciparum* HRP-2 and LDH antigens. D. N. Rao. Funded by ICMR for 3 years (2007–2010). Funds: Rs. 13 lakh.s
7. Developing defensins as a mucosal adjuvant /microbicide with peptide antigens of HIV D. N. Rao . Funded by DBT, for 3 years (2007–2010). Funds: Rs. 25 lakh.
8. T Reg cells and other negative regulatory elements of IL-2 in leprosy patients. D. N. Rao. Funded by ICMR for 2 years (2007–2009). Funds: ; Rs .13 lakh.
9. Multiple antigen peptide approach (MAP) incorporating B-T constructs of F1 and V antigens of *Y. pestis* in nanoparticles of plague vaccines. D.N. Rao. Funded by DBT for 2 years (2008–2010). Funds: Rs. 40.2 lakh.
10. A study to assess the effects of long term obstruction of epididymus on the morphology, functional and chromatin status of epididymat spermatozoa in men. D.N. Rao. Funded by ICMR (2008–2010). – Funds: Rs.10 lakh.
11. Phase III clinical trials with an intranasal injectable male contraceptive RISUG. D.N. Rao. Funded by ICMR (2008–2010). Funds: Rs. 10 lakh.
12. Evaluation of the role of free radical homeostasis, cell adhesion molecules, Nitric Oxide, HDL and associated gene polymorphisms in relation to the risk and severity of Coronary Artery Disease. Nibhriti Das. Funded by ICMR for 3 years (2006– 2009). Funds: Rs.: 20.50 lakh.
13. Paraoxonase (PON 1) activity and its genetic determinants (PON1 gene polymorphisms, in coding region at codon 55, 192 and in promoter region at position -108) in relation to coronary artery disease (CAD). Nibhriti Das. Funded by AIIMS for 2 years (2007– 2010) Funds: Rs.: 1.50 lakh.
14. Mechanism (S) of Regulation of Human Dipeptidyl Peptidase III Expression in Tumor Cell Lines S.S Chauhan Funded by Defence Research and Development Organization, Governmentt. of India for 3 years (2008– - 2011). Funds: Rs. 50.86 lakh.
15. Neurological Disorders Friedreich’s Ataxia (FRDA) and Spinocerebellar Ataxia (SCA) Associated with DNA Trinucleotide Repeats: Identification and Development of Protein Biomarkers and Circulating DNA for Clinical Diagnosis”. M.R. Rajeswari. Funded by ICMR for 3 years (2007–-2010)., Funds: Rs. 19.35 lakh.s
16. Characterzation of HIV-1 subtypes in Indian subjects”, a nested part of RO1 project. Kalpana Luthra. Funded by NIH, USA ““ Design & use of HIV V3 mimetic immunogens”” for 5 years (2005–2010) . Funds: Rs. 39.00 lakh.

17. SDF-1 and DC-SIGNR polymorphisms & Expression in HIV-1 infection. Kalpana Luthra. Funded by ICMR for 3 years (2007–2010). Funds: Rs 19 lakh.
18. Telomerase activity and telomere length in T-cells in patients of Parthenium induced contact dermatitis and its correlation with disease severity. Alpana Sharma. Funded by DBT for 3 years (2008-2011) Funds: Rs 31 lakh.
19. Role of angiogenic factors and cyclooxygenase in multiple myeloma. Alpana Sharma. Funded by ICMR for 3 years (2009–2012). Funds: Rs 22 lakh.
20. Assessment of beta γ 2 microglobulin, IL-6 and IL-2R as prognostic factors in Indian patients of multiple myeloma. Alpana Sharma. Funded by AIIMS for 3 years (2006–2009). Funds: Rs. 2.75 lakh.
21. An *in-vitro* study of the role of FAT, a Drosophila tumor suppressor gene homologue, in human glial tumorigenesis. Kunzang Chosdol. Funded by DRDO (2008–2011). Funds: Rs. 46.41 lakhs.
22. Distribution of cancer susceptibility modifying polymorphisms (MDM2 SNP309 and p53 codon72) in Indian population groups. Kunzang Chosdol. Funded by AIIMS (2007–2009). Funds: Rs. 2.0 lakh.
23. An *in vitro* model study of hyperlipoproteinemia on the degree of LDL receptor expression in placental trophoblast cells: Correlation with oral steroid contraceptive induced hyperlipoproteinemia. N.C. Chandra. Funded by ICMR (2006–2009). Funds: Rs. 18.0 lakh.
24. Studies on SREBP-mediated regulation of low-density lipoprotein receptor (LDLR), low-density lipoprotein receptor-related protein (LRP) and receptor-associated protein (RAP). N.C. Chandra. Funded by DST (2006–2009). Funds: Rs. 23.29 lakhs.
25. An *in vitro* silencing of endogenous oxidized-LDL-receptor (LOX) gene by siRNA: Study of NF- κ B activated expression of proinflammatory cytokines and related atherogenic proteins— its evaluation against anti-inflammatory cytokines mediated responses. N.C. Chandra. Funded by DBT (2007–2010). Funds: Rs. 33.75 lakh.
26. A comparative study on expression and/or transcription between LDL receptor (LDLR) and tumor suppressor proteins (p⁵³, p^{RB}) in presence of insulin, thyroxin and benzo-(a)-pyrene. N.C.Chandra. Funded by AIIMS (2008–2009). Funds: Rs .1.25 lakhs.
27. Deregulate initiation of translation in oral carcinogenesis? Jatinder Kaur. Funded by DST (2007–2010). Funds: Rs. 13.5 lakhs.
28. To study the immune response of T cell dominant synthetic peptides derived from HPV 16, using different adjuvants in a mouse model of cervical cancer. Neeta Singh. (Co-PI) Funded by DBT for 3 years (2008 –2011). Funds: Rs. 25.27 lakh.s
29. Detection of HPV in malignant ocular lesions., Seema Sen (PI), Dr. Neeta Singh (Co-Investigator) under ICMR, (2008 –2009). Funds: Rs. 11.70 Llakh.
30. Effect of curcumin on advanced human cervical carcinomas. Dr. Neeta Singh. (Co-PI), Funded by under DBT (2006 – 2009). Funds: Rs. 59 lakh.
31. Phase II/III randomized placebo controlled clinical trial of curcumin in resectable Stage III and IV squamous head and neck cancers (oral cancers). Dr. Alok Thakar (PI), Dr. Ranju Ralhan (Co-PI), Funded by under DBT (2006–2010). Funds: Rs. 62.85 lakh.

32. Investigations of genetic basis, and gene-lifestyle interactions in generalized and regional obesity, insulin resistance and diabetes in Asian Indians. Dr.Kalpna Luthra. (Co-PI) Funded by DBT (2006–2009).: Funds: Rs. 46.79 lakh.
33. Molecular analysis of gene markers in urine cytology and tissue histology specimens of Indian patients with superficial and muscle invasive TCC of urinary bladder. Dr. Alpana Sharma (Co-Investigator) under ICMR (2007–2009). Funds: Rs. 9.99 lakh.
34. Comparison of efficacy of transplantation of basal cell layer enriched epidermal suspension in patients with stable vitiligo vulgaris and segmental vitiligo. Dr. Alpana Sharma. (Co-Investigator) Funded by IRG, AIIMS (2007–2009). Funds: Rs. 2.0 lakhs.

Departmental Research

Completed

1. Evaluation of efficacy of curcumin as an adjuvant along with radiotherapy & chemotherapy in advanced cases of cervical carcinoma.
2. Mitochondria in apoptosis and human cancer.
3. Molecular insights into the pathogenesis of human cervical cancer— Aan *in-vitro* study
4. Expression of leukocyte Complement Receptor 1, its modulation and significance in the pathophysiology of systemic lupus erythematosus (SLE).
5. Role of eNOS gene polymorphisms in coronary artery disease in the Indian Subjects
6. Signal transduction and modulation of LDL receptor expression in cultured cells.
7. Role of LDL receptor, LDL uptake and thyroxin on HepG2 cell proliferation under serum starvation

Ongoing

- 1 Effect of Curcumin on advanced human cervical cancer
- 2 Molecular detection and genotyping of HPV in uterine cervix – A population based study
- 3 Development of HPV-16 candidate vaccine prototype
- 4 A study of molecular and biological factors in pathogenesis of ovarian cancer
- 5 Targeting apoptotic pathways for the treatment of primary epithelial ovarian cancer
- 6 Paraoxonase and its gene polymorphism in relation to CAD.
- 7 Elucidation of the expression of complement regulatory proteins in relation to the pathophysiology and severity of SLE.
- 8 Role of complement receptors in cell signaling and microbicidal properties of macrophages in relation to mycobacterium tuberculosis.
- 9 Complement Receptor 1 and its gene polymorphism in relation to the pathophysiology and susceptibility to severe malaria
- 10 Expression and modulation of leukocyte complement receptor 1 and CD59 (protectin) in relation to rheumatoid arthritis

- 11 Expression of Ang1 and 2 in multiple myeloma
- 12 A pilot study to evaluate the inter-relationship of insulin, insulin receptor and LDL receptor in patients of Type 1 diabetes mellitus.
- 13 Leptin and associated plasma risk factors in human Obesity.
- 14 Role of Leptin in the regulation of LDL- and oxidized LDL- receptors in cultured cells.
- 15 Modulation of oxidized-LDL-receptor and its effect on pro- and anti-inflammatory cytokines

Collaborative Research

Completed

1. Culture of limbal stem cells for ocular surface reconstruction in stem cell deficiency disorders ,(with R.P Centre , AIIMS).
2. Computational Studies and Structure Based Rational Drug Design for Flaviiral Envelope Proteins” (with School of Bioinformatics, JNU).
3. MRI studies on murine skin tumors (NMR Departmentt., AIIMS)
4. Histopathological investigations on murine skin tumors (Histopathology Dept., AIIMS).

Ongoing

1. Elucidation of the role of the hypermethylation in cancer (HIC-1) gene in glial tumorigenesis (with Dept. of Pathology and Neurosurgery ,AIIMS).
2. Role of p and 19q loss of heterozygosity in human gliomas (with Dept. of Pathology and Neurosurgery,AIIMS).
3. DNA fingerprinting methods for study of genetic alterations in gliomas (withDept. of Pathology and Neurosurgery,AIIMS).
4. MRI studies on murine liver tumours (with NMR Departmentt., AIIMS)
5. Proteomic analysis of host parasite interactive proteins of Cryptosporidim” , (with Dept of Microbiology, AIIMS).
6. Characterization of Salmonella Enterica Serotype Typhi strains from north India, (with Dept of Microbiology, AIIMS).
7. Biophysical studies on interactions of membrane proteins of *Acinetobacter baumannii* and its resistant strains with various antibiotics Microbiology.
8. Role of cobalt chloride induced hypoxia on MA10 cells (Dept of Reproductive Biology, AIIMS).
9. Isolation and analysis of the outer membrane proteins , beta lactamases of Acinatobacter Baumanii (Dept of with Microbiology, AIIMS).
10. Levels of interleukin-1-â in GCF during retention after successful orthodontic treatment (Dept of with Dental Surgery, AIIMS).
11. Neurological disorders Freidreich’s ataxia and spiniocerebellar ataxia associated with DNA trinucleotide repeats: Iidentification and development of protein biomarkers and Circulating DNA for clinical diagnosis (with Dept of Neurology, AIIMS).
12. A prospective study of oxidative stress markers and antioxidant levels in patients with pre-eclampsia (with Dept. of Obstetrics & Gynecology,AIIMS)

13. A pilot study to evaluate the inter-relationship of insulin, insulin receptor and LDL receptor in patients of Type 1 diabetes mellitus (with Endocrinology and Metabolism and Cardiology, AIIMS).
14. A case control pilot study on LDL receptor expression and serum lipid profile in cancer patients (with Obstetrics and Gynecology and Surgery, AIIMS).
15. T-cell response in Parthenium induced contact dermatitis (with Dermatology and Venereology, AIIMS).
16. Role of T helper cytokines in skin autoimmune disorder Pemphigus vulgaris. (with Dermatology and Venereology, AIIMS).
17. Study of Inflammatory markers as prognostic factors in COPD cases (Medicine).
18. Genetic diversity of *Entamoeba histolytica* isolates and identification of genotype-clinical phenotype correlations. (with Collaborative department: Gastroenterology).
19. Immunohistochemical and Molecular Studies on Wnt/ β -catenin Signaling Pathway in Sebaceous Cell Carcinoma of the Eye Lid. Collaborative department: (with Dr. R.P. Centre).
20. Association of COMT catechol-O-methyltransferase gene polymorphism G158A in obsessive compulsive disorder in Indian subjects. Collaborative department: (with Psychiatry).
21. Study of gliomagenesis: Possible involvement of CNS developmental pathway. Collaborative department: (with Pathology).
22. To evaluate the endometrial and sub endometrial blood flows in the prediction of pregnancy during In-Vitro Fertilization Treatment . Collaborative department: (Obstetric and Gynecology)
23. The role of insulin and insulin receptor on LDL receptor functioning. (with Endocrinology & Metabolism and Cardiology).

Publications

Journals

1. Ahmad Y, Bhatia MS, Mediratta PK, Sharma KK, Negi H, Chosdol K, Sinha Set al. Association between the ionotropic glutamate receptor kainate3 (GRIK3) Ser310Ala polymorphism and schizophrenia in the Indian population. *World J Biol Psychiatry*. 2009 , Jan **23**:1–4.[Epub ahead of print].
2. Badjatia N, Satyam A, Singh P, Seth A, Sharma A. Altered antioxidant status and lipid peroxidation in Indian patients with urothelial bladder carcinoma. *Urologic Oncology*; 2009 , Jan 24. [Epub ahead of print].
3. Bhushan B, Guleria R, Misra A, Luthra K, Vikram NK. TNF-alpha gene polymorphism and TNF-alpha levels in obese Asian Indians with obstructive sleep apnea.. *Respir Med*. 2009; Mar;**103**(3):386–92.
4. Bhushan B, Guleria R, Misra A, Pandey RM, Luthra K, Vikram NK. Obstructive sleep apnoea correlates with C-reactive protein in obese Asian Indians. *Nutr Metab Cardiovasc Dis*. 2009 Mar;**19** (3):184-9.
5. Chaudhary O, Bhasin R, Luthra K. DC-SIGN and DC-SIGNR polymorphic variants in Northern Asian Indians.. *Int J Immunogenet*. 2008 Dec;**35**(6):475–9.

6. Chaudhary O, Rajsekar K, Ahmed I, Verma R, Bala M, Bhasin R, Luthra K. Polymorphic variants in DC-SIGN, DC-SIGNR and SDF-1 in high risk seronegative and HIV-1 patients in Northern Asian Indians.. *J Clin Virol.* 2008; ,**43(2)**:196–201.
7. Chauhan S.S , Seth P, & Katara R. Expression of cloned cDNAs in mammalian cells from a cryptic promoter upstream to T7 in p GEM4Z cloning vector. *Mol. Cell Biochemistry* , 2009; , **322**: 119–125.
8. Chosdol K, Misra A, Puri S, Srivastava T, Chattopadhyay P, Sarkar C, Mahapatra AK, Sinha *Set al.* Frequent loss of heterozygosity and altered expression of the candidate tumor suppressor gene ‘FAT’ in human astrocytic tumors. *BMC Cancer* 2009; **9**:5.
9. Das SK, Varadhan S, Gupta G, & Rao DN., Time-dependent effects of ethanol on blood oxidative stress parameters and cytokines. *Indian. J. Biochem. & Biophys.* 2009 : **46**: 116–121.
10. Dutta R, Mondal AM, Arora V, Nag TC, & Das N. Immunomodulatory effect of DDT (bis[4-chlorophenyl]-1,1,1-trichloroethane) on complement system and macrophages.. *Toxicology.* 2008; , **252 (1-3)**: 78–85.
11. Garg S, Chauhan S S, Singh N, Sharma Y D. Immunological response to a 39.8 kDa Plasmodium vivax tryptophan—rich antigen (PvTRAg39.8) among humans. *Microbes Infect*, 2008; ,**10**:1097–1105.
12. Goswami R, Mondal AM, Tomar N, Ray D, Chattopadhyay P, Gupta N, *Sreenivas Vet al.* Presence of 25(OH)D deficiency and its effect on vitamin D receptor mRNA expression. *Eur J Clin Nutr* ,2009; , **63(3)**:446–9.
13. Gowsami B, Sharma, M, & Sharma, A. Inflammation: Its role and interplay in the development of cancer, with special focus on gynecological malignancies. *Inter J of Gynecol Cancer*; 2008; **18(4)**:591–599.
14. Goel R, Misra A, Kondal D, Pandey RM, Vikram NK, Wasir JS, *Dhingra V, Luthra Ket al.* Identification of insulin resistance in Asian Indian adolescents: classification and regression tree (CART) and logistic regression based classification rules.. *Clin Endocrinol (Oxf).* 2009; , **70(5)**:717–24.
15. Gupta R, Mirdha BR, Guleria R, Mohan A, Kabra SK, Kumar L, *Agarwal SK, Luthra Ket al.* Use of different primer directed sequence amplification by polymerase chain reaction for identification of Pneumocystis jirovecii in clinical samples.. *Indian J Chest Dis Allied Sci.* 2008; **50(4)**:321–7.
16. Isharwal S, Arya S, Misra A, Wasir JS, Pandey RM, Rastogi K, *Vikram NK, Luthra K, Sharma Ret al.* Dietary nutrients and insulin resistance in urban Asian Indian adolescents and young adults.. *Ann Nutr Metab.* 2008; **52(2)**:145–51.
17. Khan SN, Islam,B, Rajeswari M.R, Usmani H, Khan AU., Characterizing the interaction of anesthetic supplement thiopental with human serum albumin. *Acta Biochim. Pol.*, 2008; , **55**: , 399–409.
18. Khera R, & Das N. Complement Receptor 1: Disease association and therapeutic implication. *Mol. Immunol.* 2008; , **46**: 761–772.

19. Mehndiratta M, Palanichamy JK, Ramalingam P, Pal A, Das P, Sinha S. and Chattopadhyay P *et al.* Fluorescence acquisition during hybridization phase in quantitative real-time PCR improves specificity and signal-to-noise ratio. *BiotTechniques* 2008;., **45(6)**: 625—634.
20. Pathak S, Sharma C, Jayaram HN, Singh N. Apoptotic signaling induced by benzamide riboside: an in vitro study. *Mol Cell Biochem.* 2009. Mar 5.[DOI – 10.1007/s11010-009-0075-8.]
21. Pillai MR, Hariharan R, Babu JM, Lakshmi S, Chiplunkar SV, Patkar M, Tongaonkar H, Dinshaw K, Jayshree RS, Reddy BKM, Siddiqui M, Roychoudury S, Saha B, Abraham P, Gnanamony M, Abraham P, John S, Ram TS, Dey B, Sharma C, Jain SK, Singh N. *Jet al.* Cancer. 2009. Molecular variants of HPV-16 associated with cervical cancer in Indian Population. *Intl. J. Cancer.* 2009. 125(1):91-103; 2009.
22. Pun PB, Bhat AA, Paranjape R.S., & Rao D.N., Intranasal administration of peptide antigens of HIV with mucosal adjuvant CpG ODN coentrapped in microparticles enhances the mucosal and systemic immune responses. *Int. J Immunopharmacol.* 2009: **9**: 468—477.
23. Ralhan R, DeSouza LV, Matta A, Tripathi SC, Ghanny S, Datta Gupta S, Thakar A., Chauhan S.S. & Siu KWM *et al.*, iTRAQ— multidimensional liquid chromatography and tandem mass spectrometry based identification of potential biomarkers of oral epithelial dysplasia and novel networks between inflammation and premalignancies. *J proteome Res:* 2009;., **8**:300—309.
24. Sharma A, & Rajeswari MR., Over-expression of High Mobility Group (HMG) B1 and B2 proteins directly Ccorrelates with the Pprogression of squamous Ccell Ccarcinoma in Sskin. *Cancer Investigation,* 2008;.,**26**., 843—851.
25. Sharma A, Tripathi M, Satyam A, Kumar L. Antioxidant Llevels in Ppatients with Mmultiple Mmyeloma. Lleukemia & Llymphoma. 2009, March 4 [Epub ahead of print].
26. Singh M, Singh N. Molecular mechanism of curcumin induced cytotoxicity in human cervical carcinoma cells. *Mol Cell Biochem.* 2009. Feb 4. [DOI – 10.1007/S11010-009-00125-5].
27. Singhal G, & Rajeswari MR. Interaction of Actinomycin D with promoter element of c-met and its inhibitory effect on the expression of c —Met., *J. Biomol. .Struct. & Dyn.* 2009;., **26**., 625—636.
28. Singhal G, & Rajeswari MR., Preferential Bbinding of Aanticancer Ddrug Aadriamycin to the *Sp1* binding site in *c-met* promoter region: A spectroscopic and molecular modeling study., *J. Mol. Struct.* 2009;., **920**., 208—213.
29. Sinha S, Misra A, Rathi M, Kumar V, Pandey RM, Luthra K, *et al.*, Jagannathan NR Proton magnetic resonance spectroscopy and biochemical investigation of type 2 diabetes mellitus in Asian Indians: Oobservation of high muscle lipids and C-reactive protein levels.. *Magn Reson Imaging.* 2009 ;**27(1)**:94—100.
30. Tiwari A, Datta D, Khanna N, Acharya SK, Sinha S. Generation and characterization of high affinity humanized Fab against Hepatitis b surface antigen. *Mol Biotechnol* 2009 (epub ahead of print) [DOI 10.1016/S12033-009-9165-9 PMID:19326261]
31. Tiwari A, Khanna N, Acharya SK, Sinha S. Humanization of high affinity anti-HBs antibody by using human consensus sequence and modification of selected minimal positional template and packing residues. *Vaccine* 2009. [(epub ahead of print) DOI 10.1016/J.vaccine. 2009.02.019]

32. Tripathi V, Verma R, Dinda A, Malhotra N, Kaur J, Luthra K. Differential Expression of RDC1/CXCR7 in the Human Placenta.. *J Clin Immunol*. 2008. [Oct 28(DOI 10.1007/s10875-008-9258-4)]
33. Tyagi AK, Mirdha BR, Guleria R, Mohan A, Luthra K, Singh UB. Study of dihydropteroate synthase (DHPS) gene mutations among isolates of *Pneumocystis jiroveci*. *Indian J Med Res*. 2008; , **128(6)**:734–9.
34. Vikram NK, Misra, Pandey RM, Luthra K, Bhatt SP. Distribution and cutoff points of fasting insulin in Asian Indian adolescents and their association with metabolic syndrome. *J Assoc Physicians India*. 2008 Dec;**56**:949–54.

Abstracts

35. Anand D, Biswas B, Aror V, Kumar U, & Das N. Effect of IFN-g and immune complex on Neutrophil-CR1 transcript and its relationship with CR1 density polymorphism.. *Molecular Immunology* 2008; , **45**:4178.
36. Chosdol K, Misra A, Puri S, Srivastava T, Chattopadhyay P, Sarkar C, Mahapatra A, Sinha S Low expression of FAT, a human homologue of drosophila tumor suppressor gene FAT, in human astrocytic tumors. *Clin Neuropathol*, 2008; , **27 (3)**: 208.
37. Das N, Arora v, Marwah V, Verma J, Gover R , Kumar A, Anand D, Biswas B Kumar U *et al*. Cytokine imbalance and cross talks among cytokines, immune complexes and genetic factors on Complement Receptor 1 (CR1) expression in health and disease (Systemic Lupus Erythematosus). *Molecular Immunology* 2008; , **45**:4176.
38. Jha P, Suri V, Sharma MC, Chosdol K, Chattopadhyay P, Sinha S, Gupta D, Sinha S, Sarkar C Loss of Heterozygosity (LOH) for 1 and 19q Astrocytic and Oligodendroglial tumors. *Clin Neuropathol*, 2008; , **27 (3)**: 207.
39. Ramakrishnan G, & Chandra NC. Regulation of low density lipoprotein receptor activity by insulin and steroids in model cell culture system. *J. Clin. Lipidology* 2008; **2** (Suppl 5S):, abstract no 144.,
40. Sen S, Sharma C, Pal A, Kar R, Chattopadhyay, Singh N. Antioxidant activity of curcumin facilitates its cancer chemotherapeutic potential in squamous cell lung carcinoma in vitro. *Annals of Oncology*. 2008; . **19** (Suppl.. 8).
41. Seth A, Singh P, Satyam A, Sharma A, Gupta NP. Cytokine levels in patients of transitional cell carcinoma of urinary bladder. . (Abstract) *Urology*; 2008; **Vol-72**, 5A (Suppl.- 1);, p-S68.
42. Sharma S, Singh UB., Prasad HK, Sharma P, and Das N. Interaction of Mycobacterium tuberculosis secretory antigens ESAT-6 and CFP-10 on complement receptors,calcium signaling and antimicrobial functions of macrophages. 2008. *Molecular Immunology* 2008; . **45**:.,4149.
43. Singh A, Singh N. HPV and cervical cancer pathogenesis. *Proc. American. Assoc. Cancer Res.:* 2008; , **49**:.
44. Srivastava T, Chosdol K, Sarkar C, Mahapatra AK, Sinha S. Heterozygosity analysis at mismatch repair gene loci reveals frequent LOH at hMLH1 in low grade astrocytoma. *Clin Neuropathol*, 2008; , **27 (3)**: 208.

PATIENT CARE

Marker tests for pregnancy and prostate cancer:

PSA : 282 samples

Âeta-hCG : 264 samples

Indian patents have been applied for the following:

1. A novel small interfering RNA (siRNA) targeting the Human Papilloma Virus – 16 enhancer region leading to down regulation of the expression of viral oncogenic mRNA's E6 and E7 in a human Papilloma Virus – 16 (HPV-16) positive cervical carcinoma cell line, and its novel genomic target.
2. A novel small interfering RNA (siRNA) directed against ME 1a1 binding region in the P2 promoter of proto-oncogene c-myc results in its transcriptional gene silencing.

AWARDS & HONORS

Dr. Subrata Sinha was Awarded ICMR International Fellowship for Senior Biomedical Scientists. He was a Membership of the Guha Research Conference.

Dr. Neeta Singh was appointed as a Executive Ccommittee Mmember of Indian Association for Cancer Research and Editorial Board member of IACR Newsletter; Secretary (Delhi Chapter) of Indian Association for Cancer Research.

Dr. D.N. Rao was appointed Secretary, Indian Immunology Society; **Editor Indian Journal of Biochemistry & Biophysics.**

SIGNIFICANT EVENTS:

Dr. Subrata Sinha was selected as a Member of following Committees: Scientific Advisory Committee (SAC) of Rajiv Gandhi Centre of Biotechnology, Thiruvananthapuram; SAC of Institute of Pathology, New Delhi; SAC of School of Medical Sciences, University of Hyderabad; Review Committee for Biology Projects, Indian Statistical Institute (2009); Project Review Committee (PRC), Chronic Diseases, Dept of Biotechnology (DBT) (2005–2007); PRC, Biotechnology Products and Process Development, DBT, (2005 –till date); PRC, Cell and Molecular Biology, ICMR, (2005); Special Committee, Centre for Molecular Medicine,, JNU, 2001 till date.; Special Committee, Centre for Biotechnology, 2000 till date, JNU; Member of the Institutional Biosafety Comittee and Ethical Committee of the National Institute of Immunology (2000– -till date); Institutional Ethics Committee of the Jawaharlal Nehru University (2001- till date); Academic Committee, JNU-Center for Cellular and Molecular Biology (2006-08); Sectional Committee, Medical Sciences, INSA; Chairman, Committee for Biochemistry Curriculum (UG & PG) , MCI.

Dr. Neeta Singh was selected as a Member of experts committee on evaluating the effect of RFR on human health of ICMR;, Member of subject expert – Life Sciences Committee of Women Scientists Scheme of DST;, Member of B. B. Dixit Library Committee, AIIMS.. He Continues to be member of International Union Against Cancer (UICC), American Association for Cancer Research (AACR), Indian Society of Cell Biologists, Indian Women Scientists Association, Indian Society of Lung Cancer and Indian Society for Free Radicals Research in India. He was also a Member of the Research Advisory Committee and Program Advisory Committee of ICMR;, Member of Scientific

Advisory Committee of DRDO; Participated at Annual AACR meeting 2008 held at San Diego, USA, (12—16) April 2008. Participated at Cancer Congress of UICC at Geneva, Switzerland (27-31) August 2008; Member Project Review Committee of DBT, DST, ICMR. He was appointed as Reviewer for *Ind. J. Med. Res.*, *Intl. J. of Cancer*, *Ind. J. of Clin. Biochem.*, *Acta Biochemica & Biophysica Sinica*, *Intl. J. Gynecol. Cancer*, *Intl. J. Biochemistry and Cell Biology*, *Molecular Vision*, *Oncogene*, *Molecular Biology Reports*, Editorial Board Member of *Indian Journal of Clinical Biochemistry*. He was a External examiner for Rajasthan University., Mumbai University., Delhi University., Chennai University., *Jamia Hamdard University.*, PGI Chandigarh, Kerala University, BHU, DNB, BBKIMS., Nepal.

Dr. D.N. Rao was selected as Member of Technical Advisory Committee of ICMR; Member of Core Committee for Selection ICMR; ICMR Selection Committee for SRF; Member board of Studies of Biochemistry of Jamia Hamdard University & Aligarh Muslim University; Member of JNU-CCMB Academic Committee; UGC member for Biotechnology Programme in India; DST-Industry project Committee Member; Member of Ethical Committee; Project review Committee of DBT, DST, CSIR and ICMR.

Dr. Nibhriti Das was appointed as a Member of the International Complement Society; Professional Member American Heart Association; Member of the Executive Committee of NESa and ISAR.

Dr M. R. Rajeswari was elected as a Member of Project Review Committee (Neurochemistry) ICMR and CSIR –NET evaluation committee (Life sciences);. Member Selection committee at National Accreditation Board for Testing and calibration Laboratories, DST; UGC faculty selection committee meeting , University of Hyderabad (Andhra Pradesh); Nominated member of a number of UGC expert committee meetings held regarding : sanction of Deemed status to of Indian universities and XI plan review of 5 National universities

Reviewer for *J. Mol. Structure* , Melanoma Research, *J. Phys. Chem*, *Am chem. Soc.*, *DNA & Cell Biology Ind. J Biochem. Biophys.*, & *Ind. J Clin. Biochem*; Reviewed research proposals from ICMR, & DST;.

Ph. D. student (Mr Vishnu Swarup) received Best Poster award for “Protein Biomarkers for FRDA”, “Neurocon—2009”, in Feb, 2009 at Kolkata.

Dr. Kalpana Luthra was selected as Member of cultural program committee of Institute Day Sept 2008; Member of stores Negotiation Committee; Member of Project Advisory Committee of ICMR for Nephrology.

Dr. Alpna Sharma was selected as a Member American Association of Cancer Research (AACR); Member Specification committee of Instruments at VMMC and Safdarjung Hospital; Reviewer for *Int J Gynecological Cancer*, *Int J Cancer*, *Am. J Reprod. Immunol.*, *Ind J Clin. Biochem.*, *Evidence Based Complementary and Alternative Medicine*.

9.4 Biomedical Engineering

Professor and Head

Sneh Anand

Professors

Dinesh Mohan

Alok Ranjan Ray

Harpal Singh

Associate Professor

Veena Koul

Principal Scientific Officer-I

Nivendita Karmakar Gohil

Senior Design Engineer

S.M.K. Rahman

Scientist

J. C. Bhardwaj

EDUCATION

The department participates in the PhD programme

National and International

Professor A.R. Ray

- Inviated talk and participate in National Seminar on ‘Advances in materials’, MS University, Tamilnadu; 16–17 March 2009.
- Attended National Seminar on ‘Environment and waste management’, A.B. Institute of Technology, Cuttack; 29–30 January 2009.
- Attended World Congress on ‘Biomaterials’, WBC2008, Amsterdam Rai, the Netherlands and as guest researcher at School of Engineering and Physical Science, Heriot Watt University Edinburgh, UK; 26 May – 1 June 2008.
- Attended conference on ‘Medical Device’, Ahmdabad; 25 February 2008

Professor D. Mohan

- Presentation at FORUM for Exchange and Excellence in Design, Pune; 13 February 2009.
- Present a paper for International workshop on ‘Integrated transport for sustainable urban development’, Beijing; 15–19 December 2008.
- Attended International Conference on ‘Re-Imaging Cities, urban design after the age of oil’, at Philidelphia, USA; 6–7 November 2008.
- Attended Symposium on ‘Transporatation planning and safety”, Vienna; 20–28 November 2008.
- Attended the Annual International Conference of International Research Council on the Biomechanics of Injury (IRCOBI), Bern, Switzerland; 16–19 September 2009.

- Attended International Conference and delivered invited talk at MMDRM, Kathamandu; 24–26 November 2008.
- To give a seminar at Singapore, as visiting speaker University of British Columbia (UBC) in Vancouver, Canada, attend the VREF CoE Network Conference, USA, as visiting Scientist at University of Michigan transportation Research Institute, USA, attend the annual Southern African Transport Conference, CSIR, Pretoria, South Africa; 13 May – 1 June 2008.

R. Rastogi, V. Koul, S. Anand

- ‘Transdermal iontophoresis—an approach to needle-free insulin delivery’, *National Seminar on Biomedical Engineering*, Alwar Institute of Engineering and Technology, Rajasthan; 12–13 April 2008.

Raja Mohamed, Dirk Kuckling, Hans Juergen P. Adler, Veena Koul, Veena Choudhary

- ‘Folate conjugated IPN nanogels as drug carriers—synthesis and characterization’, International Conference of Poly Char 16 World forum on ‘Advanced Materials’, Lucknow; 2008.

Raja Mohamed, Veena Choudhary, Veena Koul

- ‘Biodegradable Interpenetrating Polymer Network (IPN) Macro Hydrogels for Cancer Targeting’. *National Seminar on ‘Biomedical engineering—key to global health’*, AIET, Rajasthan; April 2008.

Deepak Joshi, Sonal Atreya, A.S.Arora and Sneha Anand

- ‘Trends in EMG-based prosthetic hand development’, National Conference on Biomechanics, IIT Roorkee; 7–8 March 2009.

Deepak Joshi and Sneha Anand

- ‘Synergy-based adaptive prosthesis for transfemoral amputee’, National Conference on ‘Disability and assistive technologies, NITIE Bombay; 14–15 March 2009.

Vijay Khare, Jayashree Santhosh and Sneha Anand

- ‘Performance comparison using five ANN methods for classification of EEG signals of two mental states’, International Conference of IEEE INDICON, Kanpur; 11–13 December 2008.

Know— how developed/transferred

A bone cement technology has been patented and commercialized by XL ORTHOMED, Faridabad, Haryana.

RESEARCH

Funded Project

1. Development of low cost rapid biosensor for identification of pathogenic bacteria. Harpal Singh. Funded by DBT (2010). Funds: Rs 36 lakh.
2. Reversibility of injectable contraceptive for male technology development. J.C. Bhardwaj. Funded by Ministry of Health (2010). Funds: Rs 6.27 lakh.
3. Evaluation of vaginal microbial flora and sperms after Styrene Maleic Anhydride (SMA) Application. J.C. Bhardwaj. Funded by IIT Kharagpur (2009). Funds: Rs 2.42 lakh.

4. Studies of the Fallopian tube function with luminal implant. J.C. Bhardwaj. Funded by M/S Marrksans Ltd (2008). Funds: Rs 5.17.
5. Analysis of autonomic nervous system correlates and health benefits of rhythmic breathing techniques. Sneh Anand. Funded by AYUSH, MHFW (2009). Funds: Rs 29.63 lakh.
6. Development of Nanoparticulate system for macrophage targeting. Veena Koul. Funded by DBT (2009). Funds: Rs 30 lakh.
7. Process Optimization. Veena Koul. Funded by DBT (2008). Funds: Rs 17.17 lakh.
8. Pre-clinical trials of a portable electrically enhanced transdermal drug delivery system (RP 01890). Sneh Anand. Funded by DST (2008). Funds: Rs 18.18 lakh.
9. To develop an external counter pulsation device (RP01913). Sneh Anand. Funded by Department of Information and Technology (2008). Funds: Rs 57.60 lakh.
10. Development of artificial bone material (RPO1721). Alok R. Ray. Funded by Indian Council of Medical Research (2008). Funds: Rs 87.43 lakh.
11. Sustainable urban transport in less motorised countries: Research and training (RPO1507). Dinesh Mohan. Funded by the Volvo Research Foundations (2008). Funds: Rs 64.56 lakh.
12. Preclinical trial of a portable electrically enhanced transdermal drug delivery system. Professor Sneh Anand. Funded by DST (to be extended). Funds: Rs 24 lakh.
13. To Develop an External Counter Pulsation Device (ECP). Professor Sneh Anand. Funded by DIT, Delhi (to be extended). Funds: Rs 57.60 lakh.
14. Analysis of ANS correlates and health benefits of Rhythmic Breathing Techniques. Professor Sneh Anand, AYUSH (2009). Funds: Rs 29.63 lakh.
15. Development of instant-ECG (I-ECG), a low cost 12-lead ECG with telemetric capability (Tele-ECG), Mobile ECG (m-ECG) and a software for ECG analysis (ECG-soft). Professor Sneh Anand. Funded by DBT (2010). Funds: Rs 33.21.
16. Design and Development of Technological Aids for Spinal Injury Patients. Professor Sneh Anand. Professor Sneh Anand (2011).

Departmental Project

1. A novel contact killing antimicrobial quaternary amine acrylate copolymer and their applications thereof. Professor Harpal Singh, Supriya Singh.
2. Nanoporous polymeric micro particles for oral insulin delivery. Professor Harpal Singh, Amit Tyagi.
3. Electro-oculogram based Multi-mode Controller. Professor Sneh Anand, Jayashree Santhosh.
4. Device for External Counter Pulsation Therapy. Professor Sneh Anand.
5. Zig-G, A Wireless ECG system. Professor Sneh Anand.
6. A Prosthetic Shoe for an artificial intelligent AK prosthesis. Professor Sneh Anand.

PUBLICATIONS

Journals

1. Anand S, Jaryal A, Deepak KK, Santhosh J., Selvaraj N, *et al.* Influence of respiratory rate on the variability of blood volume pulse characteristics. *J Med Eng Technol* 2008 (submitted).
2. Joshi D, Ribiero R, Srivastava S, Anand S, Majumdar D. Gait Co-ordination: Potential marker for mental state 2009. (Under review)
3. Singh G, Joshi D, Anand S. Sub-region identification in gait cycle for real time implementation. *Journal of Computer Methods in Biomechanics and Biomedical Engineering* 2009. (Communicated).
4. Joshi D, Kandpal K, Anand S. Feature evaluation to reduce false triggering in Threshold based EMG Prosthetic Hand. *International Journal of Biomedical Engineering* 2009 (in press).
5. Selvaraj N, Jaryal A, Santhosh J, Deepak KK, Anand S. Clinical monitoring and computing of peripheral endothelial function during reactive hyperemia using blood volume pulse characteristics. *Med Biol Eng Comput* 2009. (Under review).
6. Selvaraj N, Jaryal AK, Santhosh J, Deepak KK, Anand S. Influence of respiratory rate on the variability of blood volume pulse characteristics. *J Med Eng Technol* (DOI:10.1080/03091900802454483)
7. Jaryal AK, Selvaraj N, Santhosh J, Anand S, Deepak KK. Monitoring of cardiovascular reactivity to cold stress using digital blood volume pulse characteristics in health and diabetes. *J Clin Monit Comput* 2009;**23**:12330.
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9. Selvaraj N, Shivplara NB, Bhatia M, Santhosh J, Deepak KK, Anand S. Heart rate dynamics during Shambhavi Mahamudraa practice of Isha yoga. *Journal of Complementary and Integrative Medicine* 2008;**5**: article 22.
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17. Dubey KK, Ray AR, Behera BK. Production of demethylated colchicine through microbial transformation and scale-up process development. *Process Biochem* 2008;**43**:51–7.
18. Gupta B, Saxena S, Ray AR. Plasma induced graft polymerization of acrylic acid onto polypropylene Monofilament. *Journal of Applied Polymer Science* 2008;**107**:324–330.

9.5 Biophysics

Head

Krishna Dalal

Associate Professors

Krishna Dalal

A. Srinivasan

Punit Kaur

Assistant Professors

Savita Yadav

Sujata Sharma

Senior Scientific Officer

Sharmistha Dey

Senior Technical Officers

S. Baskar Singh

Asha Bhushan

EDUCATION

The faculty and scientists are actively involved in teaching and guiding students for PhD degree, MSc (Biophysics) and MD (Biophysics) and imparting long- and short-term training to students from different institutes and universities.

RESEARCH

Funded Projects

Completed

1. Randomised clinical trial on the (RCT) of reflexology therapy and usual drug treatment in the management of intractable epilepsy. K. Dalal. Funded by CCRYN, Ministry of Health and Family Welfare (2005–2009). Funds: Rs 33 lakh.

Ongoing

1. Randomised clinical trial on the (RCT) of reflexology in the management of patients suffering from diabetic neuropathy. K Dalal. Funded by ICMR (2006-2009). Funds: Rs 22 lakh.
2. Structural and Functional Studies of Peptidoglycan recognition Proteins. Punit Kaur. Funded by DST for 3years (2008–2011). Funds: Rs 32.45 lakh.
2. Setting up of Bio-Medical Informatics Centre. Punit Kaur. Funded by ICMR for 5 years (2006–2011). Funds: Rs 30 lakh.
3. Isolation, Purification and structural and functional characterization of new proteins from seminal plasma. Savita Yadav. Funded by DST for 3years (2008–2011). Funds: Rs 22 lakh.
4. Purification, biochemical and functional characterization of heparin binding proteins in human seminal plasma. Savita Yadav. Funded by DBT for 3 years (2008–2011). Funds: Rs 27.21 lakh.
5. Structural and Functional Studies of Lactoperoxidase. Sujata Sharma. Funded by DST for 3 years (2008–2011). Funds: Rs 19.9 lakh.
6. Development of Synthetic Alternatives to Currently Available Microbicidal Agents. Sharmistha Dey. Funded by DST for 3 years (2008–2011). Funds: Rs 20 lakh.

PUBLICATIONS

1. Kumar V, Hassan MI, Singh AK, Dey S, Singh TP, Yadav S. Strategy for sensitive and specific detection of molecular forms of PSA based on 2DE and kinetic analysis: A step towards diagnosis of prostate cancer. *Clin Chim Acta* 2009;**403**:17–22.
2. Hassan MI, Bilgrami S, Kumar V, Singh N, Yadav S, Kaur P, *et al.* Crystal structure of the novel complex formed between zinc alpha2-glycoprotein (ZAG) and prolactin-inducible protein (PIP) from human seminal plasma. *J Mol Biol* 2008;**384**:663–72.
3. Hassan MI, Waheed A, Yadav S, Singh TP, Ahmad F. Prolactin inducible protein in cancer, fertility and immunoregulation: structure, function and its clinical implications. *Cell Mol Life Sci.* (2008) (in press)
4. Kumar V, Hassan MI, Singh TP, Yadav S. Comparative studies on the aggregation behavior of HBPs from human seminal plasma by dynamic light scattering. *Protein Pept Lett* 2008;**15**:633–9.
5. Hassan MI, Waheed A, Yadav S, Singh TP, Ahmad F. Zinc alpha 2-glycoprotein: a multidisciplinary protein. *Mol Cancer Res* 2008;**6**:892–906.
6. Hassan MI, Kumar V, Singh TP, Yadav S. Purification and characterization of zinc alpha2-glycoprotein-prolactin inducible protein complex from human seminal plasma. *J Sep Sci* 2008;**31**:2318–24.
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8. Hassan MI, Kumar V, Singh TP, Yadav S. Proteomic analysis of human amniotic fluid from Rh(-) pregnancy. *Prenat Diagn* 2008;**28**:102–8.
9. Singh AK, Singh N, Sharma S, Shin K, Takase M, Kaur P, Srinivasan A, Singh TP. Inhibition of lactoperoxidase by its own catalytic product: Crystal structure of the hypothiocyanate-inhibited bovine lactoperoxidase at 2.3-Å resolution. *Biophys J* 2009;**96**:646–54.
10. Mir R, Sinha M, Sharma S, Singh N, Kaur P, Srinivasan A, Singh TP. Isolation, purification, crystallization and preliminary crystallographic studies of sagitoxin, an oligomeric cardiotoxin from the venom of *Naja naja saggitifera*. *Acta Crystallogr Sect F Struct Biol Cryst Commun* 2008;**64**(Pt 6):545–7.
11. Sharma P, Singh N, Sinha M, Sharma S, Perbandt M, Betzel C, Kaur P, Srinivasan A, Singh TP. Crystal structure of the peptidoglycan recognition protein at 1.8 Å resolution reveals dual strategy to combat infection through two independent functional homodimers. *J Mol Biol* 2008;**378**:923–32.
12. Khan KAM, Das U, Rahaman HM, Hassan IM, Srinivasan A, Singh TP, *et al.* A single mutation induces molten globule formation and a drastic destabilization of wild-type cytochrome c at pH 6.0. *J Biol Inorg Chem* 2009 Mar 10. [Epub ahead of print]
13. Singh AK, Singh N, Sharma S, Shin K, Takase M, Kaur P, Srinivasan A, Singh TP. Inhibition of lactoperoxidase by its own catalytic product: Crystal structure of the hypothiocyanate-inhibited bovine lactoperoxidase at 2.3-Å resolution. *Biophys J* 2009;**96**:646–54.

14. Chatterjee U, Bose PP, Dey S, Singh TP, Chatterjee BP. Atiproliferative effect of T/Tn specific Artocarpus lakoocha agglutinin (ALA) on human leukemic cells (Jurkat, U937, K562) and their imaging by QD-ALA nanoconjugate. *Glycoconjugate J* 2008;**10**:9134–8.
15. Gill K, Singh AK, Kapoor V, Mishra B, Somvanshi RK, Das SN, Dey S. Isolation of a novel 24 kDa protein from ginger rhizomes having anti-fungal and anti-proliferative activity. *J Pept Sci* 2008;**30** (EPS): 188.
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17. Somvanshi RK, Singh AK, Saxena M, Mishra B, Dey S. Development of novel peptide inhibitor of Lipoxygenase-based on biochemical and BIAcore evidences. *Biochimica et Biophysica Acta (BBA)— Proteins and Proteomics* 2008;**1784**:1812–7.
18. Kidwai M, Bhatnagar D, Mothsra P, Singh AK, Dey S. Molecular iodine as a versatile reagent for Hantzsch synthesis of 2-aminothiazole derivatives. *Journal of Sulfur Chemistry* 2009;**30**:29–36.
19. Thakur A, Alam MT, Bora H, Kaur P, Sharma YD. Plasmodium vivax: Sequence polymorphism and effect of natural selection at apical membrane antigen 1 (PvAMA1) among Indian population. *Gene* 2008;**419**: 35–42.
20. Ethayathulla AS, Bessho Y, Shinkai A, Padmanabhan B, Singh TP, Kaur P. Purification, crystallization and preliminary X-ray diffraction analysis of the putative ABC transporter ATP-binding protein from *Thermotoga maritima*. *Acta Cryst* 2008;**F64**:498–500.
21. Singh AK, Singh N, Sharma S, Singh SB, Kaur P, Bhushan A, *et al.* Crystal structure of lactoperoxidase at 2.4 Å resolution. *J Mol Biol* 2008;**376**:1060–75.
22. Sharma P, Singh N, Sinha M, Sharma S, Perbandt, M, Betzel C, *et al.* Tryptophan as a three way switch in regulating the function of the secretory signaling glycoprotein (SPS-40) from mammary glands : structure of SPS-40 complexed with 2-methylpentane-2,4-diol at 1.6 Å. *Acta Crystallogr* 2009;**D65**:1– 4.
23. Sharma S, Singh T.P. Structure-based drug design and mechanism of action of non-steroidal anti-inflammatory agents with phospholipase A₂ as the target and neutralization of their side effects by the C-lobe of lactoferrin in Biotechnology In: Pandey A, Larroche C, Soccol CR, Dussap CG (eds). France 2008.

Conference

24. Dalal K, Tripathi M, Subramanian KK, Bajpai V, Elenchezhiyan. A randomized clinical trial on the role of reflexology in intractable epilepsy. Proc. 9th joint annual conference of Indian epilepsy association and Indian epilepsy society, India Habitat Centre; 21–22 October 2008:33.
25. Dalal K, Tripathi M. Randomized clinical trial of a combination of reflexology and antiepileptic drugs versus antiepileptic drugs alone, in the management of intractable epilepsy. Proc. 62nd Annual Meeting of the American Epilepsy Society, 2nd Biennial North American Regional Epilepsy Congress, Seattle, Epilepsia, abstract number 70352; 5–9 December 2008.

Protein Data Bank entries

1. 3FAQ Crystal Structure Of Lactoperoxidase Complex With Cyanide
- 2: 3GCJ Mode Of Ligand Binding And Assignment Of Subsites In Mammalian Peroxidases: Crystal Structure of Lactoperoxidase Complexes With Acetyl Salicylic Acid, Salicylhydroxamic Acid And Benzylhydroxamic Acid
- 3: 3GC1 Crystal Structure of Bovine Lactoperoxidase

PATIENT CARE

The following services are provided by the department for patient care:

- The patients suffering from the following ailments got treated through the research projects on the clinical trials
 - (i) intractable epilepsy
 - (ii) diabetic neuropathy
 - (iii) osteo-arthritis
- Characterization and analysis of kidney gallstones using X-ray diffraction techniques: More than 61 stones have been analyzed by this technique in the current year.
- Protein N-terminal sequencing
- Characterization of biomolecules using MALDI-TOF
- Receptor-ligand binding studies-Biacore
- Peptide synthesis
- X-ray intensity data collection for small molecules
- X-ray intensity data collection for macromolecules

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Dr Krishna. Dalal has been awarded membership of American Epilepsy Society, USA,; honorary membership (life time) of China Reflexology Association, Beijing, China; governing body members of Indian Institute of Research in Integrated Medicine, Kolkata.

Dr Punit Kaur organized workshop on 'Introduction to Bio-Medical informatics sponsored by ICMR; 2–5 February 2009.

Dr Savita Yadav participated in 3weeks course on multidisciplinary applications of synchrotron radiation from, ICTP, Trieste, Italy; 7–25 April 2008.

Dr Sharmistha Dey was a member of National Academy of Medical Sciences; life member of Indian Biophysical Society, European Peptide Society and Indian Peptide Society.

Ms Asha Bhushan has presented a paper and poster on 'Phospholipase A₂ as a potential target for structure based rational drug design' in the 'National conference on drug discovery and development', University of Delhi, South Campus, New Delhi; 21–23 January 2009.

CENTRAL FACILITIES

Infrastructure Facility for Clinical Proteomics at AIIMS (DBT supported).

Bioinformatics Centre for Drug Designing (ICMR supported)

9.6 Biostatistics

Professor and Head

R.M. Pandey

Additional Professor

S.N. Dwivedi

Associate Professor

V. Sreenivas

Scientists

R.K. Ahuja

Rajvir Singh (VRS was 4/12/2008)

Guresh Kumar

M. Kalaivani

Statisticians

Ombir Singh

Kulwant Singh Kapoor

Statistical Assistants

Ashish Datt Upadhyay

Bhupender Kumar

EDUCATION

The department was actively involved in teaching 'Biostatistics and essentials of Research Methods' in the undergraduate, paramedical and postgraduate courses, viz. MB,BS, BSc (Hons) in Medical Technology in Radiology, MBiotech, BSc, MSc (Nursing) and MD Community Medicine.

The department organized a series of evening classes on 'Biostatistical aspects of Research Methodology' for new Residents and Research Scholars. Faculty members delivered lectures on application of bio-statistical tools in specific areas of medical research; participated in departmental scientific presentations. contributed to the educational activities in other departments by being Co-Guides, DC Members for MD/MS, DM, MCH and PhD students.

The department provided 1 week hands-on-training on data analysis using statistical software to the residents, Ph.D. students and junior faculty members; short-term training (2–3 months) in practical applications of Biostatistics was given to fresh postgraduate students in Statistics/Biostatistics from outside the Institute.

Continuing Medical Education

Lectures delivered

Dr S.N. Dwivedi delivered more than 30 invited lectures in workshops/ symposium/ training programmes/continuing education programmes within and outside the Institute.

Dr V. Sreenivas delivered more than twenty invited lectures in workshops/symposium/training programs/continuing education programmes within and outside the Institute.

Ms M. Kalaivani delivered three 3 invited lectures in workshops/symposium/training programmes/continuing education programs within the Institute

National and International Conferences

- Dr R.M. Pandey organised one day pre- conference workshop on ‘Cluster Randomised trials’, Annual Conference of the Indian Society for Medical Statistics, Nainital; 7–9 November 2009..
- Dr S.N. Dwivedi presented two papers in the 14th International Conference of Forum for Interdisciplinary Mathematics, Memphis University, USA; 15–18 May 2008. He also presented a paper in the XXXth Annual Conference of the Indian Association for the Study of Population, Bangalore, Karnataka; 17–19 October 2008.
- Dr V. Seenivas attended the 5th National Conference on Science and Technology, National Academy of Science and Technology (NAST), Nepal , and presented a paper on ‘Prognostic factors of acute liver failure using Cox regression model’; 10–12 November 2008.
- Dr Guresh Kumar presented two papers in the 28th Annual convention of Indian association for cancer research and International Symposium on Emerging Challenges and approaches in cancer biology; 21–24 February, 2009. He attended a workshop on ‘Data Management of large studies’, Accra, Ghana during; 19–24 May 2008.
- M. Kalaivani presented a paper in the 26th ISMS conference during, Nainital; 7–9 November 2008, India
- Kulwant Singh Kapoor presented two papers in the Annual Conference of IASP, Institute for Social and Economical Changes, Bangalore; 17-19 October 2008 and Fifth National Conference on ‘Science and technology’; Kathmandu, Nepal; 10–12 November 2008.

RESEARCH

Funded projects

Ongoing

1. Newborn screening for congenital hypothyroidism and congenital adrenal hyperplasia: A multi centric study Data Coordinating Centre. R.M. Pandey. (Funded by ICMR. for three years (with Dept of Pediatrics) Funds: Rs 9 lakh .
2. Comparison of multivariate statistical methods of classification: Logistic Regression, classification and Regression Tree, and artificial neural network R.M. Pandey (SRF). Fundedby ICMR for one year. Funds:one SRF)
3. A study on primary, secondary and tertiary delays for prevention and treatment to breast, oral and esophagus cancer patients (S.N. Dwivedi. Funded by ICMR for 3years (2007–2010). Funds: One SRF.
4. A multicentric randomized controlled trial of Adefovir, Adefovir+ Lamivudine and combination of Adefovir and Glycyrrhizin in HBV-related decompensated Cirrhosis. Data Coordinating Centre under Dr V. Sreenivas (with Gastroenterology). Funded by ICMR, for 3 years (2007–2010). Funds: Rs 8.25 lakh.

Completed

Development of appropriate prevention and intervention strategies for non-communicable nutritional related disorders among women in post reproductive period: A multi-site study. R.M. Pandey. Funded by the DST, Ministry of Science and Technology for 3 years. Funds: Rs 21.24 lakh.

Departmental Projects

Ongoing

1. Comparison of multivariate statistical methods of classification: Logistic regression, classification and regression tree, and artificial neural network (with Medicine)
2. A Biostatistical Study on Pattern of Referral and Timing of Treatment of Cancer Patients with Special Reference to Breast Cancer (with IRCH)
3. A comparison of Cox proportional Hazards model, parametric proportional hazards model and accelerated failure time models in the survival of acute liver failure (with Gastroenterology).

Collaborative Projects

Faculty Members and the Scientists are involved as a co-investigator in large number of research projects in most of the departments in the Institute. (with ??Au: Name of the Department]

PUBLICATIONS

1. Vikram NK, Misra A, Pandey RM, Luthra K, Bhatt SP. Distribution and cut-off points of fasting insulin in Asian Indian adolescents and their association with metabolic syndrome. *J Assoc Physicians India* 2008;**56**:949–54.
2. Sinha S, Kumar V, Jagannathan NR, Pandey RM. Proton magnetic resonance spectroscopy of brain to study the cerebral metabolic abnormalities in COPD patients: a case control study in north India. *Indian J Chest Dis Allied Sci* 2009;**51**:5–9.
3. Sarda P, Sharma SK, Mohan A, Makharia G, Jayaswal A, Pandey RM, *et al.* Role of acute viral hepatitis as a confounding factor in antituberculosis treatment induced hepatotoxicity. *Indian J Med Res* 2009;**129**:64–7.
4. Chadha DS, Gupta N, Goel K, Pandey RM, Kondal D, Ganjoo RK, *et al.* Impact of obesity on the left ventricular functions and morphology of healthy Asian Indians. *Metab Syndr Relat Disord* **2009 Mar 14**.
5. Mohan A, Singh P, Kumar S, Mohan C, Pathak AK, Pandey RM, *et al.* Effect of change in symptoms, respiratory status, nutritional profile and quality of life on response to treatment for advanced non-small cell lung cancer. *Asian Pac J Cancer Prev* 2008; **9**:557–62.
6. Tiewsoh K, Lodha R, Pandey RM, Broor S, Kalaivani M, Kabra SK. Factors determining the outcome of children hospitalized with severe pneumonia. *BMC Pediatr* **2009;9**:15.
7. Agarwal SK, Misra A, Aggarwal P, Bardia A, Goel R, Vikram NK, Wasir JS, Hussain N, Ramachandran K, Pandey RM. Waist Circumference Measurement by Site, Posture, Respiratory Phase, and Meal Time: Implications for Methodology. *Obesity (Silver Spring)* **2009 Jan 22**.
8. Agarwal SK, Dash SC, Gupta S, Pandey RM. Hepatitis C virus infection in haemodialysis: The 'no-isolation' policy should not be generalized. *Nephron Clin Pract* 2009;**111**:c133–c140.
9. Mahajan V, Handa R, Kumar U, Sharma S, Gulati G, Pandey RM, Lakshmy R. Assessment of atherosclerosis by carotid intimomedial thickness in patients with rheumatoid arthritis. *J Assoc Physicians India* 2008;**56**:587–90.

10. Kohli U, Arora S, Kabra M, Ramakrishnan L, Gulati S, Pandey RM. Prevalence of MTHFR C677T polymorphism in north Indian mothers having babies with Trisomy- 21 Down syndrome. *Downs Syndr Res Pract* 2008;**12**:133–7.
11. Habibi S, Wig N, Agarwal S, Sharma SK, Lodha R, Pandey RM, *et al*. Epidemiology of nosocomial infections in medicine intensive care unit at a tertiary care hospital in northern India. *Trop Doct* 2008; **38**:233–5.
12. Bhushan B, Guleria R, Misra A, Pandey RM, Luthra K, Vikram NK. Obstructive sleep apnoea correlates with C-reactive protein in obese Asian Indians. *Nutr Metab Cardiovasc Dis* 2009;**19**:184–9.
13. Goel R, Misra A, Kondal D, Pandey RM, Vikram NK, Wasir JS, *et al*. Identification of insulin resistance in Asian Indian adolescents: classification and regression tree (CART) and logistic regression based classification rules. *Clin Endocrinol (Oxf)* 2009;**70**:717–24.
14. Wasir JS, Misra A, Vikram NK, Pandey RM, Gupta R. Comparison of definitions of the metabolic syndrome in adult Asian Indians. *J Assoc Physicians India* 2008;**56**:158–64.
15. Sinha S, Misra A, Rathi M, Kumar V, Pandey RM, Luthra K, *et al*. Proton magnetic resonance spectroscopy and biochemical investigation of type 2 diabetes mellitus in Asian Indians: observation of high muscle lipids and C-reactive protein levels. *Magn Reson Imaging* 2009;**27**:94–100.
16. Sharma R, Sinha S, Danishad KA, Vikram NK, Gupta A, Ahuja V, *et al*. Investigation of hepatic gluconeogenesis pathway in non-diabetic Asian Indians with non-alcoholic fatty liver disease using in vivo ((31)P) phosphorus magnetic resonance spectroscopy. *Atherosclerosis* 2009;**203**:291–7.
17. Pokharel PK, Pokharel P, Bhatta NK, Pandey RM, Erkki K. Asthma symptomatics school children of Sonapur. *Kathmandu Univ Med J (KUMJ)* 2007; **5**:484–7.
18. Ratan SK, Rattan KN, Pandey RM, Singhal S, Kharab S, Bala M, *et al*. Evaluation of the levels of folate, vitamin B12, homocysteine and fluoride in the parents and the affected neonates with neural tube defect and their matched controls. *Pediatr Surg Int* 2008;**24**:803–8.
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20. Agarwal S, Sethi V, Pandey RM, Kondal D. Human touch vs. axillary digital thermometry for detection of neonatal hypothermia at community level. *J Trop Pediatr* 2008;**54**:200–1.
21. Begum S, Dwivedi SN, Pandey A. On optimum numbers of controls under case control studies on unwanted pregnancies: An analytical appraisal. *Statistics in Transition* 2008;**9**:117–28.
22. Sharma P, Makharia GK, Ahuja V, Dwivedi SN, Deepak KK. Autonomic Dysfunctions in Patients with Inflammatory Bowel Disease in Clinical Remission. *Dig Dis Sci* 2009;**54**:853–61.
23. Pathak P, Kapil U, Dwivedi SN, Singh R. Serum zinc levels amongst pregnant women in a rural block of Haryana state, India. *Asia Pac J Clin Nutr* 2008;**17**: 276–9.
24. Kaur S, Sachdev HPS, Dwivedi SN, Lakshmy R, Kapil U. Prevalence of overweight and obesity amongst school children in Delhi, India. *Asia Pac J Clin Nutr* 2008;**17**:592–6.

25. Kulshreshtha B, Ganie MA, Praveen EP, Gupta N, Khurana ML, Seith A, *et al.* Insulin response to oral glucose in healthy, lean young women and patients with polycystic ovary syndrome. *Gynecol Endocrinol* 2008;**24**:637–643.
26. Dwivedi SN. Robust Statistics: Theory and Methods. *ISCB Bulletin* 2008;**45**:30.
27. Pathak P, Kapil U, Raghuvanshi RS, Singh V, Dwivedi SN, Singh R. Night blindness among pregnant women: A study in a rural block of Uttaranchal State, India. *Sight and Life* 2008;**1**:22–4.
28. Begum S, Dwivedi SN, Pandey A, Mittal S, Kumar S. Some epidemiological studies on Unwanted Pregnancies: Findings from NFHS-2. *Journal of Empirical Research in Social Sciences (JERSS)* 2008;**3**:10–18.
29. Dakshinamurthy KV, Chirravoori S, Tangirala M, Taduri G, Vishnubhatla S, Rapur R. Is there a chronic kidney disease epidemic? Profile of Chronic Kidney Disease in an Urban Renal Camp in Southern India. *Hong Kong J Nephrol* 2008;**10**:27–33.
30. Sahni M, Verma N, Narula D, Varghese RM, Sreenivas V, Puliye JM. Missing girls in India: infanticide, feticide and made-to-order pregnancies? Insights from hospital-based sex-ratio-at-birth over the last century. *PLoS ONE* 2008;**3**:e2224.
31. Vajpayee M, Kaushik S, Sreenivas V, Mojumdar K, Mendiratta S, Chauhan NK. Role of immune activation in CD4(+) T-cell depletion in HIV-1 infected Indian patients. *Eur J Clin Microbiol Infect Dis*, **2008**.
32. Vajpayee M, Mojumdar K, Raina M, Mishra S, Sreenivas V. HIV voluntary counselling and testing: An experience from India. *AIDS Care* **2008**;
33. Srivastava K, Sreenivas V, Das N. Role of Endothelial Nitric Oxide Synthase Gene (Intron 4a/b) Polymorphism in Coronary Artery Disease (Abstract). *Arteriosclerosis, Thrombosis and Vascular Biology*, **2008**
34. Jyotsna VP, Sahoo A, Sreenivas V, Deepak KK. Prevalence and pattern of cardiac autonomic dysfunction in newly detected type 2 diabetes mellitus. *Diabetes Res Clin Pract* 2009;**83**:83–8.
35. Chakrabarty A, Halstead R, Rangasami J, Gupta MA, Sahni M, V Sreenivas, *et al.* International Collaboration Validating SICK Score: A Non-invasive Severity-of-Illness Assessment. (Abstract) *Arch Dis Child* 2008: **93(Suppl I)**: A10-A12.
36. Goswami R, Ray D, Sharma R, Tomar N, Gupta R, Gupta N, *et al.* Presence of spondyloarthropathy and its clinical profile in patients with hypoparathyroidism. *Clin Endocrinol* 2008;**68**:258–63.
37. Chandra ST, Priya G, Khurana ML, Jyotsna VP, Sreenivas V, Dwivedi S, *et al.* Comparison of gliclazide with insulin as initial treatment modality in newly diagnosed type 2 diabetes. *Diabetes Technol Ther* 2008; **10**:363–8.
38. Ray D, Goswami R, Gupta N, Tomar N, Singh N, Sreenivas V. Predisposition to vitamin D deficiency osteomalacia and rickets in females is linked to their 25(OH)D and calcium intake rather than vitamin D receptor gene polymorphism. *Clin Endocrinol (Oxf)*, **2008**.
39. Makharia GK, Seith A, Sharma SK, Sinha A, Goswami P, Aggarwal A, *et al.* Structural and functional abnormalities in lungs in patients with achalasia. *Neurogastroenterol Motil* **2009**.

40. Varghese RM, Sreenivas V, Puliyel JM, Varughese S. Refractive status at birth: its relation to newborn physical parameters at birth and gestational age. *PLoS ONE* 2009; **4(2)**: e4469. Epub 2009 Feb 13.
41. H Madan K, Batra Y, Sreenivas V, Mizokami M, Tanaka Y, Chalamalasetty SB, *et al.* BV genotypes in India: do they influence disease severity? *Hepatol Res* 2009; **39**:157–63.
42. Goswami R, Marwaha RK, Gupta N, Tandon N, Sreenivas V, Tomar N, *et al.* Prevalence of vitamin D deficiency and its relationship with thyroid autoimmunity in Asian Indians: A community-based survey. *Br J Nutr* 2009; 1–5. [Epub ahead of print]
43. Mendiratta S, Vajpayee M, Malhotra U, Kaushik S, Dar L, Mojumdar K, *et al.* Characterization of Gag and Nef-specific ELISpot-based CTL responses in HIV-1 infected Indian individuals. *Med Microbiol Immunol* 2009;**198**:47–56.
44. Goswami R, Mondal AM, Tomar N, Ray D, Chattopadhyay P, Gupta N, Sreenivas V. Presence of 25(OH)D deficiency and its effect on vitamin D receptor mRNA expression. *Eur J Clin Nutr* 2009;**63**:446–9.
45. Reddy EV, Kadiravan T, Mishra HK, Sreenivas V, Handa KK, Sinha S, *et al.* Prevalence and risk factors of obstructive sleep apnea among middle-aged urban Indians: A community-based study. *Sleep Med* 2009.
46. Tiewsoh K, Lodha R, Pandey RM, Broor S, Kalaivani M, Kabra SK. Factors determining the outcome of children hospitalized with severe pneumonia. *BMC Pediatr* 2009;**9**:15.
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52. Benjamin J, Makharia GK, Kalaivani M, Joshi YK. Nutritional status of patients with Crohn's disease. *Indian J Gastroenterol* 2008;**27**:195–200.

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55. Chowdhury UK, Malik V, Yadav R, Seth S, Ramakrishnan L, Kalaivani M, *et al.* Myocardial injury in coronary artery bypass grafting: On-pump versus off-pump comparison by measuring high-sensitivity C-reactive protein, cardiac troponin I, heart-type fatty acid-binding protein, creatine kinase-MB, and myoglobin release. *J Thorac Cardiovasc Surg* 2008;**135**:1110–9.
56. Marwaha RK, Tandon N, Kanwar R, Ganie MA, Bhattacharya V, Reddy DH, *et al.* Evaluation of the role of ultrasonography in diagnosis of autoimmune thyroiditis in goitrous children. *Indian Pediatr* 2008;**45**:279–84.
57. Benjamin J, Makharia GK, Ahuja V, Kalaivani M, Joshi YK. Intestinal permeability and its association with the patient and disease characteristics in Crohn's disease. *World J Gastroenterol* 2008;**14**:1399–40.

Chapters in Book

Dwivedi SN, Dwivedi AK. Biostatistical methods for the cardiologists: Basic principles. *Cardiology Update* 2008 (Cardiological Society of India). V.K. Bahl 2008:19–32.

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Dr R.M. Pandey resumed his duties in the department in February 2009, after completing one year and ten months assignment with the International Clinical Epidemiology Network (INCLLEN) at their Global Head Quarter in New Delhi. Dr Pandey is the INCLLEN liaison person to develop joint academic and research activities with the International Epidemiological Association (IEA) under the INCLLEN-IEA MOU. Dr Pandey continues to be member of the several Data Safety Monitoring Board, Task Force, and Proposal/Project Review committees of the DBT, DST, INCLLEN and the ICMR; Member, Research committee, All India Institute of Medical Sciences; Member, Research Committee, National Institute of Health and Family Welfare; Member, National Nutritional Monitoring Bureau, National Institute of Nutrition, Hyderabad; Member, Scientific Advisory Committee, Centre of Entomological Research, Madurai; Member, Institutional Ethics Committee, Public Health Foundation of India; Member, Group to develop course curriculum for various course at all the five Institutes of Public Health; Member, Data Safety Monitoring Board of the multi country trial on neglected diseases in India, being conducted by the London School of Hygiene and Tropical Medicine; Examiner. Ph.D. thesis from Universities within and outside the country; Reviewer of the manuscripts submitted to all major medical journals in the country; Chairman, Scientific Committee, Annual Conference of the Indian Clinical Epidemiology Network, held in Nagpur;

Dr S.N. Dwivedi was included as Member of the Expert Group to discuss methods regarding evaluation of Programme effectiveness of Janani Suraksha Yojana (JSY) at National Institute of Medical Statistics, ICMR; Elected to serve the ad hoc Search Committee for the Editor of Biometric Bulletin of International Biometric Society; Member, Research Committee, B.P. Koirala Institute of Health

Sciences, Dharan, Nepal; involved as Reviewer for Research Projects of Mathematical Sciences Office, Department of Science and Technology; Member, Technical Advisory Committee, National Institute of Health and Family Welfare, Expert for Selection Committee at Lucknow University. Dr Dwivedi continued as Member, Scientific Advisory Committee, National Institute of Medical Statistics; External Expert Member, Board of Studies on Health Statistics, BHU, Varanasi; Member, ISMS Award Committee; Executive Council Member, International Biometric Society (Indian Region) for the period 2006–2008; Correspondent, Indian Region for the Biometric Bulletin of the International Biometric Society; Member, Screening/ Selection Committee, National Institute of Medical Statistics, Indian Council of Medical Research, All India Institute of Medical Sciences; Member, Editorial Board, Indian Journal of Chest Diseases & Allied Sciences; Editor, Demography India; Reviewer, Indian Journal of Medical Research; Reviewer, International Society for Clinical Biostatistics; Reviewer, Demography India; Member, Editorial Advisory Committee, Biometrics; Statistical Consultant, Indian Journal of Psychiatry; Reviewer, Journal of Royal Statistical Society, UK (Series A); External Examiner, Evaluation of Ph.D. thesis submitted at International Institute for Population Sciences, Mumbai; Member, Editorial Board regarding Technical Report on Long Term Clinical Studies on Health effects of Toxic Gas Leak from the Union Carbide Methyl Isocyanate Plant, Bhopal; Member, Task Force Group constituted by the ICMR to look into the current status of activities and provide directions to future research needs regarding toxic gas exposed people at Bhopal.

Dr V. Sreenivas was Examiner for a PhD thesis submitted to the Dibrugarh University, Dibrugarh; continued to be, Member, ICMR Expert Group on the seroprevalence study to determine the impact of Hepatitis B vaccination; Member Secretary, Data and Safety Monitoring Board (DSMB) for 3 research projects sponsored by the Department of Biotechnology, Government of India; Reviewer for the journals—*Indian Journal of Medical Research* and *Indian Journal of Paediatrics*; Chairman/ Member of the Screening/ Selection Committee, Indian Council of Medical Research, New Delhi; Advisor to the *Journal of Neonatology*, India; Statistical Consultant to the *Journal of Indian Association for Child and Adolescent Mental Health (JIACAM)*.

9.7 Biotechnology

Professor and Head

Y.D. Sharma

Professors

J.S. Tyagi

H.K. Prasad

Additional Professor

S.N. Das

Assistant Professor

Anushree Gupta

EDUCATION

Postgraduate

The department continues with its 2 years postgraduate programme in Medical Biotechnology leading to MBiotech degree. The teaching programme includes theory and practical classes, seminar presentations and research project (dissertation) on frontier area of medical research. Students are given individual attention and hands on experience in practical classes. The infrastructural facilities were expanded with the acquisition of new computer softwares and hard-wares to make available computer to each student during bioinformatics practical exercise. Experts were invited from institutes such as JNU, IGIB, ICGEB, NII and NIIT besides AIIMS faculty to provide insight to the students in their respective areas of research and developments related to biotechnology, bioinformatics, molecular medicine, genomics, proteomics, etc.

The department continues conducting PhD programme in the area of Medical Biotechnology.

Short-term training

The faculty of the department provided summer training to students from the University of Delhi, Maharshi Dayanand University, Rohtak, Kurukshetra University, Kurukshetra and institutions such as Career Institute of Technology and Management, Faridabad, Amity Institute of Technology, Noida, Manipal Institute of Technology, Manipal, Institute of Applied Medicine & Research, Ghaziabad. Students and faculty from Department of Biotechnology, Nehru Arts and Science College, Coimbatore visited the department during, July 2008.

Long-term Training

Faculty of the department provided long-term training to five scientists from various institutions. Four of them under WHO in-country training programme (from Safdarjung Hospital, Ram Manohar Lohia Hospital, Lady Hardinge Medical College, New Delhi and ICMR, Kolkata) and one as DBT Post Doctoral Fellow.

National and International Conferences

Lectures delivered

Dr Y.D. Sharma

- ‘Unusual drug resistance pattern in *P.falciparum* isolates from Andaman & Nicobar after tsunami’, International Symposium on Tribal Health, RMRC, Jabalpur (M.P.); February 2009.
- Chaired a session in Indo-US Conference on Development of Vaccines against vivax malaria, New Delhi; 17–18 June 2008.
- Chaired a session on anti-malarial drug resistance in International Symposium on Tribal Health, RMRC, Jabalpur (MP); February 2009.
- Chaired a session on malaria vaccine in International Symposium on Tribal Health, RMRC, Jabalpur (MP); February 2009.

Dr J.S. Tyagi

- ‘Laboratory diagnosis of tuberculosis: Challenges and solutions’, Seminar on ‘Recent trends in Molecular Biology and Immunology for Diagnosis and Prevention of Human Diseases’, Boston College for Professional Studies, Gwalior; 12–14 June 2008.
- Invited talk at Open Source Drug Discovery meeting, CSIR Science Centre, New Delhi. Organized by CSIR, presided by DG CSIR.
- ‘Improved laboratory diagnosis of TB’, Symposium on ‘Medical biotechnology’, Institute of Home Economics, University of Delhi; 25 September 2008.

Dr. H.K. Prasad

- ‘Diverse functions of HupB (Rv2986C) histone like protein of Mycobacterium tuberculosis’, 35th Annual Meeting of Indian Immunology Society, Bhubaneswar, Orissa; 12-14 December 2008.
- ‘Tuberculosis – Pathogen Host Interaction’, National Symposium on ‘Recent Advances in Immunology’, Department of Biochemistry, Deshbandhu College, University of Delhi, New Delhi; 30 January, 2009.
- ‘Modulation of Interferon gamma receptor 1 by live M. tuberculosis’, 2nd Annual Conference of the Cytometry Society – India and ‘Our experience in the use of flowcytometry for research in immunology of human tuberculosis’, 10th Indo US Flow Cytometry Workshop, Institute of Life Sciences, Bhubaneswar, Orissa; 14-17 February, 2009.
- ‘Trends in TB Research’, Conference on ‘Biogenesis-II (Future Challenges and Opportunities)’, IILM College of Engineering and Technology, Greater Noida, Gautam Budh Nagar (UP); 27-28 February 2009.
- ‘Variation in dendritic cell subsets and IL-12 independent production of IFN-g in pulmonary tuberculosis’, Annual meeting of the Molecular Immunology Forum-2009, ACTREC, Tata

Memorial Centre, Kharghar, Navi Mumbai held at Kashid Beach Resort, Alibaug, Maharashtra; 7–9 March 2009.

Dr S. N. Das

- ‘COX-2 and Oral Cancer: A novel strategy for estimation in serum and anti-tumour activity of its inhibitory peptides on tumour cells’, UICC World Cancer Congress, Geneva, Switzerland; 27 – 31 August 2008.
- ‘A biosensor-based technique to assay circulating COX-2 and anti tumour activity of its inhibitory peptides in Oral Cancer’, National Conference on Genomics, Proteomics and Systems Biology Indian Institute of Sciences, Bangalore; October 2008.
- TNF, TNFR2 and NF-kappa B Signaling in Oral Squamous Cell Carcinoma, 35th IISM Conference, Institute of Life Sciences, Bhubaneswar; 12 – 14 December, 2008.
- ‘Genetic polymorphism in COX-2 gene in Oral Cancer Patients’, International Symposium on “Novel Strategies for Targeted Prevention and Treatment of Cancer, School of Life Sciences, JNU, New Delhi; 19 – 20 October 2008.
- Chaired a session in symposium on Ovarian Cancer, All India Institute of Medical Sciences, New Delhi; 27–28 March 2009.

National and International Conferences

- Choudhary V, Lumb V, Vinayak S, Das MK, Dev V, Singh N, *et al.* Extensive genetic diversity in the *Plasmodium falciparum* Na⁺/H⁺ Exchanger (pfnhe-1) gene implicated in quinine resistance and its flanking microsatellites at International Symposium on Tribal Health, RMRC, Jabalpur; February 2009.
- Bora H, Zeeshan M, Alam MS, Tyagi RK, Garg S, Singh N, *et al.* Erythrocyte binding activity and physico-chemical characterization of a novel 33.5 kDa Tryptophan rich protein of *Plasmodium vivax* at International Symposium on Tribal Health at RMRC, Jabalpur; February 2009.
- Chauhan S, Tyagi JS. Interaction of DevR with multiple binding sites synergistically activates divergent transcription of *narK2-Rv1738* genes in *Mycobacterium tuberculosis* at International TB Symposium 2008, New Delhi ICGEB; 1–3 December 2008.
- Kaur K, Taneja NK, Dhingra S, Tyagi JS. DevS binding peptides inhibit signaling and hypoxic survival of *M. tuberculosis* at International TB Symposium 2008, New Delhi ICGEB; December 2008.
- Dhingra S, Kaur K, Taneja NK, Tyagi JS. DevR binding peptide inhibits transcription and survival of non-replicating (dormant) *Mycobacterium tuberculosis* at International TB Symposium, New Delhi ICGEB; December 2008.
- Kaur K, Taneja NK, Dhingra S, Tyagi JS. DevS binding peptides inhibit signaling and hypoxic survival of *M. tuberculosis* at International TB Symposium 2008 at Second Indian Peptide Symposium; February 2009.

- Dhingra S, Kaur K, Taneja NK, Tyagi JS. Peptide based inhibition of DevR function inhibits viability of *Mycobacterium tuberculosis* under hypoxic conditions, Second Indian Peptide Symposium; February 2009.

RESEARCH

Funded Projects

Ongoing

1. Malaria vaccine related field studies in Jabalpur. Y.D. Sharma. Funded by ICMR for 5 years (2005–2009). Funds: Rs 72 lakh.
2. Postgraduate training programme in Biotechnology with special application to Biomedicine. Y.D. Sharma. Funded by DBT for 10 years (1998–2008). Funds: Rs 22.58 lakh per year.
3. Biotechnology Informatics System. Y.D. Sharma. Funded by DBT for 5 years (2008-2013). Funds: Rs 75 lakh.
4. Reconstructing cellular networks: Two-component regulatory systems. J.S. Tyagi. Funded by DBT for 3 years (2007–2010). Funds: Rs 363 lakh.
5. Development of vaccine for control of bovine tuberculosis. H.K. Prasad. Funded by DBT for 3 years (2007–2010). Funds: Rs 22.04 lakh.
6. Functional Characterization of Rv2986c, a DNA Binding Protein of *M. tuberculosis*. H.K. Prasad. Funded by DST for 3 years (2007–2010). Funds: Rs 23.0 lakh.
7. Development and characterization of autologous NKT cell-based dendritic cell vaccine for oral squamous cell carcinoma. Satya N. Das. Funded by DBT for 3 years. Funds: Rs 23.0 lakh.
8. Studies on FAS (CD95) and FAS L (CD95L) gene polymorphism and their association with tobacco related oral carcinomas. Satya N. Das. Funded by ICMR for 3 years. Funds: Rs 6.0 lakh.
9. Polymorphisms in genes of the Endothelin system in patients undergoing coronary artery bypass grafting surgery and having a concomitant diagnosis for diabetes. Dr. Anushree Gupta. Funded by ICMR for 3 years (1.1.2008 to 31.12.2010). Funds: Rs 11 lakh (for 1st year).

Completed

1. Evaluation of *devR* mutant of *Mycobacterium tuberculosis* in animal model of tuberculosis and in cultured bacilli: Virulence and gene expression analysis. J.S. Tyagi. Funded by DBT for 3 years (2005–2008). Funds: Rs 50.37 lakh.
2. High throughput PCR assays for diagnosing tuberculosis caused by *Mycobacterium tuberculosis* and *M. bovis* using molecular beacons. J.S. Tyagi. Funded by DBT Indo–US VAP for 3 years (2006–2009). Funds: Rs 41.69 lakh.

3. Study of transmission of livestock derived pathogenic mycobacteria and its prevalence among humans (Zoonotic Tuberculosis). H.K. Prasad. Funded by DBT for 3 years (2005–2008) extended upto 31st March 2009. Funds: Rs 33.192 lakh.
4. Modulation of Endothelin-1 in coronary artery bypass grafting patients imparted with pre-operative relaxation therapy. Anushree Gupta. Funded by AIIMS for 3 years (2005–2008). Funds: Rs 2.32 lakh.

Departmental Projects

Ongoing

1. Innate immunity to *Mycobacterium tuberculosis*.
2. Humans immune response to *Mycobacterium tuberculosis*
3. PCR Based diagnosis of tuberculosis in humans and cattle
4. Studies on mTOR Signaling in Oral Cancer
5. Studies on PI 3 Kinase in Oral Cancer
6. TH-2 Cytokine (IL-4, IL-10) gene polymorphism in Oral Cancer
7. Genetic polymorphism in *P.falciparum* for drug resistance markers

Completed

1. Studies on Beclin 1 in Oral Cancer
2. Genetic polymorphism in COX-2 genes in Oral Cancer patients
3. Genetic polymorphisms in COX-2 genes in Breast Cancer patients
4. Studies to evaluate neo-adjuvant chemotherapy followed by post operative chemotherapy and assess the expression of multi-drug resistance gene and cell cycle specificity in locally advanced gastric and gastro-oesophageal function adenocarcinoma

Collaborative Projects

- | | |
|---------------|---|
| Project No. : | Collaboration with |
| 1. | (LRS Institute, New Delhi and M/s Arbros. Pharmaceuticals Pvt. Ltd.) |
| 2. | (Departments of Microbiology and Physical Medicine and Rehabilitation, AIIMS) |
| 3. | (National TB Institute Bangalore and Tuberculosis Research Center, Chennai) |
| 4. | (NCCS, Pune) |
| 5. | (Department of Pediatrics, AIIMS) |
| 6. | Gastroentology and Human Nutrition, AIIMS) |

Ongoing

1. Computational design and development of inhibitors for the treatment of tuberculosis. J.S. Tyagi. Funded by DBT SBIRI (2008–2010). Funds: Rs 21.98 lakh.

2. Comprehensive proteomics profiling of CSF proteins from patients of different meningitis infections for biomarker discovery. J.S. Tyagi. Funded by DBT (2008–2011). Funds: Rs 64.31 lakh.
3. Evaluation of *devR* mutant of *Mycobacterium tuberculosis* in animal model of tuberculosis and in cultured bacilli: Virulence and gene expression analysis. J.S. Tyagi. Funded by DBT (2005–2008). Funds: Rs 50.37 lakh.
4. Molecular switch in Th1-Th2 response by SMAR1: Its implications in *Mycobacterium tuberculosis* infection. H. K. Prasad. Funded by DBT (2007–2010). Funds: Rs 19.50 lakh.
5. Effects of administering 10 mg of zinc orally to young infants aged 7 days and up to 4 months with possible serious bacterial infection on survival and function of peripheral blood mononuclear cells. H. K. Prasad. Funded by DBT (2007–2010). Funds: Rs 40.34 lakh.
6. Detection of Mycobacterial pathogens in patients with Crohn's disease. H.K. Prasad. Funded by DBT. (2007–2010). Funds: Rs 35.26 lakh.
7. Imbalance between Endothelin-1 and plasma nitric oxide products influence the outcome in children suffering from severe pulmonary hypertension due to congenital heart disease (with Cardiac Anaesthesia, CTC), AIIMS.

Completed

1. High throughput PCR assays for diagnosing tuberculosis caused by *Mycobacterium tuberculosis* and *Mycobacterium bovis* using molecular beacons (with Public Health Research Institute, Newark) New Jersey, USA.

PUBLICATIONS

1. Ahmed A, Sharma YD. Ribozyme cleavage of *Plasmodium falciparum* gyrase A gene transcript affects the parasite growth. *Parasitol Res* 2008;**103**:751–63.
2. Alam MT, Bora H, Das MK, Sharma YD. The type and mysorensis forms of the *Anopheles stephensi* (Diptera: Culicidae) in India exhibit identical ribosomal DNA ITS2 and domain-3 sequences. *Parasitol Res* 2008;**103**:75–80.
3. Alam MT, Bora H, Mitra P, Singh N, Sharma YD. Cellular immune responses to recombinant *Plasmodium vivax* tryptophan-rich antigen (PvTRAg) among individuals exposed to vivax malaria. *Parasite Immunol* 2008; **30**:379–83.
4. Alam MT, Bora H, Singh N, Sharma YD. High immunogenicity and erythrocyte-binding activity in the tryptophan-rich domain (TRD) of the 74-kDa *Plasmodium vivax* alanine-tryptophan-rich antigen (PvATRAg74). *Vaccine* 2008;**26**:3787–94.
5. Baniasadi V, Das SN. No evidence for association of *PTPN22* R620W functional variant C1858T with type 1 diabetes in Asian Indians. *J Cell Mol Med* 2008;**12**:1061–2.
6. Chauhan S, Tyagi JS. Cooperative binding of phosphorylated DevR to upstream sites is necessary and sufficient for activation of the *Rv3134c-devRS* operon in *Mycobacterium tuberculosis*: Implication in the induction of DevR target genes. *J Bacteriol* 2008;**190**:4301–12.

7. Chauhan S, Tyagi JS. Interaction of DevR with multiple binding sites synergistically activates divergent transcription of *narK2-Rv1738* genes in *Mycobacterium tuberculosis*. *J Bacteriol* 2008;**190**:5394–403.
8. Choudhary V, Sharma YD. Extensive heterozygosity in flanking microsatellites of *Plasmodium falciparum* Na(+)/H(+) exchanger (pfnhe-1) gene among Indian isolates. *Acta Trop* 2009;**109**: 241–4.
9. Garg S, Chauhan SS, Singh N, Sharma YD. Immunological responses to a 39.8kDa *Plasmodium vivax* tryptophan-rich antigen (PvTRAg39.8) among humans. *Microbes Infect* 2008;**10**:1097–105.
10. Gupta R, Kapuria V, Das SN. Single Nucleotide Polymorphisms in TNF- α , TNFR2 genes and TNF- α production in Asian Indians. *Immunol Investig* 2009;**38**: 1–15.
11. Haldar S, Sharma N, Gupta VK, Tyagi JS. Efficient diagnosis of tuberculous meningitis by detection of *Mycobacterium tuberculosis* DNA in cerebrospinal fluid filtrates using PCR. *J Med Microbiol* 2009;**58**:616–24.
12. Kumar P, Shah NP, Singhal A, Chauhan DS, Katoch VM, Mittal S, *et al.* Association of tuberculous endometritis with infertility and other gynecological complaints of women in India. *J Clin Microbiol* 2008; **46**: 4068-70.
13. Kumar P, Srivatsava MVP, Singh S, Prasad HK. Filtration of CSF improves isolation of *Mycobacteria*. *J Clin Microbiol* 2008;**46**:2824–5.
14. Malhotra V, Tyagi JS, Clark-Curtiss J.E. DevR-mediated adaptive response in *Mycobacterium tuberculosis* H37Ra: Links to asparagine metabolism. *Tuberculosis (Edinb)* 2009;**89**:169–74.
15. Mehlotra RK, Mattera G, Bockarie MJ, Maguire JD, Baird JK, Sharma YD, *et al.* Discordant patterns of genetic variation at two chloroquine-resistant loci in worldwide populations of malaria parasite *Plasmodium falciparum*. *Antimicrob Agents Chemother* 2008;**52**:2212–22.
16. Siddiqui AA, Bora H, Singh N, Dash AP, Sharma YD. Expression, purification, and characterization of the immunological response to a 40-kilodalton *Plasmodium vivax* tryptophan-rich antigen. *Infect Immun* 2008;**76**:2576–86.
17. Somvanshi RK, Subashini R, Dhanasekaran V, Arulprakash G, Das SN, Dey S. Synthesis, Crystal Structure Cytotoxic and Apoptotic activity of 2, 4-Dichloro-6-Methyl Quinoline on human oral carcinoma cell line. *J Chem Crystallogr* 2008;**38**:381–6.
18. Srivastava K, Chauhan DS, Gupta P, Singh HB, Sharma VD, Yadav VS, *et al.* Isolation of *Mycobacterium bovis* and *M. tuberculosis* from cattle of some farms in north India – possible relevance in human health. *Indian J Med Res* 2008;**128**:26–31.
19. Thakur A, Alam MT, Bora H, Kaur P, Sharma YD. *Plasmodium vivax*: Sequence polymorphism and effect of natural selection at apical membrane antigen 1 (PvAMA1) among Indian population. *Gene* 2008;**419**:35–42.

20. Thakur A, Alam MT, Sharma YD. Genetic diversity in the C-terminal 42 kDa region of merozoite surface protein-1 of *Plasmodium vivax* (PvMSP-1(42)) among Indian isolates. *Acta Trop* 2008;**108**:58–63.

PATIENT CARE

Patents

International Application # PCT/N03/00302 dated 9.9.2003 on ‘The Characterization of *HupB* Gene Encoding Histone like Protein of *Mycobacterium Tuberculosis*’” filed in the name of DBT and AIIMS.

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|-------------|---------------------------|
| 1. European | 03813287.4-2402-IN0300302 |
| 2. US | 10/540,086-IN0300302 |
| 3. Chinese | 03825875.7-IN0300302 |

Patents Awarded

- | | |
|------------------|----------------------|
| 1. South African | 2005/05007-IN0300302 |
| 2. Indian | 1274/DEL/2002 |

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Professor Y.D. Sharma has been elected as a Fellow of all the three National Science Academies; continued to be Member, Sectional Committee of Indian National Science Academy (INSA); Member, Project Advisory Committee of CSIR for Biotechnology; Member, DBT Task Force Sub-committee on Human Resources Development; Member of Course Curriculum Committee for PG programme in Biotechnology of DBT; Research Advisory Committee, Parasite Biology, NIMR, Delhi; Member, Board of Research Studies of NICD-IP University; Academic Committee, Guru Nanak Dev University, Amritsar; Member, Board of Studies in Biotechnology, Jawaharlal Nehru University, New Delhi; Interdisciplinary Biotechnology Unit, Aligarh Muslim University, Aligarh; Expert Member, Board of PG Studies in Biotechnology, Vanasthali Vidyapeeth; Expert Member, Teaching Advisory Committee of Devi Ahilya University, Indore; Expert Member, Teaching Advisory Committee of Banaras Hindu University, Varanasi; Member, Editorial Board of ‘*J Vect Borne Dis*’; Member, International Reviewer Panel of ‘Medical Science Monitor’; Member, Editorial Board of ‘Biotechnology’; Member, NML Book Selection Committee; Member, Research Committees of AIIMS; Chairman, Patent Cell of AIIMS; Chairman, Central Recruitment Committee of Research staff in projects in AIIMS; Member, Selection Committee for Scientists for ICMR; Faculty positions of GNDU, Amritsar; Expert, Review Committee of NII.

Dr J.S. Tyagi was awarded the Tata Innovation Fellowship by Department of Biotechnology, Government of India; Member, Scientific Advisory Committee, Tuberculosis Research Centre, Chennai; RAP/SAC, National Institute of Immunology, New Delhi; NBRC MSc. Neuroscience Coordination Committee; Masters in Biotechnology Curriculum Development Committee of BCIL; AIIMS Patent Committee and Chairperson of AIIMS Institutional Biosafety Committee for Recombinant DNA Research.

Dr H.K. Prasad is a Member, Guha Research Conference (GRC); Member, IAEC Nominee of Committee for the Purpose of Control and Supervision of Experiments of Animals (CPCSEA); Member, Expert Group of the Technical Committee of Central JALMA Institute for Leprosy and Other Mycobacterial Diseases, Agra; Institute of Life Sciences, Bhubaneswar; Expert Member, Selection Committee of the National Institute of Immunology, ICMR, DBT, ICGEB, SGPGIMS, Biotech Consortium India Limited, Central Drug Research Institute (CDRI), National Centre for Cell Science (NCCS); Member, Medical Biotechnology Sectional Committee, MHD-20, Bureau of Indian Standards; Member, Sub-Committee for the construction of Molecular Biology Centre at AIIMS; Member, Specification Committee for the purchase of LSR II Flowcytometer, Department of Microbiology, AIIMS; Member, National Advisory Committee and Invited Speaker, 2nd Annual Conference of Cytometry Society – India, Institute of Life Sciences, Bhubaneswar, Orissa.

Dr S.N. Das continued as Fellow, International Academy of Biological Therapy; Member, National Academy of Medical Sciences, India; Life Member, Indian Immunology Society; Member, American Association for Cancer Research, USA; Member, DKFZ Alumni Association, Heidelberg, Germany; Life Member, The Cytometry Society, India; Member, Task Force Group on Cancer Cervix, DBT, Government of India; Member, Terry Fox Run Grant Committee on Cancer Research; Member, Technical Committee, Institute of Pathology (ICMR) New Delhi; Member, Institutional Committee for recombinant DNA research, AIIMS; Member, Negotiation Committee, AIIMS, Member, Selection Committee for posts' - under sponsored projects, AIIMS; Member, Selection Committee for PGT in Biotechnology, Kendriya Vidyalaya Sangathan, New Delhi; Member, Editorial Board, Open Journal of Toxicology; Member, Editorial Board, International Journal of Osteoporosis and Metabolic Disorders; Referee, International Journal of Immunogenetics; Referee, Cancer Immunology and Immunotherapy; Referee, Oral Oncology; Referee, Cancer Letters; Referee, International Journal of Medicine and Medical Sciences; Referee, Journal of Cellular and Molecular Medicine.

OTHER ACTIVITIES

Bioinformatics Centre

The department has a Bioinformatics resource centre which provides database services, bibliographical search facility, DNA and protein sequence search and retrieval, e-mail, Internet services, training and assistance to students in graphics, statistics and data presentation. This facility is being widely used by students and faculty of this as well as neighbouring institutes. A 512 kbps leased line for internet taken from VSNL is also functional in the department.

Liquid Nitrogen Plant

The department's liquid nitrogen plant supplied a total of 2947 litres of liquid nitrogen to users at AIIMS on request.

9.8 Centre for Community Medicine

Professor & Head

C.S. Pandav

Professors

Bir Singh

Shashi Kant

Sanjeev K. Gupta

Additional Professors

Kiran Goswami

Associate Professor

K. Anand

Assistant Professors

Puneet Misra
Y.S. Kusuma Kumari

Sanjay K. Rai

Nongkynrih Baridalyne

EDUCATION

The education programmes for undergraduates, postgraduates, BSc nursing and Post-certificate Nursing students remained unchanged.

Undergraduate

Rural posting: A major revamp of undergraduate teaching was carried out. The duration of the programme remained the same. Undergraduates undergo a residential posting for five weeks in Semester VII. A new activity called Orienting Undergraduates to Community Health (OUCH) was started. The other activities were regrouped into Health System, Epidemiology and Clinical sessions. The schedule was made more rational. Regular assessment has been introduced. Newer techniques such as qualitative research method, case studies, etc. have also been introduced.

Urban posting: Fourth and fifth semester students are posted in urban area for five weeks as part of their teaching programme,

- A role play on High Risk Pregnancy, rabies, alcoholism and First-aid was performed by 5th semester students under Family Health Advisory Service at Dr Ambedkar Nagar. Participant :300.
- 64 Health Talks on different topics were organized and supervised at the community level.
- 50 families with chronic problems were identified and allotted to undergraduates for Clinical Psycho Social Case Review (CPSCR) and supervised for various intervention and follow-up.
- Four research projects were undertaken by undergraduates during their field posting.

Internship

The programme remained unchanged. Interns are posted for six weeks in either Dayalpur or Chhainsa primary health centre and for 6 weeks at Ballabgarh. It is a residential posting. Activities in both areas were the same.

Postgraduate

Postgraduates in Community Medicine were posted in rural areas for 15 months. This gives them adequate time to gain the necessary experience both at referral hospital and at primary health centres. They are encouraged to take active part in decision making. Their teaching in Ballabgarh has also been revised with a higher focus on learning practical aspects of running, PHCs, addressing public health issues, working with district level officials, etc. A system of regular assessment has also been introduced.

Fellows

Ms Purva Dwivedi and Mr Ravinder Bisla joined as INDEPTH fellows at Ballabgarh to support our demographic and data management activities.

Continuing Medical Education

Conferences

- Dr Osmon Sankoh delivered 19th Guest Lecture on ‘Cluster detection method—an application to data from health and demographic surveillance sites (HDSS)’, INDEPTH, Nursing LT; 24 July 2008.
- Professor R.M. Mutatkar delivered 20th Guest Lecture on ‘Ethical issues in health research’ Maharashtra Association of Anthropological Sciences (MAAS), LT of College of Nursing, Pune; 11 September 2008.
- Dr Sanjeev Kumar delivered 21st Guest Lecture on ‘Public health—present and future’, at CCM, UNICEF, Nairobi, Kenya; 1 January 2009..
- Two CMEs for Qualified Medical Private Practitioners was held on ‘Influenza and on safe injection practices’.
- A Public Lecture on ‘HIV/AIDS’, was organized for the BSF Jawans & Officers, BSF Signal Training Centre, Delhi; 27 March 2009.
- Training Sessions on ‘Safe injection practices’ were held for Nursing students (three), Waste handlers (three), Registered Medical Practitioners (fourteen).
- Two trainings of ASHAs were carried out. The first one was on 22 September 2008 and focused on ‘Neonatal and child health issues’. The second one held on 19 December 2008 was on ‘Non-communicable diseases and refresher course on neonatal health’.
- All the health workers were trained in management of non-communicable diseases through a protocol developed by the faculty.
- Training of Health workers and Anganwadi workers were carried out on nutrition related disorders and balanced diet.
- Female volunteers groups were trained on diet and nutrition.

Lectures delivered

Dr Bir Singh

- ‘Role of community health workers in substance use’, NDDTC (AIIMS), Ghaziabad; 14 April 2008.
- Key note address on ‘Technical aspects of PPTCT (HIV/AIDS)’, UNICEF meeting, Mahabalipuram, Tamil Nadu; 11 May 2008.
- Invited Lecture in the symposium ‘Social psychiatry and clinical practice’, AIIMS; 28 November 2009.
- ‘HIV—Prevention of parent to child transmission, for doctors, Nurses, and Counsellors in a Training Programme, Delhi State AIDS Control Society, AIIMS; 13 February 2009.
- ‘HIV/AIDS’ for BSF *Jawans* and Officers, BSF Signal Training Centre, Delhi; 27 March 2009.

Dr Shashi Kant

- 1st Annual Clinical and Epidemiological Research Methods and Leadership Training workshop for UG and PG medical students, AIIMS, New Delhi.
- Orientation workshop organized by Academic Section of AIIMS for new postgraduate students.

Dr Anil Goswami

- ‘HIV/AIDS’ in Sawan Public School, Chhattar Pur attended by students from 32 Bhartiya Vidya Bhawan Schools; 17 May 2008.
- ‘World TB Day’ and ‘Women Health’, Bhoomiheen Camp, Govind Puri, Kalka Ji (a field practice area of Laxman Public School) [with Ms. Mercy John (115 Participants)]; 23 March 2009.

RESEARCH

Funded Projects

Ongoing

1. Regional Research Centre for NCD Surveillance Under The Integrated Disease Surveillance Project. K Anand. World Bank/ICMR funded project (2008–2010)
2. Development of a model for strengthening of existing health system to address non communicable diseases in India. K. Anand. Funded by ICMR (2007–2009)
3. Prevalence of coronary heart disease and its risk factors in residents of urban and rural areas of NCR—a repeat survey. K. Anand. Funded by ICMR (2009–2010)
4. ‘Model injection centre’, Rai K. Sanjay, Pandav CS, Kant S, and Misra P. Funded by INCLN
5. Determinants of under-nutrition in children and assessment of management at different levels of health care by IPEN, INCLN

6. Evaluation of Janani Suraksha Yojana (JSY) in Jharkhand
7. Quality assurance visits to supervise field work in two of the six states, i.e. Uttar Pradesh and Delhi under 'HIV Sentinel Surveillance' (Central Region), NACO
8. A pilot study on menstrual hygiene and practices of rural women and their willingness to pay for low cost sanitary pads
9. 'Feasibility of introducing Dried Blood Spot (DBS) for HIV Sentinel Surveillance and assessment of quality of HIV testing' (Commissioned by World Health Organization, Country Office, New Delhi, NACO, Ministry of Health and Family Welfare, Government of India)
10. Pilot deployment of yele–ophthalmology system using '*Sehat saathi* portable rural telemedicine software'.
11. Mukhya Mantri Janani Swasthya Abhiyan (MMJSSA)–Janani Surakhsha Yojana (JSY) in Jharkhand. Funded by INCLIN.
12. Haemoglobin color scale in field and Laboratory by WHO
13. Prevalence of tuberculosis in Faridabad District of Haryana. Funded by Ministry of Health and Family Welfare, Government of India.

Collaborative Projects

Ongoing

1. Direct and indirect protection by influenza vaccine given to children in India. Shobha Broor, K. Anand (2009–2011).
2. A pilot study to estimate the community prevalence of celiac disease. G. Makharia, K. Anand. Funded by ICMR (2008–2009).
3. Influenza disease burden in rural communities in India. Shobha Broor, K. Anand. (2009–2011).
4. To study the prevalence of rheumatic heart disease among children of 5–15 years age group in Ballabgarh block of Haryana using echocardiography with Doppler (a Pilot study). Anita Saxena. Funded by ICMR.
5. 'Acute respiratory viral infections in rural India'. Shobha Broor, C.S. Pandav *et al.* Funded by ICMR.

Departmental Projects

Completed

1. Development of a Rapid Assessment approach to estimate prevalence of non-communicable diseases and their risk factors.

Ongoing

1. A study of hygiene behavior and water treatment practices of the residents of the slums in North India in the context of an ongoing behavior change intervention
2. Evaluation of ASHA Scheme under NRHM in Faridabad District of Haryana

3. Implementing and monitoring healthy settings approach for prevention of Non-Communicable Diseases in Middle schools of rural Ballabhgarh (block), District Faridabad, Haryana, India
4. Validation of a short adult verbal Autopsy tools. K. Anand. Funded by Intramural Research Grant, AIIMS (2008–2009). Funds: Rs 1 lakh.
5. Evaluation of a traumatic restorative technique for dental caries in geriatric patients in a resettlement colony of Delhi (2008–2009).
6. Antenatal care: Utilization, perceptions and expectations of migrant women in Delhi—a mixed methods study. Y.S. Kusuma, S.K. Gupta, C.S. Pandav.
7. Prevalence of metabolic syndrome and its selected socio-behavioral determinants among females aged more than 20 years residing in a rural area of Haryana
8. Association of blindness and hearing impairment with mortality among the elderly in a rural area
9. Development of an integrated predictive model for evidence-based eye care. Department of Community Ophthalmology, Dr R.P. Centre for Ophthalmic Sciences, AIIMS.

PUBLICATIONS

1. Pandav CS, Somos-Krishnan A, Chakrabarty A, Karmarkar MG. Need for citizens group to monitor national iodine deficiency disorders control programme in India?. *Indian J Public Health* 2008;**52**:3–4.
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8. Kusuma YS, Gupta SK, Pandav CS. Does rural-to-urban migration explain elevated blood pressure? A study among recent- and settled-migrants in Delhi, India. *Current Science* 2008;**95**:1408–10.
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 11. Dar L, Pati SK, Patro AR, Deorari AK, Rai SK, Kant S, *et al.* Congenital cytomegalovirus infection in a highly sero-positive semi-urban population in India. *Pediatr Infect Dis J* 2008;**27**:841–3.
 12. Pandey A, Reddy DCS, Ghys PD, Thomas M, Sahu D, Bhattacharya M, *et al.* Improved estimate of India's HIV burden in 2006. *Indian J Med Res* 2009;**129**:50–8.
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Chapter in Books

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PATIENT CARE

This has been divided into five broad categories.

1. Comprehensive Rural Health Services (CRHS) Project, Ballabgarh
2. Urban Health Programme
3. National Service Scheme Unit, AIIMS
4. Sex and Marriage Counselling Clinic
5. AIDS Education and Training Cell

Other activities are described under:

1. Health Promotion and Health Communication unit, and

2. Social Services

CRHS Project, Ballabgarh

This has two components: (i) Referral Hospital, Ballabgarh; and (ii) Community Health Services.

Referral Hospital, Ballabgarh

Outpatients

The following outpatient departments are run:

- General OPD for adults
- Child Welfare Centre for children
- Ophthalmology (daily)
- ENT (twice a week)
- Dental (daily)
- Obstetrics & Gynaecology (daily)
- Rehabilitation (two days a week)
- Psychiatric (once a week)
- ANC Clinic (thrice a week)
- Paediatric Surgery OPD-cum- surgery (once a week)
- NCD clinic (once a week)

OPD load

New Patients	98,700
Old & New Patients	1,66,886
ANC Registration	5541
Immunizations	6415
NCD Clinic*	

*A total of 5380 patients attending the OPD were screened for risk factors related to NCDs. Counselling for behavior change was done for 1113 individuals.

Inpatients

The number of beds has remained unchanged at 50.

- Total number of admissions including hospital births 7009
- Number of hospital births 1595
- Bed occupancy rate 49.19%
- Average duration of stay 1.7 days

Distribution of inpatients by specialty

Specialty	Number
Medicine	1555
Surgery	217
Obstetrics Gynaecology	2313
Paediatrics	1036
Ophthalmology	293
Newborn	1595
Total	7009

Casualty

- Number of patients registered 18,899
- Number of medico-legal cases 3,125

Diagnostic tests performed

- Lab investigations (Including malaria slides) 95,149
- X-ray (total) 5,335
- Malaria slides 4,512
 - Malaria cases 25
 - P. Vivax* 25
 - P. Falciparum* Nil

Total number of surgical procedures performed sex wise

Male	651
Female	1,340
Total	1,991

Revised National Tuberculosis Control Programme (RNTCP)

Ballabgarh hospital is a treatment unit under the Revised National Tuberculosis Control Programme (RNTCP) and has 4 microscopy centres under it. The total number of cases treated at Ballabgarh Treatment Unitl was 529 in2008.

Break-up of cases treated at the Ballabgarh Microscopy Centre

Category I	306
Category II	109
Category II	114
Total	529

Community Health Services

Intensive Field Practice Area (IFPA)

This comprises of the two primary health centres—Dayalpur and Chhainsa. Outpatient, domiciliary and referral services are being provided.

1. Community level Indices

• Population	85,552
• Birth Rate per 1000 population	23.8
• Death Rate per 1000 population	7.2
• Neonatal mortality rate per 1000 live- births	23.1
• Infant mortality rate per 1000 live- births	46
• Maternal mortality rate per 100,000 live- births	212

2. Load of OPD patients at various centres in IFPA

PHC	New cases	Repeat visits	Total
Dayalpur	12,710	10,737	23,447
Chhainsa	10,506	9,137	19,643

Laboratory activities

Laboratory test	PHC Chhainsa	PHC Dayalpur
Slides for malaria parasite	–	7,433
Sputum slides	–	479
Haemoglobin estimation	581	
Blood sugar	239	296
Urine for albumin, sugar and pregnancy	434	160
Blood grouping and Rh typing	432	300
Urine Pregnancy Test	343	—
ECG	152	—

National Health Programmes

Family Welfare & Maternal Child Health

The Project area is dependent on the District Family Welfare and Immunization Offices for the supply of vaccines and other items.

• Total antenatal cases (new registration)	2239
• Pregnant women receiving AN care	100%
• Complete TT coverage of registered cases	90.10%
• Deliveries conducted by staff or hospital	1033
• Eligiblecouple protection rate	52.05%
• Total number of persons who accepted family planning methods in the year 2008	1169
– Tubectomy	197
– Vasectomy	30
– CC users	532
– IUD	201
– Oral pills	207

Expanded Programme on Immunization

Coverage of 12 - 23 month of age

BCG	98.0%
OPV (3 doses)	96.4%
DPT (3 doses)	97.9%
Measles	94.4%

Malaria

Collection of blood slides is done by active and passive surveillance in the IFPA.

Total number of slides collected	8058
Total number of positive cases	10

Indices

• Annual blood examination rate	9.4%
• Annual parasite incidence rate	0.12/1000 population
• Slide positivity rate	0.12%

Tuberculosis

The Revised National Tuberculosis Control Programme (RNTCP) is carried out in the IFPA on the national pattern. Dayalpur PHC has been designated as a microscopy centre and caters to all villages under the IFPA. The break-up of patients treated in the toal field practice area is as follows:

Category 1	66
Category 2	35
Category 3	14
Total	115

3. Integrated Disease Surveillance Project (IDSP)

Integrated Disease Surveillance Project is going on in Primary Health Centre and weekly report is being sent to District Hospital. No outbreaks were reported in year 2008–2009.

SPECIALACTIVITIES

Demographic and Behavioural Surveillance: The Census of the villages under PHC, Chhainsa was carried out between 1 and 31 December 2008 by male Multipurpose Health Worker. Data was collected for various demographic indicators including literacy and occupation. Data entry was started as soon as census was over. Data entry was completed by 5 January. Final census report was ready by 19 January which was discussed with different stakeholders.

Surveillance for Demographic Environmental and Health Information-2 (SUDEHI-2): Information on Maternal and Child Health related knowledge, attitude and health seeking behaviour was collected from the mothers of a child cohort born from 1 January to 31 December 2008. Health worker female collected the information using the appropriate forms under the supervision of Health Assistant female. The number of Sudehi forms filled were 884 by Chhainsa and 902 by Dayalpur.

Birth and Death Registration: All the birth and death events that took place under the villages of PHC Dayalpur were registered at PHC Dayalpur. The registrar for registering the vital events was MO I/C PHC Dayalpur.

Number of Births registered at the PHCs: Dayalpur – 435; Chhainsa – 634

Number of Deaths registered at the PHCs: Dayalpur – 255; Chhainsa – 232

Maternal and Child health (MCH) camps at Chhainsa: Since 7 November 2008 MCH camps are being organized in different villages of PHC on Friday forenoon. Since February 2009, this activity was intensified in two sub-centres Chhainsa and Atali, where camps are being held at Anganwadi centres on Wednesdays and Thursdays respectively. A comprehensive reproductive and child health services including ANC check-ups, laboratory investigations like haemoglobin estimation blood grouping and typing and urine albumin, immunization and health check-up of children as well as health education is being provided at these clinics.

Number of camps held	24
Number of patients seen	467
Investigations	
Haemoglobin Estimation	454
Blood grouping and typing	391
Urine albumin and sugar	249
Urine Pregnancy Test	27

Intensive Pulse Polio Immunization (IPPI): The Intensified Pulse Polio Programme was conducted 11 times during the year 2008 viz, 06.01.08, 10.02.08, 30.03.08, 27.04.08, 01.06.08, 06.07.08, 17.08.08, 07.09.08, 28.10.08, 16.11.08 and 21.12.08. The coverage was 99%. lasted for three days. (First day – booth activity, Second and Third day for house to house immunization)

Control and prevention of NCDs: Under a research project initiated in collaboration with ICMR, since March 2008, health workers were trained to do risk assessment for NCDs, suspect NCDs, provide advice on risk behavior change. The Sub centres and PHCs were also provided digital BP instruments and glucometer. 2195 adults were screened by health workers for risk of Diabetes, CVD and Stroke. 1800 patients screened at PHC through opportunistic screening.

Delivery Hut: One of the notable achievements has been in getting the delivery hut at Dayalpur functional. Though the scheme was innovated by Haryana government, it was implemented by the CRHSP, Ballabgarh. CRHSP provided manpower, infrastructure, non consumable and consumables of the delivery hut at Ballabgarh. In addition to doctors an ANM () was also available. A total of 88 deliveries were conducted in PHC Dayalpur in 2008–2009. A similar activity was being launched in PHC Chhainsa.

Health Promotion/Health education activities:

Following health education activities were carried out in CRHSP.

Health Talks	107
Films	69
Exhibitions	03
Community Meetings	02
Yoga Demonstrations	10
Cooking Demonstrations	10

The topics covered were related to NCDs, Breast feeding, weaning, female feticide, Newborn care, Diarrhea, Dengue and malaria, Institutional deliveries.

Village health days at Dayalpur: All the female health workers along with selected Anganwadi worker and ASHA worker conducted village health days as per the planned schedule. These days were utilized for providing health education regarding ANC, Adolescent Health, identification of high risk beneficiaries, and notification of vital events. A total of 381 ***Village Health Days were held in 2008–2009.***

The nursing students delivered health talk on selected topics in various villages as a part of their assessment supported by the health workers during the talks. A total of 108 **Health Talks were delivered in 2008–2009.**

Sarpanch Meeting: Meeting with all Sarpanches of villages under the project was held on 2 January 2009. Eighteen Sarpanches attended the meeting. The discussion was on increasing the role of Panchayat in health especially in tobacco control, promoting institutional deliveries and in decreasing female feticide.

Urban Health Programme

• Total number of patients seen at Dakshin Puri Extention Dr Ambedkar Nagar	20,359
• Total number of Referrals	1031
• Total number of Health talks given on different health topics at Dr Ambedkar Nagar	120
• <u>Immunizations</u>	<u>Doses given</u>
0 dose OPV	102
BCG	250
DPT I	520
DPT II	526
DPT III	491
DPT B	495
OPV I	520
OPV II	526
OPV III	491
OPV B	495
DT I + OPV	100
DT II + OPV	16
DT (Booster) + OPV	222
Measles	506
MMR	588
TT I (Antenatal)	205
TT II (Antenatal)	147
TT (Booster)	72
TT (Others) - above 6 years	106
Hepatitis B	0 dose
	I dose
	II dose
	III dose
Typhoid	578
Supplements	
Vitamin A(I dose)	596
Iron and folic acid (Adult)	1455x30
Iron and folic acid (Paediatric)	82x30

Family planning acceptors

Nirodh	4360
Oral contraceptive pills	102 Cycles

Laboratory Services

Blood smear for malarial parasite	136
Haemoglobin	740
Urine routine/ microscopic examination	95
Urine pregnancy test	61

National Services Scheme Unit, AIIMS

The NSS Unit of AIIMS is located at Centre for Community Medicine. Dr Bir Singh continued to be its Programme Coordinator and Dr Anil Goswami, Mrs Kiran Singh continued to be the Programme Officers of this unit. Despite receiving no grants from the government, the unit continued to be active in the year under review. Dr Anil Goswami, Ms Neena Chawla and the Field Staff organized these events as part of the Urban Health Programme and NSS activities:

Organization of events / exhibitions

- T.B. posters displayed on notice boards of CCM, AIIMS 01.04.2008
- Organized an exhibition on '**World Health Day**' and '**World Water Day**' Exhibition at Dr. Ambedkar Nagar (120 participants) 07.04.2008
- Organized an exhibition on '**World No Tobacco Day**' was held at Dr. Ambedkar Nagar (105 Participants) 31.05.2008
- Dengue Posters Displayed at Centre for Community Medicine and 20 other prominent places at AIIMS 05.06.2008
- '**World Population Day**' was observed in the form of exhibition and a talk at Dr Ambedkar Nagar (95 Participants) 10.07.2008
- New Batch of MBBS Students briefed about Centre's activities 04.08.2008
- Participated in '**Institute Day Health Exhibition**' at AIIMS (14 Posters) 25.09.2008 - 26.09.2008
- Participated in '**Walkathon**' on the eve of 'International Day for the Older Persons' organized by HelpAge India at Raj Path India Gate (With 3 PGs) 01.10.2008
- Organized a Mini exhibition on the '**Tobacco and its ill Effects**' In front of AIIMS Foyer 01.10.2008 –12.10.2008

- Organised a film Show for CCM staff on '**Institute of Naturopathy and Yogic Sciences Bangalore**' 30.10.2008
- Organised a '**Health Camp/Health Exhibition**' at Mobile Crech (NGO) at Dakshin Puri Extension Dr.Ambedkar Nagar 25.11.2008
- Organised a mini Exhibition on HIV/AIDS at AIIMS 01.12.2008\ 10.12.2008
- Two 'Blood Donation Camp' were organized for HDFC at Kasturba Gandhi Road and Gurgaon in Colloboration of CNC Blood Bank and CNC Blood Bank on 12 December 2008 12.12.2008
- Organized and Co-ordinated MIS training programme for the Urban Health Centre staff with Dr Kapil and Dr Kiran Singh 06.03.2009- 09.03.2009
- Organised an exhibition on '**World Water Day**', Dakshin Puri Extension, Dr Ambedkar Nagar (125 Participants) 23.03.2009
- Organised an exhibition on '**World TB day**' at Dakshin Puri Extension, Dr Ambedkar Nagar (120 Participants) 26.03.2009

Sex and Marriage Counselling Clinic

(This clinic operates 3 days a week.
Faculty Incharge Dr Bir Singh).

Report of SMCC wef 01.04.2008 to 31.03.2009:

New Patients	2,148
Old Patients	2,408
Total	4,556

Investigations

Hormone Analysis	681
Blood Sugar	429
Semen Analysis	645
Urine and semen C/S, VDRL, HIV	74
Urine (R/M)	99
Haemoglobin	15
FNAC	164
USG Doppler/ X-Ray	473

AIDS Education and Training Cell

Professor Bir Singh is the coordinator of this Cell and Professor C.S. Pandav is the Chairperson. Ms Sosamma Shyam and Ms Manju Siddhu are other functionaries. The following activities were organized

- The telephone helpline on HIV/AIDS and contraception ‘Shubhchintak’ continued to be operated with usual popularity, attracting good number of calls.
- The Internet-based helpline ‘e-shubhchintak’ on HIV/AIDS and contraception continued to be operated with usual popularity. It received 3–5 requisitions/day for IEC materials apart from queries on HIV/AIDS, sexual problems, STDs, contraception etc.
- The Cell produced and disseminated educational material on HIV/AIDS to general public in 2008–2009 also.
- About seventy new patients were given personal counselling personally apart from repeat patients.
- Organized mini-exhibition on HIV/AIDS, AIIMS; 01–10 December 2008.
- Organized a Public Lecture on HIV/AIDS for BSF *Jawans* and Officers, BSF Signal Training Centre, Delhi; 27 March 2009.

Health Promotion and Health Communication (HPHC) unit

The ‘Health Promotion and Health Communication (HPHC) unit’ carried out the following activities in the field as well as the AIIMS in the year under review.

IEC material development

by Dr Bir Singh/Dr Anil Goswami/Mr R.B. Pokale:

1. Poster on ‘**Father’s day**’ Developed and displayed at 20 places in the campus.
2. Posters were on ‘Dengue’ were displayed at three places, i.e. Dengue screening OPD, AIIMS and at CCM & CRHSP Ballabgarh, Faridabad, Haryana.

S. No.	Posters Developed / Modified on	No.
1.	Father’s day	01
2.	Tobacco/smoking	12
3.	Field data poster	02
4.	Team-work works	01
5.	HIV/AIDS	01
6.	Design IDD-MGD card with logos of ICCIDD , AIIMS and IQ plus	01
7.	Tobacco free area	01
	Designing	
8.	Designed banners on HIV/cards	04
9.	Designed Poster on Bihar flood relief	01
10.	Designed poster on HELP	
11.	Designed Banners	

Presentations

- | | | |
|-----|---------------------------------------|----|
| 12. | Presentation on Dengue cases in Delhi | 01 |
| 13. | Presentation on smoking in Hindi | 01 |
| 14. | Presentation on Medicine | 01 |

Eleven film shows were conducted under various teaching and training programmes.

Four role-plays were performed in the community on Alcoholism, Drug-addiction, Family Planning, Polio, Personal Hygiene, Obesity, Mother and Child Health and Gender Bias.

Radio and TV programmes

Radio Programmes

1. Singh B. Live-Phone-in-Programme on ‘Mental health’, National Channel, All India Radio; 03 April 2008.
2. Singh B. Live Phone-in-Programme: ‘Protecting health from climate change’, All India Radio; 07 April 2008.
3. Singh B. Live Phone-in-Programme on ‘Junk food and its adverse effects on Health’, All India Radio; 26 May 2008.
4. Singh B. Discussion on ‘Prostate gland–diseases and treatment’, National Channel, All India Radio; 05 June 2008.
5. Singh B. Live Phone- in- Programme on: ‘Blood cancer in children’. All India Radio; 09 June 2008.
6. Singh B. Live Phone in Programme on ‘*Pet ke rog*’, All India Radio; 07 July 2008.
7. Singh B. Live Phone in Programme on ‘Kidney failure’, All India Radio; 30 July 2008.
8. Singh B. Live Phone in Programme on ‘Disaster management’. All India Radio; 11 August 2008.
9. Singh B. Live Phone in Programme on ‘Dengue: Prevention and treatment, All India Radio; 18 August 2008.
10. Singh B. Live Phone in Programme: ‘TB–Prevention and treatment, All India Radio; 29 September 2008.
11. Singh B. Live Phone-in-Programme on ‘Sleep disorders’, All India Radio; 06 October 2008.
12. Singh B. Live Phone-in-Programme on ‘Joint Problems’, All India Radio; 13 October 2008.
13. Singh B. Live Phone-in-Programme on ‘HIV/AIDS’, All India Radio; 01 December 2008.
14. Singh B. Live Phone-in-Programme on ‘Common ENT problems’, All India Radio; 05 January 2009.
15. Singh B. Live Phone-in-Programme ‘Common eye problems, All India Radio; 19 January 2009.

16. Singh B. Live Phone-in-Programme: 'Chicken Pox and Measles', All India Radio; 23 February 2009.
17. Singh B. Live Phone-in-Programme on 'Acute emergencies requiring general surgical interventions', All India Radio; 23 March 2009.

T.V. Programmes

1. Singh B. Viral fever. MH-1 TV News Channel; 02 April 2008.
2. Singh B. Sex counselling. Delhi Aaj Tak T.V. Channel; 08 June 2008.
3. Singh B. Sex problems. Sahara Samay TV Channel; 09 June 2008.
4. Singh B. Pre-marriage counselling. Sahara NCR TV Channel; 09 June 2008.
5. Singh B. Dengue fever. Doordarshan Channel; 28 July 2008.
6. Singh B. Anti-smoking legislation. Aaj Tak TV Channel; 03 October 2008.
7. Singh B. Pre-marriage counselling'. NDTV Metro-nation TV Channel; 01 December 2008.
8. Singh B. HIV/AIDS. NDTV India TV Channel; 26 November 2008.
9. Singh B. HIV/AIDS. DD News TV Channel; 30 November 2008.
10. Singh B. HIV/AIDS. NDTV Metro-nation TV Channel; 01 December 2008.
11. Singh B. Programme on tuberculosis. Doordarshan Channel; 28 March 2009.

Social Services

Dr Anil Goswami and Mrs Neena Chawla carried out the following activities

Patients identified for social services	4,597
Financial help arranged for	
Medicine	04
Education	03
Occupation	06
Charges exempted	08
Counselling provided	
Individual	4,027
Family	360
Group	330
Referral services to various social welfare organizations	137
Rehabilitation Services	

Jobs	05
Cancer patients	05
Handicapped	10
School drop out	03
Widows/deserted	07
Nutritional supplement	10
Arranged cataract surgery	24
Vocational training	03
Physiotherapy	05
Free denture for poor patients	04
Help for widow daughters marriage	02

AWARDS AND HONOURS

Dr C.S. Pandav was selected as a Member of the Advisory Committee of Food and Nutrition Board, Ministry of Women and Child Development, Government of India in 2008. He has been conferred Dhanvantari Oration during the 35th Annual National Conference of Indian Association of Preventive and Social Medicine held at Puducherry from 21st to 23rd January, 2009; has been selected for the 'Best Citizens of India Award – 2008', International Publishing House.

Dr Puneet Misra and Dr Sanjay Rai was awarded for Best Poster as First Author for poster entitled '*Annual HIV sentinel surveillance in India and its quality assurance*'. (XIth International Health Conference in California, USA in March 2009, Conference jointly organized by UC Berkeley, UC Devis, UC San Francisco, Stanford University and Touro University.)

SIGNIFICANT EVENTS

Professor C.S. Pandav attended the National Programme for Quality Assurance of Laboratories related to Iodine Deficiency Disorders Control Programme (IDDCP) in Bhuj, Gujarat, 21–24 May 2008; attended two day round table conference on the 'Role of science and spirituality in promoting the culture of peace in the world', Pune, 1–2 August 2008; Attended Executive Committee Meeting of The Maharashtra Association of Anthropological Sciences, Pune, 4 August 2008; attended the Review Meeting of Project Proposals under NARI, Pune, 28–30 August 2008. Participated in the 61st WHO-SEARO Regional Committee Meeting, New Delhi, 8–11 September 2008; attended 'Ninth South-East Asia Nutrition Research-cum-Action Network' at NIN, Hyderabad, 24–26 September 2008; participated in two day Symposium on CME and Disaster Preparedness, Medical College Latur, Maharashtra, 27–28 September 2008; attended the Scientific Advisory Committee of National AIDS Research Institute (Indian Council of Medical Research), Pune, on 5 November 2008; participated in the Review meeting for the Text Book on 'Public Health and Community Medicine' as a Member of the Expert reviewer Armed Forces Medical College, Pune, 13–14 November 2008; attended meeting of IPromis Project as an Expert, Nagpur, 21–22 November 2008; attended 9th Scientific Advisory Committee (SAC) of National Institute of Epidemiology (NIE), Chennai, 29–30 December 2008; Attended the 53rd Annual National Conference of Indian Public Health Association

Bangalore, Karnataka, 9–11 January, 2009; participated as Team Leader in the Second Annual ‘Health Mela’, Gidhour (Jamui), Bihar organized by the Civil Surgeon cum CMO, Jamui, Bihar to provide quality health care to rural community as envisaged under ‘National Rural Health Mission’, 17–19 January, 2008; attended the 36th Annual National Conference of IAPSM and Joint State Conference of Maharashtra Chapters of IPHA and IAPSM, at Aurangabad, Maharashtra, 21–23 January 2009; Attended the Review Meeting of Project Proposals under National AIDS Research Institute, (NARI), Pune, 9–10 February 2009. Attended IndiaCLEN Governing and General Body Meetings scheduled, Nagpur, 20–22 February 2009; participated as an External Expert for the Senior Staff Selection Committee meeting, Sree Chitra Tirunal Institute for Medical Sciences and Technology, Thiruvananthapuram; Conducted MD Examination (Community Medicine) as an External Examiner in the University of Colombo, Sri Lanka from 11–17 August 2008; attended the Annual Board Meeting of the International Council for Control of Iodine Deficiency Disorders, Moscow, Russia, 27–30 April 2008; attended the Annual Board Meeting of the International Council for Control of Iodine Deficiency Disorders at Cairo, Egypt, 13–16 March 2009.

Dr Bir Singh started a unique, innovative programme ‘Pre-marriage counselling course for happy married life’, AIIMS for the unmarried men and women. Three courses held during 2008–2009; Nominated as the National Resource Faculty for STI/RTI Program by National AIDS Control Organization, Government of India (19 May 2008); was a Consultant to UNICEF Assam for Evaluation of PPTCT/ ICTC Services in the State. [August–September 2008]; was a Consultant to UNICEF Jharkhand for evaluation of PPTCT/ICTC services in the state [December 2008]; Participated as a Resource Faculty in the symposium ‘National Symposium on Belief & Faiths’ at Maulana Azad Medical College, New Delhi (13 September 2008); Adviser to UPSC for Combined Medical Services Examination – 2008 Interviews [3–7 November, 2008]; Organized and coordinated Relief work for Bihar Flood Victims under the auspices of National Service Scheme Unit, AIIMS (September 2008); participated as an Observer in the WHO–SEARO Meeting at New Delhi on ‘Core-Competencies for Health Promotion Specialists’ (18–20 June 2008); Participated in ‘National Advocacy Workshop on ‘Health promotion in hospitals in Delhi’ (11–13 August 2008); was an Examiner for Jammu University and Kashmir University (May 2008); was a Judge for a Hindi Debate in Indian Council of Medical Research (ICMR). [26 September 2008]; was an Examiner for M.D. Exam in Community Medicine for University of Delhi (October 2008); Was an Examiner for MBBS Examination for MD. Medical University, Rohtak (November 2008); nominated as an Expert on the Health Portal of the Public Health Foundation of India and Ministry of Health and Family Welfare, Government of India; continued to be a member of the Editorial Board of *Indian Journal of Pediatrics*; Chaired a Scientific session during the 53rd National Conference of Indian Public Health Association at Bangalore (09–11 January 2009); participated and Chaired two Scientific session during the 36th Annual National Conference of Indian Association of Preventive and Social Medicine (IAPSM) Aurangabad, Maharashtra (21–23 January 2009); Continued to be the Secretary General of IAPSM during 2008–2009; Continued to be a Member of the Scientific Advisory Committee of Dessert Medicine and Research Centre (ICMR) during 2008–2009; Continued to be a member of the National Technical Advisory Group of Department of Science and Technology, Government of India; and Indian Council of Medical Research (ICMR), Government of India; Member of the Research Sub-Committee of AIIMS to select Community-based Research Studies; Organized a Public Lecture on HIV/AIDS for BSF *Jawans* and Officers at BSF Signal Training Centre, Delhi (27 March 2009).

Institutional Responsibilities at AIIMS

- Co-Chairman, Gymkhana Committee
- Member, *Raj Bhasha* Committee
- Member, Selection Committees
- Member of the Research Sub-Committee of AIIMS to select Community Based Research Studies.

Research-related:

- Member, Doctoral Committee of Dr Manish Jain, Reproductive Biology Department of AIIMS.
- Co-guide for a PhD student in Department of Biostatistics, AIIMS.
- Member of the Research Sub-Committee of AIIMS to select Community Based Research Studies

Dr Shashi Kant is the Nodal Person for Regional Institute for HIV Sentinel Surveillance in Central Zone recognized by National AIDS Control Organization. Temporary Technical Advisor to review HIV surveillance in India, organized by WHO (SEARO); Chaired the training programme on School Health organized by Directorate of Health Services, Government of NCT of Delhi; Co-chaired a session on HIV/AIDS at Annual Conference of Indian Association for the study of population (IASP) held at Bangalore; Organized a Training Workshop for Laboratory Technicians and Microbiologists on behalf of World Health Organization, Country Office, New Delhi; Presented a scientific paper at Australasian Society for HIV Medicine-2008 conference at Perth, Australia; Facilitated the meeting on use of DBS in the TI project Organized by National Institute of Health and family Welfare, New Delhi; Resource person for Annual Sentinel Surveillance for HIV infection 2008 Organized by National Institute of Health and family Welfare, New Delhi; Organized Review meeting of HIV Sentinel Surveillance, Central Zone at New Delhi; Participated in 'Protocol finalization workshop' organized by the INCLIN Trust International at Faridabad, Haryana; Attended the National Conference of the Indian Association of Preventive and Social Medicine held at Aurangabad, Maharashtra; Attended Annual General Body Meeting of IndiaCLEN held at Nagpur; Attended the 14th World Conference on Tobacco or Health held at Mumbai; Member of National Resource Pool for orientation on STI/RTI services in India; Member of Personality Test Board for Combined Services Examination held by the Union Public Service Commission (UPSC), Government of India; Member of Indian Delegation for the 5th Steering Committee meeting of Pan African e-Network Project to be held at Addis Ababa, Ethiopia; Member of Expert Committee for selection of PhD student at National Institute of Medical Statistics; Member of Institutional Review Board of IndiaCLEN; Member of Ethics Committee of National Institute of Medical Statistics; Member of Ethics Sub-committee of All India Institute of Medical Sciences. Wrote the background document on 'Sexually transmitted diseases in India' for Department of Communicable Diseases, WHO (SEARO)

Additional responsibilities at AIIMS

1. Faculty in-charge of Central workshop
2. Faculty in-charge of Telemedicine facility

3. Member of Dean's Committee
4. Member of House Allotment Committee
5. Member of Staff Council

Dr Sanjeev Kumar Gupta was a part of the Course Revision team (2nd revision) of the Preventive MCH Course of PGDMCH Programme of IGNOU, New Delhi; Member the sub-committee for reconsideration and restructuring of the document, i.e. nomenclature, qualification, pay, etc for the research staff at the AIIMS; Member of the revised committee for the MBBS teaching curriculum Phase-II/III for the session July- December 2008; Member , Stores Purchase Committee of the Centre for Dental Education and Research; Reviewer for the *Indian Journal of Community Medicine*; Member, Doctoral Committee in respect of a Ph.D. Thesis in the Department of Community Ophthalmology, Dr R.P. Centre, AIIMS.

Dr Kiran Goswami attended Project Management Workshop by INCLIN; Attended DBS Training for Trainers under HIV Sentinel Surveillance; Participated as resource person under 'MICs: A programme to improve injection practices in country' at AIIMS, Delhi; Attended Training for Web Based Data Entry (3– 4 December 2008) for HIV Sentinel Surveillance NIHF; Attended the South Asian Conference on 'Alternatives to Mercury in the health care sector' on 5–6 December 2008; Chief guide and co-guide for two MD students; Examiner for MBBS Undergraduate Examination at Lady Hardinge Medical College, Delhi from 20th to 25th Nov.2008; Examiner for MD Community Medicine at BP Koirala Institute of Health Sciences, Dharan, Nepal from 20–23 August 08.

Dr K. Anand

Member of Steering Committee of National Program for Prevention and Control of Diabetes, CVD and Stroke. (NPDCS); Member of Technical Advisory Group for NCD Surveillance under IDSP; Member Board of Trustees of INDEPTH Network; Undertook an Assignment As Temporary International Professional in NCD Risk Factor Surveillance with WHO/SEARO in January 2009; Delivered lecture on 'Economic evaluation in healthcare' at Platinum Jubilee Celebration of MCI during a CME organized by Medical College Indore; Conducted training program for national level trainers under the National Program for prevention of Diabetes, CVD and stroke in Gandhinagar Gujarat; Member of the Committee on PG medical education set up by Indian Academy of Public Health under Indian Public Health Association; Facilitated a workshop on STEPs approach to NCD Surveillance at a meeting organized by Madras Diabetes Research Foundation in Chennai, 28 March 2009; Attended different meetings of the Steering Committee of National Program for Prevention and Control of Diabetes, CVD and Stroke. (NPDCS) and Technical Advisory Group for NCD Surveillance under IDSP; Attended 'Teaching the teacher to teach' (T5) in Boston University for three weeks from 23 May – 13 June 2008; Attended Project Review Group Meeting of Media Lab Asia at Trivandrum on 5 January 2009; Non-specific Effects of Vaccination by London School of Hygiene and Tropical Medicine in London from 17–18 April 2008; National Course on NCD Prevention and Control in Chandigarh, 22–23 April 2008; Attended INDEPTH NCD Meeting at Bangkok, Thailand from 04– August 2008; Attended Influenza Vaccine group Meeting, CDC Atlanta, 28 August 2008 To 29.08.08; Attended Eighth Annual General and Scientific Meeting INDEPTH, Tanzania from 22–26 September 2008; Attended Employee Health as a Strategic Priority 2008—Joint Meeting of the

World Economic Forum and World Health Organization at New Delhi, India from 14–15 November 2008; Attended National Level Workshop for Medical Officers under National Programme for Prevention and Control of Diabetes, Cardiovascular Diseases and Stroke (NPDCS) at New Delhi from 25–26 November 2008; Attended INDEPTH Board of Trustees Meeting at Accra, Ghana from 16–18 February 2009; Attended National Capacity Strengthening Workshop for Programme Managers on Integrated Prevention and Control of NCDPC at DPR Korea from 23 February – 05 March 09.

Dr Puneet Misra

Member of Program Advisory Committee, Department of science and Technology, Government of India; Member of Regional Institute Central Zone for HIV Sentinel Surveillance, NACO, Government Of India, responsible for HSS activity in five states of India for technical support and quality control; Member of Telemedicine Committee of AIIMS and In charge Telemedicine Facility at CRHSP-AIIMS, Ballabgarh; Team member of Consensus Development for Cut-offs of Measures of Obesity and Metabolic Syndrome for Asian Indians; Attended Meeting on HIV surveillance, SIHFW, Jaipur, September 2008; Attended Pre round Meeting on HIV surveillance, Hotel Rajhans, Surajkund October 2008; Attended IDSP meeting for training of surveillance officers – on 11 November 2008 at NICD; Attended Obesity summit – Delhi on 15 and 16 November 2008; Attended IMNCI training, MAMC, Delhi, 22–30 September 2008; Attended INDEPTH meeting on COPD, KEM Hospital and CRF Pune Jan 2009; Attended National conference of IAPSM, Aurangabad, Jan 2009; Attended **2nd International Conference on Integrating Spirituality and Organizational Leadership, Pondicherry, February 2009**; Attended International meeting on ‘Non-specific effects of vaccination’, London School of Tropical Medicine and Hygiene, UK, April 2008; Attended Health Communication Skills workshop in Ghana, October 2008; Attended XI International Health Conference, Touro University, California, USA in March 2009.

Dr Sanjay Rai

Attended ‘2 Technical Advisory Group meeting for the study entitled: Neuro Developmental Disabilities among children in India’ on 9 April 2008 at Hotel Rajhans, Surajkund, Faridabad; Organized ‘Post round review meeting of HIV Sentinel surveillance 2007 (Central Zone)’ from 14–15 April 2008 at hotel Atrium, Suraj Kund, Faridabad; Conducted Epidemiological investigation of HIV positive cases in Moradabad district of UP May 2008; Attended ‘Orientation Workshop on STI/RTI services under NACP-III for National Resource Faculty’ organized by National AIDS Control Organization, Ministry of Health & Family Welfare, Government of India, National Institute of Health and Family Welfare, Munirka, New Delhi, 19 May; Nominated by Punjab University as a member of the Board of Examiners in community medicine for 2008–2009 and was external examiner for 3rd professional MBBS part 1 examination (Community Medicine) at Government Medical College Chandigarh from 25 June 2008; Participated as an expert in UNICEF sponsored evaluation of ‘PPTCT Outreach Programme’ of Andhra Pradesh from 4–12 July 2008; Reviewer for journals. ‘Health and Population Perspective and Issues’, Indian Journal of Public Health, Indian Journal of Community Medicine.

Dr Baridalayne Nongkynrih

Attended a meeting organized by Norway India Partnership Initiative (NIPI)-NIHFW collaboration on planning for training curriculum for Yashoda on 20 April 2008; Attended a workshop in NDDTC

Ghaziabad on 'Developing curriculum for paramedical workers in substance abuse' organized by Department of Psychiatry, AIIMS on 6 August 2008; Meeting organized by Council for Advancement of people's Action and rural technology (CAPART) sharing the results of the book 'Malnutrition, an emergency: What it costs the nation' by Veena Rao in 12 August 2008; Attended a workshop in Lady Hardinge Medical College, Delhi chapter of IAPSM in collaboration with WHO India on 'Health promotion-healthy settings approach', 5–6 September 2008; Workshop on 'The World Breastfeeding Trends Initiative (WBTi): India country assessment workshop held at Indian Medical Association building, New Delhi on 4 October 2008; attended National Level Workshop for Medical Officers under National Programme for Prevention and Control of Diabetes, Cardiovascular Diseases and Stroke (NPDCS) at New Delhi, 25–26 November 2008; Attended the 36 National Conference of IAPSM, Government Medical College Aurangabad, 23–25 January 2009; Reviewer for the Indian Journal of Community Medicine.

Dr Anil Goswami

Attended a Symposium on 'One Million Campaign: Support Women to Breastfeed' at Constitutional Club on 09 February 2009; Attended a Symposium on 'One Million Campaign: Support Women to Breastfeed' at Constitutional Club, 09 February 2009; Attended a training course on 'Health & Human Right' at National Institute of Health & Family Welfare (NIHFW) w.e.f. 04–06 August 2008; Attended a two days 'Workshop on Health Promotion in a setting based approach viz School, Hospitals, and Workplace', Lady Harding Medical College (LHMC), New Delhi, 5–6 September 2008; Attended 2nd National Symposium on 'Belief and faiths: A challenge to public health', Maulana Azad Medical College (MAMC), New Delhi, 13 September 2008; Attended a Symposium on "The setting-based approach to Health Promotion: Concepts and application in common setting" at Maulana Azad Medical College (MAMC), New Delhi, 08 November 2008; Attended a Seminar on 'Female foeticide: Social evil or medical vice' at Maulana Azad Medical College (MAMC) on 13 November 2008; Attended '53 National Conference of Indian Public Health Association' 9–11 January 2009 at Kempegowda Institute of Medical Sciences, Bangalore, Karnataka; attended '36th Annual National Conference of "Indian Association of Preventive & Social Medicine' 21–23 January, 2009 at Government Medical College & Hospital Aurangabad, Maharashtra; Continued to be the Treasurer of Indian Association of Preventive Medicine (IAPSM) during 2008–2009; Organized and co-ordinated relief work for the 'Bihar flood victims' under the National Service Scheme during September 2008.

Dr Rakesh Kumar Senior Resident and Mr Mangi Lal Chaudhury PHN at Ballabgarh were sent to National Institute of Mental Health and Allied Neuro-sciences for training in Tobacco Cessation by the Ministry of Health and Family Welfare as a preparatory work for setting up an Tobacco Cessation Clinic at Ballabgarh.

Vivek Gupta attended the TARGETS Program Dissemination Workshop of the Maharashtra Association of Anthropological Sciences (MAAS) and London School of Hygiene and Tropical Medicine on 15 December 2008 in Pune; Attended the Review meeting for the Text Book on Public Health and Community Medicine, Armed Forces Medical College, Pune, 13–14 November 2008.

Kapil Yadav participated in meeting on 'Non specific effects of vaccine' organized by London School of Hygiene and Tropical Medicine, London, United Kingdom, 17–19 April 2008; Participated in 14th World Conference on Tobacco or Health, Mumbai; 8–12 March 2009

Conferences

1. Kapil Yadav, Sanjay Rai, Anand K. Thirty five years trend in Infant Mortality rate at Ballabgarh: Lessons learned and future strategies. Oral Presentations on 8 Annual General Body Meeting (AGM) of In-depth network in, Dar-es-Salaam, Tanzania; 22–26 September, 2008.
2. Vivek Gupta, Kapil Yadav, Anand K. Changing patterns of diet, physical activity and obesity among urban, rural and slum populations in north India. Oral Presentations on 8 Annual General Body Meeting (AGM) of In-depth network in, Dar-es-Salaam, Tanzania; 22–26 September, 2008.
3. Vivek Gupta, Kapil Yadav, Anand K. High Prevalence of *Bidi* (hand manufactured cigarette) use in a North-Indian Community. Oral Presentations on 8 Annual General Body Meeting (AGM) of In-depth network in, Dar-es-Salaam, Tanzania; 22–26 September, 2008.
4. Gupta V, Yadav K, Anand K. 'Identifying priority intervention strategies for prevention of tobacco use among school children'. Posters presented in 14th World Conference on Tobacco or Health, Mumbai; 8–12 March 2009.
5. Pandey A, Singh M, Garg R, Patni N. Effect of tobacco chewing on prevalence of hypertension and angina in a rural population of India. Posters presented in 14th World Conference on Tobacco or Health, Mumbai; 8–12 March 2009.
6. Ambrish pandey, M. Singh, R. Garg, N. Patni Prevalence and Pattern of smokeless tobacco usage in adult rural population of Haryana. Posters presented in 14th World Conference on Tobacco or Health, Mumbai; 8–12 March 2009.
7. Patra S, Kumar A, UG Study Group, Singh R, Rai SK. Prevalence of smokeless tobacco usage and its relationship with select cardiovascular parameters in a village of North India. Posters presented in 14th World Conference on Tobacco or Health, Mumbai; 8–12 March 2009.
8. Palanivel C, Yadav K, Gupta V, Stalin P, Kulkarni V, Anand K. Causes of death in a rural adult population of North India using Verbal Autopsy tool; 2002–2007. Oral presentations in the 36th National conference of Indian Association of Preventive and Social Medicine, Aurangabad; 21–23 January 2009.
9. Kumar A, Singh B, Kusuma YS. Evaluation of counselling services in Prevention of Parent to Child Transmission (PPCT) centres in Delhi. Oral presentations in the 36th National conference of Indian Association of Preventive and Social Medicine, Aurangabad; 21–23 January 2009.
10. Jaryhan P, Yadav K, Gupta V, Anand K. Comparison of prevalence of hypertension and self reported diabetes in Urban semi urban and rural population of Ballabgarh block, Haryana. Oral presentations in the 36th National conference of Indian Association of Preventive and Social Medicine, Aurangabad; 21–23 January 2009.

VISITING SCIENTISTS

Scientists from different parts of the country and abroad visited the Centre during this period.

International

1. Centre for Diseases Control (CDC) Atlanta
2. University of Alabama, United States
3. Stanford Biodesign Team (AIIMS – IIT Delhi Stanford University collaboration)
4. Regional Adviser—NCDs WHO/SEARO and Public Health Administrator from WHO India for evaluating Center for Community Medicine and CRHSP Ballabgarh as a WHO Collaborating Center.
5. An International network of HDSS sites involved in demographic and health research in developing countries (INDEPTH)
6. Health Sector Management programme of Boston University

National

1. National Health Systems Resource Center (NHSRC), New Delhi
2. National Institute of Health and Family Welfare (NIHFW)
3. Community Health Department, Jawahar Lal Nehru University (JNU)
4. Sree Chitra Thirunal Institute of Medical Sciences, Trivandrum

9.9 Dermatology and Venereology

Professor and Head

Vinod K. Sharma

Professors

Neena Khanna

Kaushal K. Verma

Additional Professor

M. Ramam

Associate Professors

Binod K Khaitan

Sujay Khandpur

G Sethuraman

Assistant Professor

Somesh Gupta

EDUCATION

Lectures/Presentations in Conferences, CMES

Dr V.K. Sharma

- Chaired session on ‘After patch test’, 8th Asian Dermatological Congress 2008 on ‘Shaping the future dermatology in Asia’, Seoul, Korea; 1–4 October 2008.
- Talk on ‘Shaping the future dermatology in Asia’, 8th Asian Dermatological Congress 2008, Seoul, Korea; 1–4 October 2008.
- ‘Recent advances in the management of Urticaria/Psoriasis’, Department of Dermatology of Osmania Medical College, Hyderabad; 11 April 2008.
- Panel discussion on ‘Parthenium, footwear dermatitis, metals, pigmented contact dermatitis’, 2nd National Conference of Contact and Occupation Dermatoses Forum of India, CODFICON and PHOTOCON-2008, Peelamedu, Coimbatore; 18–20 July 2008.
- ‘Patch test reading and interpretation’, 2nd National Conference of Contact and Occupation Dermatoses Forum of India, CODFICON and PHOTOCON-2008, Peelamedu, Coimbatore, 18–20 July 2008.
- ‘Dermatology practice today—challenges and solution’, XXVI Annual Conference of Indian Association of Dermatologist, Venereologist and Leprologist, Uttar Pradesh and Uattarakhand Branch, Cuticon–2008, Meerut; 1–2 November 2008.
- ‘Allergic disorders and contact dermatitis and vesiculobullous disorders’, 19th Annual Conference of North East States Branch of IADV, Imphal, Manipur, Imphal, Manipur; 7–8 November 2007.
- ‘Cutaneous manifestations of HIV & AIDS’, CME on ‘Sexually transmitted disease, HIV and AIDS’, Department of Dermatology, Venereology and Leprology, Gajra Raja Medical College, Gwalior (MP); 30 November 2008.

- Attended 37th National Conference of Indian Association of Dermatologists Venereologists and Leprologists at Bangalore as President and Panel discussion on 'Off label uses of common drugs'; 6–10 January 2009.
- Delivered a talk on 'Toxic epidermal necrolysis', Annual Dermatology Convention, Goa; 20–22 February 2009.

Dr M. Ramam

- 'Histoplasmosis', Self Assessment Course, XXIX Symposium of the International Society of Dermatopathology, Graz; 2–4 October 2008.
- 'Histopathology of cutaneous tuberculosis, 37th National Conference of IADVL, Bangalore; 6–10 January 2009.
- 'A dermatologist's approach to vasculitis', AP State Conference of IADVL, Hyderabad; 8–9 November 2008.
- 'A clinico-pathologic approach to panniculitis', 12th State Conference and 7th Eastern Zonal Conference of IADVL, Kolkata; 28–29 November 2008.

Dr Binod Khaitan

- Talk on 'Corticosteroids pulse in vitiligo', 2nd CME of Asian Society for Pigment Cell Research, Saudi Arabia, Riyadh; 27 November 2008.
- Invited talk on 'Oral mini-pulse therapy in Dermatology', Annual Conference of North-East Chapter of IADVL, Dimapur; 7th November 2008.
- **Sushruta Dash, Binod K. Khaitan** presented 'A randomized study to evaluate efficacy and safety of 0.1% tacrolimus ointment Vs 0.05% fluticasone propionate cream in patients with segmental vitiligo', European Academy of Dermatology and Venereology Congress, Paris, France; September 2008

Dr Sujay Khandpur

- 'Clinico-epidemiological study of Pure Neural Leprosy', 13th International Congress on 'Infectious diseases', Kuala Lumpur, Malaysia; 19–22 June 2008.
- 'Comparison of clinical efficacy and cost-effectiveness of PUVA versus PUVAsol in extensive plaque psoriasis', 67 Annual Meeting of American Academy of Dermatology, San Francisco, USA; 6–10 March 2009.
- 'Managing tight corners in phototherapy', 2nd National Conference of CODFICON and Photocon, Coimbatore; 18–20 July 2008.
- 'Pulse dye laser for vascular dermatoses', COSMOLASERCON 2008, Mumbai; 19–21 September 2008.
- Panelist in Videoconference of 2nd World Congress of TeleDermatology, Chennai; 16–18 October 2008.

- ‘Diagnosis of Bullous Disorders’, Regional Conference of Indian Association of Dermatologists, Venereologists and Leprologists (Delhi State Branch); December 2008.
- ‘Induction of Th2 cells in the pathogenesis of autoimmune skin disease—pemphigus vulgaris, Immunology Conference, AIIMS; September 2008.

Dr G. Sethuraman

- ‘Blistering disorders in children’, Pediatric Dermatology Update and CME, Delhi; August 2008.

Dr Somesh Gupta

- Chaired a session in 18th International Society for Sexually Transmitted Diseases Research (ISSTD) Congress in association with British Association of Sexual Health Conference, London, UK; 28 June – 1 July 2009

PUBLICATIONS

1. Kumar U, Ramam M. Rational use of antibiotics: Skin and soft tissue infections. *Ind J Pediatrics* 2008;**76**:S40–S45.
2. Ramam M. Prolonged antimicrobial and oral cyclophosphamide therapy in pemphigus: Need for caution. *Ind J Dermatol Venereol Leprol* 2008;**75**:85.
3. Kubba R, Bajaj AK, Sharma VK. Indian Acne Alliance (IAA). *Indian J Dermatol Venereol Leprol* 2009; **75** (Suppl 1):1–62.
4. Bansal A, Kumari R, Ramam M. Cross reaction between two azoles used for different indications. *Ind J Dermatol Venereol Leprol* 2008;**74**:81.
5. Ramesh V, Ramam M, Singh R, Salotra P. Hypopigmented post kala azar dermal leishmaniasis. *Int J Dermatol* 2008;**47**:414–16.
6. Ramam M, Bhat R, Garg T, Sharma VK, Ray R, Singh MK, Banerjee U, Rajendran C. Author’s reply. *Ind J Dermatol Venereol Leprol* 2008;**74**:168.
7. Sethuraman G, Ramesh V, Ramam M, Sharma VK. Skin tuberculosis in children: learning from India. *Dermatol Clin* 2008;**26**:285–94.
8. Kumar U, Ramteke R, Yadav R, Ramam M, Handa R, Kumar A. Prevalence and predictors of pulmonary artery hypertension in systemic sclerosis. *J Assoc Phys Ind* 2008;**56**:413–17.
9. Verma KK, Mahesh R, Srivastava P, Ramam M, Mukhopadhyaya AK. Azathioprine versus betamethasone for the treatment of parthenium dermatitis: A randomized controlled study. *Ind J Dermatol Venereol Leprol* 2008;**74**:453–7.
10. Malhotra AK, Khaitan BK, Sethuraman G, Sharma VK. Betamethasone oral mini-pulse therapy compared with topical triamcinolone acetonide (0.1%) paste in oral lichen planus: A randomized comparative study. *J Am Acad Dermatol* 2008;**58**:596–602.
11. Khandpur S, Malhotra AK, Bhatia V, Gupta S, Sharma VK, Mishra R, *et al*. Chronic arsenic toxicity from Ayurvedic medicines. *Int J Dermatol* 2008;**47**:618–21.

12. Khandpur S, Sugandhan S, Sharma VK. Pulsed itraconazole therapy in eruptive lichen planus. *J Eur Acad Dermatol Venereol* 2009;**23**:98–101.
13. Khandpur S, Sethy PK, Sharma VK, Das P. An atypical presentation of erythema induratum. *Indian J Dermatol Venereol Leprol* 2008;**74**:505–6.
14. Khandpur S, Sharma VK. Successful treatment of multiple gingival pyogenic granulomas with pulsed-dye laser. *Indian J Dermatol Venereol Leprol* 2008;**74**:275–7.
15. Satyam A, Khandpur S, Sharma VK, Sharma A. Involvement of Th1/Th2 cytokines in the pathogenesis of pemphigus vulgaris. *Immunol Invest* 2009;**38**:1–12.
16. Khandpur S, Sharma VK. Efficacy of pulsed dye laser in cosmetically distressing facial dermatoses in skin types IV and V. *Indian J Dermatol* 2008; **53**:186–9.
17. Khandpur S, Pahwa P. Conflict of Interest. *Indian J Dermatol Venereol Leprol* 2009;**75**:225–8.
18. Khandpur S, Chaturvedi P, Sharma VK. Mucocutaneous deposits. In: Lahiri K (ed). *100 interesting cases in Dermatology*; 2009:36–41.
19. Sethuraman G, Mancini AJ. Neonatal skin disorders and the emergency medicine physician. *Clin Ped Emerg Med* 2009;**9**:200–9.
20. Kaur J, Sharma VK, Sethuraman G, Tejasvi T. Comparison of the efficacy of narrowband UVB phototherapy with PUVA for the treatment of chronic plaque psoriasis in patients with skin types IV and V. *Clin Exp Dermatol* 2008;**33**:513–15.
21. Sharma VK, Sethuraman G, Minz A. Stevens Johnson SYNDROME (SJS), Toxic Epidermal Necrolysis (TEN) AND SJS-TEN Overlap: A Study of causative drugs and clinical outcome. *Ind J Dermatol Venereol* 2008;**74**:238–40.
22. Gupta S, Aggarwal R, Gupta S, Arora SK. Human papillomavirus and skin tags: is there any association? *Indian J Dermatol Venereol Leprol* 2008;**74**:222–5.
23. Gupta S, Malhotra AK, Verma KK, Sharma VK. Intralesional immunotherapy with killed Mycobacterium w vaccine for the treatment of ano-genital warts: an open label pilot study. *J Eur Acad Dermatol Venereol* 2008;**22**:1089–93.
24. Malhotra AK, Gupta S, Khaitan BK, Verma KK. Multiple basal cell carcinomas in xeroderma pigmentosum treated with imiquimod 5% cream. *Pediatr Dermatol* 2008;**25**:488–91.
25. Parsad D, Gupta S. IADVL Dermatosurgery Task Force. Standard guidelines of care for vitiligo surgery. *Indian J Dermatol Venereol Leprol* 2008;**74** (Suppl):S37–S45. (Published late).
26. Same guidelines were reproduced in a book on Vitiligo published from Springer, Europe (Edited by Dr Mauro Picardo, Roma, Italy)
27. Gupta S. Stability in Vitiligo: Why such a Hullabaloo? *Journal of Cutaneous and Aesthetic Surgery* 2009;**2**:41–42.

BOOKS

1. **Sharma VK.** *IASSTD and AIDS Textbook sexually transmitted diseases and AIDS*. 2nd ed. New Delhi: Viva Book; 2009.
2. Guidelines for Vitiligo, Stevens-Johnsons Syndrome & Toxic Epidermal Necrolysis and Psoriasis (IADV&L); 2009.
3. **Sharma VK.** Hand book of urticaria. New Delhi: Massey Art Press; 2008: 90 (total).
5. Sharma VK, Malhotra AK. Leprosy: Classification and clinical aspects. IADVL In: Valia RG, Valia AR (eds). *Text book of dermatology*. 3rd ed. Indian Association of Dermatology, Venereology and Leprology; 2032–69.
4. Sharma VK, Khandpur S. Epidemiology of sexually transmitted infection. In: *IASSTD and AIDS Textbook of sexually transmitted diseases and AIDS*". 2nd ed. New Delhi: Viva Book; 2009: 3–54.
5. Sharma VK, Sethuraman G. Side laboratory procedures in sexually transmitted diseases. In: *IASSTD & AIDS Textbook of sexually transmitted diseases and AIDS*, 2nd Edition, 2009 Hard Cover, Viva Book, p 249-258
6. Sethuraman G, Sharma VK. Treatment of syphilis. In: *IASSTD & AIDS Textbook of sexually transmitted diseases and AIDS*. 2nd ed. New Delhi: Viva Book; 2009: 327–36.
7. Sharma VK, Bansal M. ‘Miscellaneous sexually transmitted diseases’. In: *IASSTD & AIDS Textbook Sexually Transmitted Diseases and AIDS*. 2nd ed. New Delhi: Viva Book; 2009:457–86.
8. Sharma VK, Dhawan J, Tejasvi T. Trichomoniasis and other Protozoal Diseases. In: *IASSTD & AIDS Textbook Sexually Transmitted Diseases and AIDS*. 2nd ed., New Delhi: Viva Book; 2009: 487–512.
9. Murugan S, Malhotra A, Sharma VK. Sexually transmitted diseases in children and adolescent. In: *IASSTD & AIDS Textbook sexually transmitted diseases and AIDS*. 2nd ed. New Delhi: Viva Book; 2009: 557–74.
10. Malhotra S, Sharma VK. Psychosexual disorders. In: *IASSTD & AIDS Textbook Sexually Transmitted Diseases & AIDS*. 2nd ed. 2009 New Delhi: Viva Book; 2009:727–740.
11. Sharma VK, Kumar U. Clinical approach to genital ulcer disease. In: *IASSTD & AIDS Textbook Sexually Transmitted Diseases and AIDS*. 2nd ed. New Delhi: Viva Book; 2009:767–76.
12. Aggarwal K, Sharma VK. Comparative (WHO/CDC/NACO) Treatment of Sexually Transmitted Diseases: 851–68.
13. Malhotra A, Sharma VK. Syndromic approach –Flow Charts NACO 2007. In: *IASSTD & AIDS Textbook Sexually Transmitted Diseases & AIDS*. 2nd ed. New Delhi: Viva Book; 2009: 869–84.

14. Khandpur S, Ramam M. Skin tumours. In: Valia RG, Valia AR (eds). *IADVL Textbook of Dermatology*. 3rd ed. New Delhi: Bhalani Publishing House; 2008:1475–38.
15. Ramesh V, Ramam M. Cutaneous tuberculosis. In: Inamdar A, Sacchidanand S (eds). *Textbook of pediatric dermatology*. New Delhi: Jaypee Brothers; 2009: 237–46.
16. Khaitan BK, Dash S. Immunity and inflammation. In: Valia RG, Valia AR (eds). *IADVL Textbook of dermatology*. 3rd ed.. Mumbai: Bhalani Publishing House; 2008:41–66.
17. Bhat R, Khaitan BK. Skin manifestations in internal disease. In: Valia RG, Valia AR. *IADVL Textbook of Dermatology*. 3rd ed. Mumbai: Bhalani Publishing House; 2008:1347–1409.
18. Khaitan BK. Non-venereal diseases of genitalia. In: Sharma VK. *Sexually transmitted diseases and AIDS*. 2nd ed. New Delhi: Viva Book; 2008:
19. Khandpur S. Co-edited Handbook of Urticaria. In: V.K. Sharma. 1st ed. 2008; and contributed 6 chapters in it.
20. Sharma VK, Jerajani HR, Srinivas CR, Kanwar AJ, Premlatha S, Sengupta SR, *et al*. Guidelines for Vitiligo, SJS-Toxic Epidermal Necrolysis and psoriasis. Therapeutic Guidelines of National IADVL.
21. Gupta S, Malhotra AK. Urethritis, pelvic inflammatory disease and Reiter's Syndrome. In: Valia RG, Valia A (eds). *IADVL Textbook of Dermatology*. 3rd edn. Mumbai: Bhalani; 2008:1848–72.

RESEARCH

Funded Project

[Ongoing]

1. Evaluation of cyctophosphamide pulse therapy as adjuvant in the management of pemphigus. Vinod K. Sharma. Funded by ICMR for 3 years.
2. To study genetic and immunological immunological associations and examine
3. Melanocyte Kerate Network in Vitiligo. Vinod K. Sharma. Funded by DBT for 3 years.
4. Development of DNA Biosensor for detection of Neisseria gonorrhoeae in clinical sample. Vinod K. Sharma.
5. Vasculitis: A clinicopathological and Etiological correlation. Funded by AIIMS for 3 years. Funds: Rs 1 lakh.
6. Randomized clinical trial of Azathioprine weekly pulse versus daily azathioprine for the treatment of Parthenium dermatitis. Funded by ICMR for 3 years. Funds: Rs 3 lakh.

Departmental Projects

[Ongoing]

1. Desmoglein 1 and 3 antibodies in pemphigus
2. Comparative efficacy of 40 mg betamethasone monthly and equivalent doses of biweekly pulse in treatment of alopecia areata

3. Clinical and histopathological profile of PMLE
4. Clinical profile photo dermatoses in India
5. Study of Occupational dermatitis in India
6. To study of effectiveness of 15 mg weekly methotrexate in inducing remission in chronic idiopathic urticaria resistant to antihistamines
7. Dexamethasone–cyclophosphamide pulse therapy in pemphigus. Binod Khaitan.
8. A study to characterize segmental vitiligo. Binod Khaitan.
9. A descriptive study to define the specific clinical features of segmental vitiligo as compared to non-segmental vitiligo and to study the prevalence of co-existent organ specific (TPO) and non-organ specific (ANA) autoimmunity in these patients. Binod Khaitan.
10. A study of knowledge and attitude towards leprosy in people with and without leprosy and measurement of debilitation in leprosy patients. Binod Khaitan.
11. Cutaneous vasculitis- etiological and clinicopathological correlation. Binod Khaitan.
12. A study on isolation, characterization and evaluation of differentiation potential of hair follicle stem cells. Binod Khaitan
13. Development of an intervention module to reduce psychosocial stress in patients with vitiligo. Binod Khaitan.
14. A study of the clinical spectrum of photodermatoses. Binod Khaitan.
15. A study of prevalence of vitamin D deficiency and rickets in children and adolescents with congenital ichthyosis and erythroderma due to keratinizing disorders. Binod Khaitan.
16. Member, Doctoral Committee: Studies on T cell mediated immunosuppression in Visceral Leishmaniasis patients. Binod Khaitan.
17. Comparison of efficacy of PUVA versus PUVAsol in vitiligo. Dr Sujay Khandpur.
18. Clinico-Epidemiological study of palmoplantar psoriasis. Dr Sujay Khandpur.
19. Comparison of topical PUVASOL versus steroid-coal tar combination in palmoplantar psoriasis. Dr Sujay Khandpur.
20. Histological evaluation of palmoplantar psoriasis. Dr Sujay Khandpur.
21. Comparison of Daivobet ointment versus coal tar in chronic plaque psoriasis. Dr Sujay Khandpur.
22. Utility of ELISA testing in establishing the activity of pemphigus vulgaris. Dr Sujay Khandpur.
23. Role of sclerotherapy in vascular malformations. Dr Sujay Khandpur.
24. Utility of Miltefosine in Post kalaazar dermal leishmaniasis. Dr Sujay Khandpur.
25. Role of cyclophosphamide pulse as adjuvant therapy in pemphigus vulgaris. Dr Sujay Khandpur.
26. Clinico-histological and etiological study of acquired palmoplantar keratodermas. Dr Sujay Khandpur.

27. Involvement of Th1/Th2 cytokines in the pathogenesis of pemphigus vulgaris. Dr Sujay Khandpur.
28. Quality of Life and Questionnaire development in vitiligo. Dr Sujay Khandpur.
29. Prevalence of Vitamin D Deficiency in patients with congenital ichthyosis and erythroderma. G. Sethuraman.
30. Clinical and Neurobehavioral profile in children with Tuberous Sclerosis. G. Sethuraman.
31. Molecular genetic studies in Indian patients with ichthyosis and ectodermal dysplasia. G. Sethuraman.

Completed

Effectiveness of Pulse Dye Laser in the treatment of recalcitrant warts in children. Sethuraman G, Richards KA, Hiremagalore RA, Wagner A. Pediatric Dermatology Fellowship, Chicago; 2007–2008.

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Dr Vinod K Sharma was selected as a National President, Indian Association of Dermatologists, Venereologists and Leprologists; Member, Editorial Board, *Journal of European Society of Contact Dermatitis* named ‘Contact Dermatitis’; Member, Editorial Board, *American Society of Contact Dermatitis* named “Dermatitis”.

Dr M Ramam was awarded Bishnupriya Devi award for best original article in IJDVL, 2007

Dr Binod Khaitan was elected President, Faculty Association, AIIMS; Elected Fellow of International Medical Science Academy; Reviewer, *Indian Journal of Dermatology, Venereology and Leprology, Indian Journal of Community Medicine, Indian Journal of Pediatrics*; Member, Thesis Evaluation Committee, IADVL; Member, Editorial Board, *Indian Journal of Cutaneous and Aesthetic surgery*

Dr Sujay Khandpur was selected as Assistant Editor, *Indian Journal of Dermatology, Venereology and Leprology*; Deputy Editor, *Indian Journal of Cutaneous and Aesthetic surgery*; Treasurer, Dermatopathology Society of India; Member Dermato-Therapeutic and Dermatosurgery Guidelines Committee of IADVL; International Fellow American Academy of Dermatology; Reviewer of *Dermatology, Indian Pediatrics, Indian Journal of Dermatology*.

Dr G Sethuraman was selected as a Reviewer for *British J Dermatol, Clin Exp Dermatol, JEADV and IJDVL, Indian J Pediatrics*.

Dr Somesh Gupta was elected as President, Association of Cutaneous Surgeons of India; Membership Secretary of International Union against Sexually transmitted Infections (IUSTI)-World; Co-chair of 12th International Union against Sexually transmitted Infections (IUSTI) World Congress to be held in New Delhi from 2–5 November 2011; Associate Editor of Sexual Health, an official journal of IUSTI-Asia-Pacific (Published from Australia, indexed in Medline/PubMed); Associate Editor of *Journal of Cutaneous and Aesthetic Surgery*.

9.10 Endocrinology and Metabolism

Professor and Head

A.C. Ammini

Professor

Nikhil Tandon

Additional Professor

N. Gupta

Associate Professor

R. Goswami

Assistant Professors

V.P. Jyotsna

R. Khadgawat

EDUCATION

Undergraduate, postgraduate, paramedical training

The department was actively involved in regular training of undergraduate and nursing students while postgraduate students from MD Internal Medicine came for one month posting in the Department of Endocrinology and Metabolism

Long-and short-term training

- Three candidates completed their DM and two new candidates joined the department for DM course.
- Two student joined PhD (Endocrinology).
- Six students joined the department for short-term training of six months.

National and International Conferences

Lecture delivered

Dr R. Goswami

- ‘Approach to metabolic bone disorder and vitamin D deficiency in the Medicine Uupdate’, Department of Medicine, Maulana Azad Medical College and Associated Hospitals, New Delhi.
- ‘Vitamin D deficiency in India: A perspective’, 64th Annual Meeting of the Association of Physician of India, NCR; 30 January 2009.
- ‘Vitamin D deficiency in India and its potential significance’, International Symposium on ‘Frontiers in molecular medicine’, ointly organized by Centre for Molecular Medicine, Jawaharlal Nehru University, New Delhi and Uppsala University, Sweden, at School of Social Sciences-I, Jawaharlal Nehru University, New Delhi; 13–14 February 2009.

Dr R Khadgawat

- ‘OPG in Health and disease’, 4th Annual Conference of Indian Society of Bone & Mineral Research (ISBMR), PGIMER, Chandigarh; 18 October 2008.

- ‘How close are diabetes and depression’, 23rd Annual Conference of Rajasthan Psychiatric Association, Behror, Rajasthan.
- ‘Medical management of osteoporosis’, ICS–2008 Annual conference of Association of Spine Surgeons of India (ASSI), Shimla; 10 August 2008.

Dr N. Tandon

1. ‘Asian audit—an update’, Talk given at the meeting of Committee of National Societies, International Osteoporosis Foundation of the Indian Society for Bone and Mineral Research; Istanbul, Turkey; 8–9 April 2008.
2. ‘ADVANCE’, Annual Conference of Delhi Chapter of the Research Society for the Study of Diabetes in India, Delhi; 29 September 2008.
3. ‘Tight hyperglycemic control: Lessons from ADVANCE in the Indian context’, CAD Meeting, Mumbai; 5 October 2008.
4. ‘Atherosclerosis and Thrombosis’, Jerome Markowitz Gold Medal Oration: The South Asian Society, Delhi; 10 October 2008.
5. ‘Vitamin D Replacement Therapy’, 4th National Conference of the Indian Society of Bone and Mineral Research, Chandigarh; 18 October 2008.
6. ‘Challenges in the management of diabetes in India’, the Indo-US Trade Mission, Delhi; 27 October 2008.
7. ‘Thyroiditis in pediatric and adolescent age groups’, 5th Biennial Scientific Meeting of the Asia Pacific Pediatric Endocrine Society, Seoul; 29–31 October 2008.
8. ‘Pediatric thyroid nodules—clinical and management challenges’, 5th Biennial Scientific Meeting of the Asia Pacific Pediatric Endocrine Society, Seoul; 29–31 October 2008.
9. ‘Low cost technology for diabetes and endocrinology’, Indo-US workshop on Low cost diagnostic and therapeutic medical technologies, Hyderabad; 20 November 2009.
10. ‘Results from the ADVANCE Trial: Indian experience’, Australia-India Diabetes Workshop held as part of the Annual Conference of the Research Society for the Study of Diabetes in India, Hyderabad; 21 November 2008.
11. ‘Origins of the non-communicable disease: The influence of early life events’, Talk delivered as the President of the Biological Sciences Division, National Academy of Sciences, India at the Annual Conference of the NASI; 22 November 2008.
12. ‘BMD in Indians’, Annual conference of the Endocrine Society of India, Kochi; 18–20 December 2008.
13. ‘PN Shah Oration’, Annual conference of the Endocrine Society of India, Kochi; 18–20 December 2008.
14. ‘ACCORD, ADVANCE and the elusive 7’, Annual conference of the Endocrine Society of India, Kochi; 18–20 December 2008.

15. 'Childhood obesity researchable issues', ICMR-CIHR Workshop on childhood obesity, Gurgaon; 14–16 January 2009.
16. 'HbA1c: How low do we go?', Annual conference of the Association of Physicians of India, Noida; 31 January 2009.
17. 'Public Oration: Diabetes', Downtown Hospital Annual Day Celebrations, Guwahati; 15 February 2009.
18. 'Recent concepts on the management of osteoporosis', Annual Conference of the Delhi Rheumatology Association, Delhi; 22 February 2009.
19. 'Diabetes and CVD', Meeting of Physicians Forum, Delhi; 22 February 2009.
20. 'Thyroiditis in children and adolescents', Annual Conference of the Indian Thyroid Society, Hyderabad; 7 March 2009.
21. 'Bone mineral biochemical parameters and bone mineral density in patients of type 1 diabetes with and without tissue transglutaminase antibody positivity', Poster presented at the Annual Conference of the ECCEO, Athens; 18–20 March 2009.
22. 'Correlation between BMD measured by peripheral and central DXA in healthy Indian men aged 20–40 years', Poster presented at the Annual Conference of the ECCEO, Athens; 18–20 March 2009.

Conferences

- Khadawat R, Brar KS, Tandon N, Gahlot M, Yadav CS, Malhotra R, *et al.* High prevalence of vitamin D deficiency in elderly patients with non-traumatic hip fractures. 3rd National Annual conference of Indian Society of Bone & Mineral Research (ISBMR), Chandigarh; 18–19 October 2008.
- Gahlot M, Khadawat R, Eunice EM, Ammini AC, Gupta N. Spinal bone mineral density in growth hormone deficient Indian children. 3rd National Annual conference of Indian Society of Bone and Mineral Research (ISBMR), Chandigarh; 18–19 October 2008.
- Grewal E, Kansara S, Khadawat R, Kachhawa G, Ammini AC, *et al.* Prevalence of gestational diabetes mellitus among women attending a tertiary care hospital. 4th National conference of the Diabetes In Pregnancy Study group India, Chennai; 7–8 February 2009..
- Grewal E, Desai A, Khadawat R, Tandon N, Kriplani A. Assessment of iodine nutrition during pregnancy in north Indian subjects. 6 Annual conference of Indian Thyroid Society, Hyderabad; 7–8 March 2009.
- Manaktala S, Salam R, Khadawat R, Mathur S, Chandan, Bal CS. Rock-thyroid: Unusual thyroid calcification. 6 Annual conference of Indian Thyroid Society, Hyderabad; 7–8 March 2009.
- Grewal E, Kansara S, Khadawat R, Tandon N, Kriplani A, Gupta N. Prevalence of thyroid peroxidase antibody positivity in first trimester of pregnancy in Asian-Indian subjects. Presented in 6th Annual conference of Indian Thyroid Society, Hyderabad; 7–8 March 2009..

RESEARCH

Funded projects

Ongoing

1. A randomized, double, placebo-controlled, parallel-group study to determine whether, in patients with type 2 diabetes at high risk for cardiovascular and renal events, aliskiren, on top of conventional treatment, reduces cardiovascular and renal morbidity and mortality. Nikhil Tandon. Funded by George Institute, Hyderabad for 5 years (2008–2013).
2. Registry of people with diabetes in India with young age at onset. Nikhil Tandon. Funded by Indian Council of Medical Research (ICMR) for 5 years (2006–2011).
3. Assessment of dose-dependent effects of LY2189265 on glycemic control in patients with type 2 diabetes treated only with life style interventions. Nikhil Tandon. Funded by Eli-Lilly India Company Pvt. Ltd. for 8 months (2009–2010). Funds: Rs 6.5 lakh.
4. Safety and efficacy of exenatide once weekly injection versus metformin, dipeptidyl Peptidase-4 Inhibitor or Thiazolidinedione as Monotherapy in Drug. Naïve Patients with Type 2 Diabetes (H-80-MC-GWCH). [Dr. Nikhil Tandon]. Funded by Eli-Lilly India Company Pvt. Ltd. for 1 year (2009–2010). Funds: Rs 10.5 lakh.
5. Genomic analysis of MHC genes in type 1 diabetes in the Indian Population. N.K. Mehra. Funded by ICMR for 3 years (2007–2010).
6. Centre for prevention and control of diabetes and Cardio-metabolic diseases: an Ovation Center. Funded for 5 years (2008–2013). Funds: \$1.1 million.
7. Effect of glycemic control, depression and quality of life in patients of diabetes mellitus with rhythmic breathing (sudashan kriya yoga and pranayam) in addition to standard treatment of diabetes. Funded by ICMR for 3 years (2008–2009). Funds: Rs 9,80,099.
8. To assess the prevalence of vitamin D deficiency in patients with non-traumatic fracture of hip. Dr R. Khadawat. Funded by AIIMS (intramural). Funds: Rs 55,000.
9. Pattern and significance of single nucleotide polymorphism at select sites in two important candidate genes, i.e. Vitamin D receptor and parathormone genes in subjects with osteoporosis. Funded by DRDO New Delhi, Ministry of Defence for 3years. Funds: Rs 9.75 lakh.
10. Role of oral vitamin D as an adjunct therapy in category I pulmonary tuberculosis long with assessment of immunological parameters: Randomized double blind trial. Funded by Department of Biotechnology, Government of India for 3 years. Fund: Rs 90.7 lks.
11. Prevalence and significance of celiac disease in patients with type-1 diabetes Funded by ICMR, New Delhi for 3 years. Funds: Rs 19.7 lakh.

Completed

- A phase 3 open label, parallel group study to evaluate efficacy and safety of Human Insulin Inhalation Powder (HIIP) compared to preprandial Injectable Insulin in Insulin Naïve patients with type 2 diabetes mellitus. Nikhil Tandon. Funded by Eli-Lilly.

- A Phase IIb/III randomized, placebo-controlled clinical trial to study the safety and efficacy of MK0364 in overweight and obese patients with type 2 diabetes mellitus (T2DM). Nikhil Tandon. Funded by MSD Pharmaceuticals.
- A multicenter, double blind randomized, placebo controlled study of MK-0431 in patients with type 2 diabetes who have inadequate glycemic control. Nikhil Tandon. Funded by MSD Pharmaceuticals.
- Reduction in the occurrence of threatening diabetic macular edema (B7A-MC-MBDL). Nikhil Tandon. Funded by Eli Lilly Ltd. (2005–2008). Funds: Rs 5 lakh.
- Fetal and childhood growth and the effect of lifestyle interventions on CHD risk factors in young Indian adults. Nikhil Tandon. Funded by British Heart Foundation (2005–2008). Funds: Rs 141 lakh.

PUBLICATIONS

1. Chathurvedi D, Khadgawat R, Kulshrestha B, Gupta N, Joseph AA, Diwedi S, *et al.* Type 2 diabetes increases risk for obesity among subsequent generations. *Diabetes Technol Ther* 2009;**11**:393–8.
2. Kumar R, Tanwar M, Ammini AC, Kumar R, Gupta NP, Sharma RK, *et al.* Robertsonian translocation and their role in pathogenesis of recurrent *in vitro* fertilization failure. *Med Sci Monit* 2008;**14**:CR617–CR620.
3. Kulshreshtha B, Ganie MA, Praveen EP, Gupta N, Lal Khurana M, Seith A, *et al.* Insulin response to oral glucose in healthy, lean young women and patients with polycystic ovary syndrome. *Gynecol Endocrinol* 2008;**24**:637–43.
4. Shankar S, Handa R, Aneja R, Marwaha V, Ammini AC, Aprajita V. Bone mineral density in Indian women with rheumatoid arthritis. *Rheumatol Int* 2009;**29**:377–81. [Epub 2008 Sep 16].
5. Chandra ST, Priya G, Khurana ML, Jyotsna VP, Sreenivas V, Dwivedi S, *et al.* Comparison of gliclazide with insulin as initial treatment modality in newly diagnosed type 2 diabetes. *Diabetes Technol Ther* 2008;**10**:363–8.
6. Pakhetra R, Priya G, Jyotsna VP, Seith A, Ammini AC. Insulinoma: reversal of brain magnetic resonance imaging changes following resection. *Neurol India* 2008;**56**:192–4.
7. Kulshreshtha B, Marumudi E, Khurana ML, Kriplani A, Kinra G, Gupta DK, *et al.* Fertility among women with classical congenital adrenal hyperplasia: Report of seven cases where treatment was started after 9 years of age. *Gynecol Endocrinol* 2008; **24**:267–72.
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Chapter in book

Goswami R. Vitamin D deficiency in India: A perspective. In: Agarwal AK (ed). *Medicine Update 2009* A publication of the Association of physician of India. New Delhi: Jaypee Brothers;2009:484–92.

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Dr Nikhil Tandon Downtown Public Oration, Guwahati; President of the Biological Sciences Section of the National Academy of Science, India (Allahabad) and Presidential lecture in the Annual Conference of the NASI; Dr PN Shah Oration awarded by the Endocrine Society of India; Jerome Markowitz Memorial Oration awarded by the South Asian Society for Atherosclerosis and Thrombosis (SASAT).

Dr R Goswami won Shanti Swarup Bhatnagar prize for Medical Sciences, 2008, Member , Selection Committee for the Senior Research Fellow and Research Associates by the ICMR from 2007 to date; Member , selection committee for awarding MD, DM and MCh thesis financial grant by The Indian Council of Medical Research (ICMR) 2009 ; .

PATIENTS CARE

Endocrine OPD

Month	New Cases	Old cases	Total
April 2008	746	1729	2475
May 2008	794	2062	2856
June 2008	800	1899	2699
July 2008	844	2138	2982
August 2008	773	1860	2633
September 2008	860	1969	2829
October 2008	699	1578	2277
November 2008	717	1731	2448
December 2008	749	1894	2643
January 2009	749	1859	2608
February 2009	847	1848	2695
March 2009	866	1905	2771
Total	9444	22472	31916

Pediatric and Adolescent Endocrinology Clinic (PAEC)

New Cases	310
Old cases	1402
Total	1712

OPD activity

The department has OPD on all six working days with two specialty clinics, Pediatric and Adolescent Endocrinology clinic, PAEC (every Monday, 2–5 p.m.) and Diabetes of Young clinic, DOY (Every Saturday 9–1 pm).

Laboratory Investigations

The total number of hormone assays done during this period was 44,703, while metabolic laboratory of the department carried out 19,855 investigations. The break-up of these investigations is given below.

<u>Hormone</u>	<u>Number of samples assayed</u>
1) T4	7,543
2) TSH	11,161
3) TPO	1,435
4) LH	1,291
5) FSH	1,463
6) PRL	1,390
7) Testosterone	1,435
8) Cortisol	2,764
9) 17-OH Progesterone	281
10) DHEAS	644
11) ACTH	1,436
12) 25-OH Vitamin. D	1,432
13) PTH	2,404
14) Insulin	4,617
15) C-Peptide	2,935
16) GAD Antibody	212
17) Growth hormone	394
18) Free T4	991
19) Free T3	474
20) T3	473
Total	44,703

Investigations done in the Metabolic Laboratory

<u>Investigation</u>	<u>Number of samples</u>
Blood glucose	9,998
Glycosylated haemoglobin	6,155
Urinary creatinine	1,508
Urinary albumin	1,508
Urine pH	218
Osmolality	318
Calcium	50
Phosphorus	50
Alkaline Phosphatase	50

9.11 Forensic Medicine

Professor and Head

T.D. Dogra

Additional Professor

R.K. Sharma

O.P. Murty

D.N. Bhardwaj
(relieved on 31/3/09 on VRS)

Associate Professor

S.K. Gupta

Assistant Professors

Millo Tabin

Sanjeev Lalwani (JPNATC)

Adarsh Kumar (JPNATC)

Scientist II

Anupama Raina

Scientist I

A.K. Jaiswal

EDUCATION

The department is actively engaged in undergraduate and postgraduate teaching with five postgraduate (MD) students and one Ph D student. The department is also imparting training in DNA Fingerprinting and Toxicology to BSc/MSc students from other Indian universities

CONTINUING MEDICAL EDUCATION

Conferences

- The department co-organized 9th Conference of ICFMT and SAFCON 2008 at Amity Institute Noida –.
- The department organized Wet workshop in collaboration with NICFS, Rohini for Forensic Scientists.

Lectures delivered

The departmental faculty/staff participated in training programmes organized by Academy of CBI, NICFS, Amity Institute, Delhi Judicial Academy, Delhi Police (HRD Cell), Delhi Police Training School. Lectures and demonstrations were held for CBI officials, police officers, judicial officers, medical officers and forensic science experts from all over country. Professor T.D. Dogra delivered lecture on 'Medical Ethics' at JLN Medical College, Aligarh . Dr Adarsh Kumar delivered lecture on 'Medico-legal aspects of record keeping hosted by IMA, Lucknow ' .

RESEARCH

Departmental Projects

Completed

1. A comprehensive autopsy study of sudden natural deaths in South Delhi

Ongoing

1. A comprehensive autopsy study of unnatural deaths in children and women
2. Auditing of asphyxial death
3. A comprehensive autopsy study of fatal poisoning in South Delhi
4. A comprehensive autopsy study of injury pattern in fatal road traffic accidents in South Delhi
5. Inferring genetic diversity and molecular relatedness among the Indian Saraswat community at various STR loci.

PUBLICATIONS

Journals

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2. Behra C, Rautji R, Lalwani S, Dogra TD. A comprehensive study of motorcycle fatalities. *JIAFM* 2009;**31**:
3. Behra C, Rautji R, Lalwani S, Dogra TD. Drowning death in South Delhi. (1999–2005). *Ind Med Gaz* 2008;**CXI**: 359–62
4. Bhardwaj DN, Sharma SK. Epidemiological study of medico-legal autopsies of elderly in Delhi in a tertiary care hospital from 2000–2004. *Ind Med Gaz* 2007; **CXL**:74–6.
5. Dogra TD, Bhardwaj DN, Sharma GA, Kumar S, Lalwani S. Postmortem examination of custodial deaths. *JIMA* 2008;**106**:101–3.
6. Jaiswal AK, Kumar Adarsh. Determination of Quinolphos in biological sample by HPTLC. *Malaysian J Forensic Pathology and Science* 2008;**3**:89–114.
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8. Jaiswal AK, Kaur A, Millo T, Kumar A, Gupta M. Determination of Malathion in blood and urine using TLC. *JIAFM* 2008;**30**:15–21.
9. Jaiswal AK, Millo T, Murty OP. Toxicological Mannual series, Article IV, extraction and isolation methods for miscellaneous poisons from biological sample. *International J Med Toxicol and Legal Med* 2008;**10**:22–5.

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11. Jaiswal AK, Millo T, Mewar SK, Sharma M, Moon Dr, Moharana M. Do's and don't for sophisticated analytical instruments, Vol 3. *J For Med and Toxicol* 2008; **25**:14–19.
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14. Kumar A, Lalwani S, Agarwal D, Rautji R, Dogra TD. Fatal Road traffic accidents and their relationship with head injuries: An epidemiological survey of five years. *Ind J Neurotrauma* 2008;**5**:63–67.
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16. Kumar A. Exhumation—plugging of pitfalls. *Indian Internet J Forensic Medicine and Toxicology* 2008;**6**:48–51
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18. Millo T, Bharadwaj DN. Medico-legal examination of sexual assault case—a review. *Obs and Gynae Today* 2008;**23**:242–44.
19. Millo T, Jaiswal AK, Behra C. Collection, preservation and forwarding of biological samples for toxicological analysis in medico-legal cases—an update. *JIAFM* 2008;**38**:96–100.
20. Millo T. Documentation in medicolegal cases. *J For Med and Toxicol* 2008;**25**:39–42.

PATIENT CARE

Casualty services

The department continued to provide round-the-clock coverage to the casualty in medicolegal cases, e.g. injury, sexual offences, poisoning and other complicated medicolegal cases. The department is also attending all the calls pertaining to medical examination in police and judicial custody.

Medicolegal postmortem performed: 1254+893(JPNATC) =2147

The department provided consultation services to the CBI, crime branch and other central and state investigating agencies in complicated medicolegal postmortem conducted at other centers of the country and also participated in board postmortem cases. At trauma centre **893** autopsies were conducted.

Court attendance by the members of the department: 800

Doctors of the department also attended court in CBI cases as experts.

Clinical forensic medicine

The department examined cases of age estimation, medical examination, marriage disputes, potency, DNA fingerprinting, etc referred by the court, CBI and other investigating agencies. Thirty-five such cases were dealt in 2008–09.

DNA Fingerprinting

The department is providing training to the candidates of various universities. It is performing DNA fingerprinting test in selected medicolegal cases. 42 samples were processed for DNA fingerprinting during 2008–09. Department also provided training to 28 students in DNA fingerprinting and toxicology.

Medical toxicology

Tests for various poisons, e.g. heavy metals, opiates, benzodiazepines and alcohol were done in toxicology laboratory. 115 such tests were performed during this period.

Community services

The department participated in training programme organized by CBI officials, police officers, medical officers, judges public prosecutors and forensic science experts from all over country.

AWARDS AND HONOURS

Professor T.D. Dogra was given felicitation for ‘Outstanding contribution in field of Forensic Medicine’, by Indian Congress of Forensic Medicine (ICFMT).

Dr Sanjeev Lalwani was awarded a Scroll of honour from Pakistan Society of Forensic Medicine and Toxicology. He was also awarded fellowship of Indian Congress of Forensic Medicine and Toxicology (ICFMT).

Dr Anupama Raina, Scientist II was given ‘Meritorious performance award’ by Pakistan Society of Forensic Medicine and Toxicology. Dr Raina, Scientist II was given best performance award of ICFMT :2008.

Dr Ashish Jain (MD Student) was awarded best poster award in conference, SAFCON-2008.

9.12 Gastroenterology and Human Nutrition Unit

Professor and Head

S.K. Acharya

Professors

Y.K. Joshi

Umesh Kapil

Anoop Saraya

Associate Professors

Pramod Garg

Vineet Ahuja

Govind K. Makharia

EDUCATION

Undergraduate, postgraduate, PhD and paramedical training programme remained the same.

Short- and long-term training

Eight candidates underwent training during 2008–09 for a period of 3 months to 6 months. Thirteen DM candidates and seven PhD candidates underwent long-term training.

Continuing Medical Education

The department organized Asia Pacific Digestive Week (APDW-2008) in conjunction with Annual Conference of Indian Society of Gastroenterology, Ashoka Hotel, New Delhi, 13–16 September 2008.

National and International Conferences

The department faculty delivered 39 lectures at international and national conferences/meetings.

RESEARCH

Funded projects

Completed

1. Randomised trial of pegylated interferon (Peg-) vs. lamivudine followed by PEG-l for 1 year among patients with chronic hepatitis-B. S.K. Acharya. Funded by Fulford, India for 4 years. Funds: Rs 24 lakh.
2. Screening of patients with functional bowel disease, short stature, metabolic bone disease, amenorrhoea and infertility for celiac disease. Govind Makharia. Funded by AIIMS (2006–2008). Funds: Rs 94,000.

Ongoing

1. Double blind placebo controlled randomized trial of L-ornithine-L aspartate among patients with acute liver failure. S.K. Acharya. Funded by Intas Pharmaceutical for 3 years. Funds: Nil (company supplies drug and placebo).

2. Advanced Centre for liver diseases (institute and different projects in liver diseases). Projects include (i) randomized controlled trial of somatostatin monotherapy vs. somatostatin and nitroglycerine infusion in acute variceal bleeding, (ii) aetiology, clinical presentation and therapy among Indian patients with primary liver cancer, (iii) hepatic venous outflow tract obstruction: etiology and results of angioplasty, (iv) probiotics for spontaneous bacterial peritonitis, and (v) neutrophilic function studies in acute liver failure, (vi) randomized double blind placebo control trial of L-ornithine, L-Aspartate in acute liver failure. S. K. Acharya. Funded by ICMR. Funds: Rs 2 crore.
3. A multicentric randomized controlled clinical trial of adefovir, adefovir+lamivudine and combination of adefovir and glycyrrhizin in HBV-related decompensated cirrhosis. S.K. Acharya. Funded by ICMR for 3 years. Funds: Rs 18.47 lakh.
4. Identification of biomarker (s) for differentiation of Crohn's disease from intestinal tuberculosis using proteomics. S.K. Acharya. Funded by DBT for 3 years. Funds: Rs 43 lakh.
5. An open label responses adaptative study of telbivudine in adults with HBeAg compensated chronic hepatitis B. S.K. Acharya. Funded by Novartis for 3 years. Funds: Rs 11.11 lakh.
6. An open label responses adaptative study of telbivudine in adults with HBeAg negative chronic hepatitis B. S.K. Acharya. Funded by Novartis for 3 years. Funds: Nil (company supplies drug and placebo).
7. Is idiopathic chronic pancreatitis a pre-malignant disease? Pramod Garg. Funded by ICMR for 3 years. Funds: Rs 14 lakh.
8. A study of mutational and histopathological risk factors for gallbladder cancer in patients with gallstones. Pramod Garg. Funded by DBT for 3 years. Funds: Rs 32 lakh.
9. Comparison of single dose SPD 476 with mesalamine. Vineet Ahuja. Funded by Shire Pharma Ltd, Multicentre International trial (2005–09). Funds: Rs 6 lakh.
10. Efficacy and tolerability of probiotics in microscopic colitis. Vineet Ahuja. Funded by CD Pharma Ltd (2006–08). Funds: Rs 5 lakh.
11. Efficacy of curcumin enemas in patients with mild to moderate ulcerative colitis. Vineet Ahuja. Funded by Himalaya Drug Company Ltd (2007–09). Funds: Rs 5 lakh.
12. Detection of mycobacterial pathogens in patients with Crohn's disease. Govind Makharia. Funded by DBT (2007–10). Funds: Rs 35.4 lakh
13. A phase 2/3 multicenter, randomized, placebo-controlled, double-blind study to evaluate the safety and efficacy of golimumab induction therapy, administered subcutaneously, in subjects with moderately to severely active ulcerative colitis. Govind Makharia. Funded by Centocor (2008–09). Funds: Rs 6 lakh.
14. A phase 3 multicenter, randomized, placebo-controlled, double-blind study to evaluate the safety and efficacy of golimumab maintenance therapy, administered subcutaneously, in subjects with moderately to severely active ulcerative colitis. Govind Makharia. Funded by Centocor for 4 years (2008–12). Funds: Rs 10 lakh.

15. Efficacy and safety of mesalamine delayed-release Tablets (1.2 g), par Pharmaceutical (Test Drug) in the treatment of active mild to moderate ulcerative colitis: A Double Blind, Double Dummy, Multicentre Randomized Phase III, Comparison with Placebo and Lialda® (1.2 g) Mesalamine Delayed-Release Tablets, Shire US Inc (Reference drug)-292-07. Govind Makharia. Funded by Lambda for 1 year (2008–9). Funds: Rs 4 lakh.
16. A multi-centric study on treatment of abdominal tuberculosis (intestinal or peritoneal): A randomized controlled trial to compare the 6 months of Cat I treatment with 9 months of Cat I Treatment (extension for 3 months) in abdominal tuberculosis under the Revised National Tuberculosis Control program. Govind Makharia. Funded by Central TB Division, Ministry of Health and Family Welfare, Government of India for 4 years (2008–11). Funds: Rs 57 lakh
17. A pilot study to estimate the community prevalence of celiac disease. Govind Makharia. Funded by ICMR for 1 year (2008–09). Funds: Rs 14.5 lakh.
18. Characterization of tight junction proteins in patients with Crohn’s disease and celiac disease. Govind Makharia. Funded by DST for 3 years (2009–11). Funds: Rs 24.5 lakh.

Departmental projects

Completed

1. Acute viral hepatitis in diabetics: Evaluation of natural course
2. Three month treatment of chronic hepatitis C with interferon a2b and ribavirine
3. Characterization, natural course, and outcome of patients with organized pancreatic necrosis.
4. A study of the risk factors for cancer of the pancreas
5. A study of the risk factors for cancer of the gallbladder
6. Relationship between intestinal permeability in anti-*Saccharomyces cerevisiae* antibody in patients with Crohn’s disease
7. Nutritional and biochemical assessment of patients with inflammatory bowel disease
8. A study of assessment of dietary fiber intake in patients with irritable bowel syndrome and healthy individuals
9. Differentiation of Crohn’s disease and intestinal tuberculosis: Therapeutic trial of anti-tuberculous therapy

Ongoing

1. Hepatitis Be antigen negative chronic hepatitis B. Magnitude, viral and host characteristics
2. Immunotolerant chronic HBV infection: Natural course
3. Endoscopic biliary drainage versus conservative treatment for patients with inoperable cancer of the gallbladder with obstructive jaundice: A randomized controlled trial

4. To develop mouse model of acute pancreatitis and to correlate the severity of pancreatitis with the levels of TNF- α and IL-6 cytokines
5. Dose ranging study of steroid (oral and intravenous) in patients with moderate to severe ulcerative colitis
6. Retinoic acid is the microenvironmental cue determining disease activity in patients with ulcerative colitis
7. Genomic diversity of *E. histolytica* isolates and identification of genotype–clinical phenotype correlations
8. Dynamics of differential T regulatory cell expression in inflammatory bowel disease and intestinal tuberculosis
9. Role of leukocytapheresis in steroid dependent/refractory patients with ulcerative colitis
10. Natural history of steroid resistant and steroid responsive patients with ulcerative colitis
11. Fox p3 mRNA expression in patients with Crohn’s disease and intestinal tuberculosis
12. A study of assessment of dietary fibre intake in patients with irritable bowel syndrome and healthy individuals
13. Prevalence of celiac disease in irritable bowel syndrome and dyspepsia
14. Effect of steroid in celiac disease: A randomized controlled trial

Collaborative Projects

Completed

1. Role of diffusion MRI, MDCT and EUS in the evaluation of patients with pancreatic head mass (with Radiology).
2. Quality of life assessment following palliative esophageal stenting (with Gastrointestinal Surgery)
3. A prospective study to evaluate the role of *Helicobacter pylori* in benign and malignant hepatobiliary disease (with Surgery)
4. Molecular typing of *Campylobacter jejuni* by PCR and its subtyping using PCR-RFLP and PFGE) (with Microbiology)
5. A double blind randomized trial to evaluate efficacy and tolerability of probiotics in mild to moderate ulcerative colitis. (with Multicentre, DMC Ludhiana, and PSRI, New Delhi)
6. Genetics of inflammatory bowel disease in Indians and Asians migrated to Canada (with Mount Sinai Hospital, Toronto, Canada)
7. A study of emerging parasitic agents (intestinal coccidia and microsporidia) in the aetiology of malabsorption syndrome (with Microbiology).

8. Autonomic and immune functions in inflammatory bowel disease: Effect of yogic intervention (with Physiology).
9. A comparison of metabolites in the involved and non-involved segment of the colon in patients with inflammatory bowel disease using MR spectroscopy (with Nuclear Magnetic Resonance).
10. Prevalence of osteoporosis and osteopenia in patients with inflammatory bowel disease. (with Endocrinology and Metabolism).
11. Functional magnetic resonance imaging and magnetic resonance imaging in patients with achalasia cardia (with Nuclear Magnetic Resonance).

Ongoing

1. Role of surface promoter mutations in hepatitis B surface antigen production and secretion in occult hepatitis B virus infection (with Pathology).
2. HBV mutants among patients with acute and chronic liver disease (with Pathology).
3. Cellular and humoral immunity studies among patients with acute hepatitis E virus infection (with Pathology).
4. HCV quantitation assay and HEV quantitation assay development and their relevance (with Pathology).
5. A randomized trial of endoscopic versus laparoscopic removal of common bile duct stones in patients with gallstones and CBD stones (with Surgery).
6. Comparative evaluation of PET CT scan and EUS in patients with suspected pancreatic malignancy (with Nuclear Medicine)
7. Randomised trial of endoscopic stenting versus cholecystojejunostomy in patients with peri-ampullary cancer with obstructive jaundice (with GI Surgery).
8. Role of TNF- α in the pathogenesis of experimental acute pancreatitis and the effect of anti-TNF- α therapy in attenuating the severity of pancreatitis and in the subsequent regeneration of the pancreas (with Anatomy).
9. Application of specific amplification of *Entamoeba histolytica* DNA for the diagnosis of amoebic liver abscess directly from ultrasound guided aspirated pus (with Microbiology).
10. Identification and molecular characterization of bacterial flora in inflammatory bowel disease (with Jawaharlal Nehru University)
11. Studies on metronidazole resistance in laboratory grown and patient derived *Entamoeba histolytica* (with Jawaharlal Nehru University)
12. Derivation of a risk score to predict risk of advanced colorectal cancer (Collaborative study, with Asia Pacific Colorectal Cancer Study Group).
13. Attitude towards colorectal cancer (Collaborative study, with Asia Pacific Colorectal Cancer Study Group).

14. Prevalence of celiac disease in high risk group such as seizure, short stature, metabolic bone disease (with Endocrinology and Neurology).
15. Prevalence of celiac disease in autoimmune diseases (autoimmune thyroid diseases, rheumatoid arthritis, systemic lupus erythematosus, progressive systemic sclerosis, juvenile arthritis) (with Endocrinology and Medicine).
16. Brain activation in response to visual and auditory cues in patients with irritable bowel syndrome (with Nuclear Magnetic Resonance).
17. PET-CT enteroclysis: A new technique for evaluation of small intestinal inflammatory diseases (with Nuclear Medicine).
18. PET-CT colonography: A new technique for evaluation of activity and extent of ulcerative colitis (with Nuclear Medicine).
19. PET-CT colonography: Evaluation of terminal ileal disease (Nuclear Medicine).
20. Detection, identification and molecular characterization of intestinal coccidia and microsporidia in patients with chronic diarrhoea and malabsorption syndrome (with Microbiology).
21. Reintroduction of anti-tubercular drugs in ATT induced hepatitis: Randomized controlled trial (with Medicine)
22. Effect of treatment (laparoscopic cardiomyotomy and pneumatic dilatation) on structural and functional abnormalities of the lungs in achalasia (with General Surgery)
23. Genetic study of *Giardia lamblia* (with Microbiology).

PUBLICATIONS

Journals

1. Acharya SK. Does the level of hepatitis B virus vaccination in health-care workers need improvement? *J Gastroenterol Hepatol* 2008;**23**:1628–31.
2. Balakrishnan V, Unnikrishnan AG, Thomas V, Choudhuri G, Veeraraju P, Singh SP, *et al.* Chronic pancreatitis. A prospective nationwide study of 1,086 subjects from India. *JOP* 2008;**9**:593–600.
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4. Banerjee D, Deb R, Dar L, Mirdha BR, Pati SK, Thareja S, Falodia S, Ahuja V. High frequency of parasitic and viral stool pathogens in patients with active ulcerative colitis: Report from a tropical country. *Scand J Gastroenterol* 2009;**44**:325–31.
5. Benjamin J, Makharia GK, Ahuja V, Kalaivani M, Joshi YK. Intestinal permeability and its association with the patient and disease characteristics in Crohn's disease. *World J Gastroenterol* 2008;**14**:1399–405.

6. Benjamin J, Makharia GK, Joshi YK. Association between intestinal permeability and anti-Saccharomyces cerevisiae antibodies in patients with Crohn's disease. *Inflamm Bowel Dis* 2008;**14**:1610–11.
7. Bhardwaj P, Garg PK, Maulik SK, Saraya A, Tandon RK, Acharya SK. A randomized controlled trial of antioxidant supplementation for pain relief in patients with chronic pancreatitis. *Gastroenterology* 2009;**136**:149–159.e2.
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9. Bhatia V, Garg PK, Gupta SD, Dash NR, Saluja SS, Madan K. Demonstration of peristalsis in gastric duplication cyst by EUS: implications for diagnosis and symptomatology (with videos). *Gastrointest Endosc* 2008;**68**:183–5.
10. Bhatia V, Singhal A, Panda SK, Acharya SK. A 20-year single-centre experience with acute liver failure during pregnancy: is the prognosis really worse? *Hepatology* 2008;**48**:1577–85.
11. Falodia S, Garg PK, Bhatia V, Ramachandran V, Dash NR, Srivastava DN. EUS diagnosis of a left gastric artery pseudoaneurysm and aneurysmogastric fistula seen with a massive GI haemorrhage (with video). *Gastrointest Endosc* 2008;**68**:389–91.
12. Garg PK. Refining papillary balloon dilation: Less is better! *J Gastroenterol Hepatol* 2008;**23**:824–7.
13. Ghoshal UC, Abraham P, Bhatt C, Choudhuri G, Bhatia SJ, Shenoy KT, *et al.* Epidemiological and clinical profile of irritable bowel syndrome in India: Report of the Indian Society of Gastroenterology Task Force. *Indian J Gastroenterol* 2008;**27**:22–8.
14. Kapil U. Time to stop giving indiscriminate massive doses of synthetic vitamin A to Indian children. *Public Health Nutr* 2009;**12**:285–6.
15. Kapil U. Urinary iodine excretion levels amongst schoolchildren in Haryana. *Indian Pediatr* 2009;**46**:57–9.
16. Kaur S, Kapil U. Prevalence of overweight and obesity in school children in Delhi. *Indian Pediatr* 2008;**45**:330–1.
17. Kaur S, Sachdev HP, Dwivedi SN, Lakshmy R, Kapil U. Prevalence of overweight and obesity amongst school children in Delhi, India. *Asia Pac J Clin Nutr* 2008;**17**:592–6.
18. Khadgawat R, Makharia GK, Puri K. Evaluation of bone mineral density among patients with inflammatory bowel disease in a tertiary care setting in India. *Indian J Gastroenterol* 2008;**27**:103–6.
19. Kumar R, Singla V, Acharya SK. Impact and management of hepatitis B and hepatitis C virus co-infection in HIV patients. *Trop Gastroenterol* 2008;**29**:136–47.
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26. Saluja SS, Gulati M, Garg PK, Pal H, Pal S, Sahni P, *et al.* Endoscopic or percutaneous biliary drainage for gallbladder cancer: A randomized trial and quality of life assessment. *Clin Gastroenterol Hepatol* 2008;**6**:944–50.e3.
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Chapters in Books

1. Paul SB, Gamanagatti SR, Gupta AK, Acharya SK. Clinical Aspects of Liver Cirrhosis: A Perspective for the Radiologist. In: Gupta AK, Chowdhury V, Khandelwal N. *AIIMS-MAMC-PGI, Diagnostic Imaging: Hepatobiliary System*. New Delhi: Jaypee Brother; 2008:292–304.

2. Acharya SK. Acute liver failure. In: Shah SN (ed). *API Textbook of Medicine*. Mumbai: Association of Physicians of India; 2008:690–1.
3. Gupta P, Acharya SK, Panda SK. Hepatitis E virus vaccine. In: Sharma SK, Singhal RK, Agarwal AK (eds). *Adult immunisation*. Mumbai: API; 2009:66–76.
4. Ahuja V, Acharya SK. Granulomatous hepatitis. In: Sharma SK (ed). *Tuberculosis*. 2nd ed. New Delhi: Jaypee Brothers; 2009:294–303.
5. Sharma MP, Ahuja V. Abdominal (Gastrointestinal tract) tuberculosis in adults. In: Schaff HS, Zumla A (eds). *Tuberculosis—A comprehensive clinical reference*. London: Saunders Elsevier; 2009:424–31.
6. Sharma MP, Makharia GK. Upper gastrointestinal bleeding. In: Sharma OP (ed). *Geriatric care: A text book of geriatrics and gerontology*. New Delhi: Viva Books; 2008:210–16.
7. Makharia GK, Sharma MP. Gastrointestinal endoscopy. In: Sharma OP (ed). *Geriatric care: A text book of geriatrics and gerontology*. New Delhi: Viva Books; 2008:93–4.
8. Goswami P, Das CJ, Makharia GK. Non invasive tools for diagnosis of inflammatory bowel disease. In: Goenka GK, Sethy PK (eds). *Inflammatory bowel disease* Kolkata: Sailee; 2008:32–52.
9. Makharia GK, Falodia S. Benign biliary stricture. In: Mahtab MA, Rahman S (eds). *Text Book of Hepatology*. Chennai: Elsevier; 2009: 578–90.
10. Makharia GK. Crohn’s disease in India: Searching for the needle in the haystack. In: Agarwal AK (ed). *Medicine Update 2009*. New Delhi: Association of Physicians of India; 2009:577–84.
11. Makharia GK. Celiac disease in India. In: Das AK (ed). *Postgraduate Medicine. Vol. XXIII*. Navi Mumbai: Oscar Offset; 2009:368–75.

PATIENT CARE

Special clinics

Name of the clinic	New cases	Old cases
Liver	919	7205
Gallstone and pancreas	377	1236
IBD and ulcer	179	1603
Interventional	333	221

Routine clinic

New cases	14,996
Old cases	32,348

Procedures

Endoscopy	12,000
Colonoscopy	1,890
Endoscopic sclerotherapy and variceal ligation	3,000
Sigmoidoscopy	370
Side viewing endoscopy	140
Endoscopic cholangiopancreatography	1,020
Endoscopic ultrasound	250
Ultrasound	4,000

Tests undertaken in the department

1. Serum ceruloplasmin	530
2. Serum copper	544
3. 24-hour urinary copper	562
4. TNF- α	404
5. IL-6	524
6. IL-1 α	86
7. Adeponectin	86
8. Insulin	86
9. Lipid peroxidation	577
10. Free radical antioxidant potential	356
11. Vitamin C	592
12. Leptin	86
13. Superoxide dismutase	281
14. TtG-1GA	1200
15. Nitric oxide	338
16. Neutrophil function test	90
17. Melatonin	260
18. IL-1 α	238
19. IL-8	238
20. IFN- γ	238
21. MCP-1	200
22. HBV-DNA (PCR)	863
23. HBV-DNA (Real Time PCR)	150

24. HCV-RNA (PCR)	750
25. HEV-RNA (PCR)	70
26. Plasma glutamina (HPLC)	450
27. Bile acid (HPLC)	92
28. Il-6 (PCR)	200
29. K-ras mutation (PCR)	120
30. Ca19.9	180
31. Pancreatic tissue DNA	114
32. Matrix metalloproteinase-1	40
33. Matrix metalloproteinase-2	182
34. Matrix metalloproteinase-8	101
35. Matrix metalloproteinase-9	101
36. IgG4	20
37. LOH (PCR)	50
38. FFPE tissue section DNA	25
39. TNF- α (PCR)	200
40. Plasma renin activity	80
41. Myeloperoxidase activity	35
42. L-Cathepsin	80
43. Antiendotoxin antibody (IgG)	80
44. Antiendotoxin antibody (IgM)	80
45. C reactive protein	80
46. D-xylose	670
47. Faecal chymotrypsin	187
48. Faecal fat	190
49. Hydrogen breath test	236
50. Blood ammonia	200
51. Prothrombin time	1500

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Dr Pramod Garg was awarded an Overseas Associateship by the Department of Biotechnology for 6 months in 2008.

Dr Vineet Ahuja was awarded ICMR Young Biomedical Fellowship, June–December 2008 at Inflammatory Bowel Disease Centre, Massachusetts General Hospital, Harvard Medical School,

Boston, USA; Coordinator, Postgraduate Training Clinics organized by Indian Society of Gastroenterology, February 2009; Member, Investigative committee for recommendations on tackling hepatitis B epidemic in Modasa, Gujarat, February 2009.

Dr Govind Makharia nominated Member, Asia Pacific Working Party on Inflammatory Bowel Disease; nominated Secretary, Sub-Committee for Asia Pacific Guidelines on Management of Irritable Bowel Syndrome (Asian Neurogastroenterology and Motility Associations); elected Governing Council Member, Indian Society of Gastroenterology; invited Member, Task Force on celiac disease by Indian Council of Medical Research; nominated as Coordinator, Young Clinician's Programme, Indian Society of Gastroenterology.

VISITING SCIENTISTS

1. Professor A. McCullough, USA visited the department on 10 April 2008.
2. Professor Paul Koltman, Mount Sinai School of Medicine, New York, USA visited the department on 16 March 2009.

9.13 Gastrointestinal Surgery

Professor and Head

Tushar K. Chattopadhyay

Professor

Peush Sahni

Assistant Professors

Sujoy Pal

Nihar Ranjan Dash

EDUCATION

The department faculty is involved in the didactic teaching programme for undergraduates, surgical postgraduates and postdoctoral trainees. The department offers 3 year superspecialty training in gastrointestinal surgery leading to an award of MCh in Gastrointestinal Surgery.

Continuing Medical Education

Lectures

The faculty delivered 14 CME lectures at various regional medical fora of the country.

RESEARCH

Funded projects

Ongoing

1. Design development and commercialization of an indigenous syringe pump. Peush Sahni. Funded by Department of Information Technology, Government of India (2005–08). Funds: Rs 28 lakh.
2. Identification of novel esophageal squamous cell carcinoma genes by using a combination of array-based CGH and gene expression microarrays. Murali Dharan Bashyam, CDFD, Hyderabad (PI), TK Chattopadhyay, Siddhartha Duttgupta and Sujoy Pal (Co-PIs). Funded by Department of Biotechnology, Ministry of Science and Technology, Government of India for 36 months. Funds: Rs 73.26 lakh.
3. Safety of unilateral versus bilateral percutaneous transhepatic biliary drainage in effective preliminary management of malignant hilar obstruction with jaundice. A randomized controlled pilot study. Nihar Ranjan Dash. Funded by AIIMS. Funds: Rs 99,000.

Departmental projects

Completed

1. A prospective study of the quality of life following endoscopic oesophageal stenting for inoperable patients with oesophageal carcinoma
2. A prospective pilot study to evaluate the efficacy of neoadjuvant chemoradiotherapy in patients with locally advanced but resectable gall bladder cancer

3. A prospective and retrospective evaluation of the long term outcomes of patients with incidental gall bladder cancer
4. A prospective study of evaluation of neoadjuvant chemoradiotherapy in adenocarcinoma of the gastro-oesophageal junction

Ongoing

1. A prospective evaluation of three field resection for carcinoma of mid-oesophagus
2. A randomized controlled trial of resection versus bypass procedure for the treatment of corrosive stricture of oesophagus
3. Quality of life following restorative proctocolectomy in patients with refractory ulcerative colitis
4. Quality of life following transhiatal oesophagectomy in patients with carcinoma oesophagus.
5. Long term follow up of lieno-renal shunt procedure in patients with extrahepatic portal vein obstruction
6. Study of gastric emptying following classical Whipple's pancreatoduodenectomy and pylorus-preserving pancreaticoduodenectomy using scintigraphic techniques after randomizing them to antecolic or retrocolic gastrojejunostomy or pylorojejunostomy
7. A prospective randomized trial comparing preoperative radiotherapy and transhiatal oesophagectomy vs. transhiatal oesophagectomy alone for squamous cell cancer of the lower third of oesophagus
8. Prospective evaluation of the outcome following management of oesophageal perforations
9. Prospective evaluation of choledochoscopy for various biliary tract disorders
10. Prospective evaluation of the role of intraoperative enteroscopy in the management of obscure gastrointestinal bleeding
11. A prospective randomized study to compare hand-sewn and stapled oesophagogastric anastomoses following transhiatal oesophagectomy
12. Evaluation of long term outcome following oesophageal resections for cancer of oesophagus.
13. Quality of life following operations for corrosive strictures of oesophagus
14. Assessment of the problem of mucocele following bypass procedure for corrosive strictures of oesophagus

Collaborative Projects

Ongoing

1. A randomized controlled trial of proximal lieno-renal shunt versus sequential endoscopic variceal ligation and endoscopic sclerotherapy for patients with extrahepatic portal venous obstruction (with Gastroenterology)

2. Role of neoadjuvant chemoradiotherapy in adenocarcinoma of gastro-oesophageal junction (with Radiotherapy).
3. Prospective study on the effect of lienorenal shunt on pericholedochal collaterals causing portal hypertensive biliopathy (with Gastroenterology).
4. A randomized controlled clinical trial of preoperative cholecystojejunostomy versus endoscopic stenting in surgical obstructive jaundice due to periampullary carcinoma (with Gastroenterology).
5. The role of endoscopic ultrasound in the evaluation of periampullary tumours (with Gastroenterology).

PUBLICATIONS

Journals

1. Saluja SS, Gulati M, Garg PK, Pal H, Pal S, Sahni P, Chattopadhyay TK. Endoscopic or percutaneous biliary drainage for gallbladder cancer: A randomized trial and quality of life assessment. *Clin Gastroenterol Hepatol* 2008;**6**:944–50.
2. Satyanarayana K, Sharma A, Parikh P, Vijayan VK, Sahu DK, Nayak BK, Gulati RK, Parikh MN, Singh PP, Bavdekar SB, Sreehari U, Sahni P. Statement on publishing clinical trials in Indian biomedical journals. *Indian J Pediatr* 2008;**75**:755. (The above article has been published simultaneously in the following journals: *J Vector Borne Dis* 2008;**45**:81–2; *Natl Med J India* 2008;**21**:105–6; *Indian J Cancer* 2008;**45**:39–40; *Indian J Med Sci* 2008;**62**:132–3; *J Postgrad Med* 2008;**54**:78–9).
3. Singh RK, Sahni P, Chattopadhyay TK. Esophageal perforation—the problems of late presentation. *Hepatogastroenterology* 2008;**55**:2103–7.

Books

1. Chattopadhyay TK, Sahni P, Pal S (eds). *GI Surgery Annual, Volume 15*. New Delhi:Indian Association of Surgical Gastroenterology; 2008.

Chapters in Books

1. Chattopadhyay TK. Advances in Gastrointestinal surgery. In: Chattopadhyay TK, Sahni P, Pal S (eds). *GI Surgery Annual, Vol.15*. New Delhi: Indian Association of Surgical Gastroenterology; 2007:192–239.
2. Pal S, Sahni P. Preoperative biliary drainage for malignant lesions of the head of pancreas. In: Shrikhande SV, Friess H, Buchler MW (eds). *Surgery of pancreatic tumors*. New Delhi: BI Publications; 2008:121–8.
3. Pal S, Singh RK, Chattopadhyay TK. Cancer of oesophagus. In: Haribhakti S (ed). *Clinical GI Surgery*. Ahmedabad:Haribhakti Educational Foundation; 2008:238–63.
4. Singh RK, Pal S, Chattopadhyay TK. Cancer of the oesophagus. In: Tandon BN (ed). *Tropical Hepatogastroenterology*. New Delhi:Elsevier India; 2008:3–38.

PATIENT CARE

OPD and specialty clinics

Please *see* Chapter 6 (Hospital), Appendix VI

Total number of new patients seen 1791

Total number of old patients seen 5261

Special laboratory facilities

Anal manometry

Oesophageal manometry

24-hour ambulatory oesophageal pH monitoring

Inpatients

Please *see* Chapter 6 (Hospital), Appendix III

Total number of inpatient admissions (January 2007–December 2007) 584

Surgical procedures

Please *see* Chapter 6 (Hospital), Appendix V

Total number of operations performed 537

Elective operations 410

Emergency operations 127

Number of operations performed (Special interest areas)

Surgical jaundice 83

Portal hypertension 45

Oesophageal cancer 81

Carcinoma gall bladder 29

Ulcerative colitis 21

Upper GI haemorrhage 14

Lower GI haemorrhage 11

Acute pancreatitis 21

Chronic pancreatitis 16

Biliary strictures 17

Pancreaticoduodenectomy 30

Liver resections 24

Cadaveric liver retrievals 1

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Dr Peush Sahni is the current representative of the World Association of Medical Editors (WAME) at the International Committee of Medical Journal Editors and is also the Editor of *National Medical Journal of India*.

VISITING SCIENTISTS

1. Dr Sumit Mittal, Department of Surgery, Creighton University Medical Center, Omaha, Nebraska, USA.

9.14 Hematology

Professor and Head

R Saxena

Professors

HP Pati

Dr Rajat Kumar
resigned from the
post of professor.

Associate Professors

S Tyagi

M Mahapatra

Assistant Professors

Tulika Seth

Pravas Mishra

Scientist

S. Sazawal

EDUCATION

The faculty is training undergraduates in Haematology and Medicine, and Clinical case studies for Paediatric students and postgraduates from MD Pathology in Haematology.

The department is running DM courses in Clinical Haematology and Haematopathology. , Two candidates passed DM Clinical Hematology and one passed the DM Haemato-pathology examination. Presently eight residents are undergoing training in DM Clinical Haematology and six in DM Haemato-pathology . Currently, five students were registered for PhD in Haematology,.

Short- and long-term training

The department has provided 1–6 months training in the field of clinical and laboratory Haematology to eleven doctors from other institutions . Seventeen MSc students also undertook short-term training in molecular haematology for periods of 1 to 6 months during the year.

Continuing Medical Education

Conferences, seminars, workshops:

- International conference on Atherosclerosis and thrombosis in association with South Asian Society of Atherosclerosis and Thrombosis; October 2008.
- Thalassaemia Symposium III in association with National Thalassaemia Welfare Society, Department of Paediatrics, LHMC and KSCH; 31 August 2008.
- ‘Stem cell transplantation’ and ‘Thrombosis in newborns and children’, Pre-conference workshops under the aegis of IAP-PHO chapter; 7 November 2008.

Lectures delivered

Dr R. Saxena

- ‘Myelodysplastic syndromes in the WHO classification of tumours of haematopoietic and lymphoid tissues 2008 (4/e)’, Department of Haematology, B.L. Kapur Memorial Hospital, , New Delhi; 20 December 2008.
- ‘Anemia in pregnancy’, Panelist AIIMS, National CME Module 5[1]; 27 April 2008.
- ‘Peripheral blood examination in paediatric and neonatal age groups’, Nizam’s Institute of Medical Sciences, Hyderabad; 10 January 2009.
- Cytochemistry for leukemias. Nizam’s Institute of Medical Sciences, Hyderabad; January 2009.
- ‘Molecular genetics in Inherited bleeding disorders’, Indian Society of Human Genetics ,Delhi; March 2009
- ‘All you need to know about HbA2’, XV National CME in Haematology, Bombay Hospital, Mumbai; 24–26 January 2009.
- ‘Serum transferrin receptors (sTfR) and sTfR- Ferritin index’. XV National CME in Haematology, Bombay Hospital, Mumbai 24–26 January 2009.
- ‘Evaluation of a bleeding patient–what’s new?’, NICE Registry CMC Vellore, Bangalore; March 2009.
- ‘Monitoring of anticoagulant therapy’, Thrombosis workshop; AIIMS; November 2008.
- Role of molecular genetics in Clinical Haematology’, Symposium on ‘Cancer biochemistry’, PGIMS Rohtak; 28 March 2009.
- ‘Flowcytometric methods for platelet dysfunction’, Symposium on ‘Advanced Clinical Application in Flow Cytometry’, Cytometry Society, Hinduja Hospital, Mumbai; 2009.

Dr H.P. Pati

- ‘How safe is blood after viral screening tests?’, 3rd Annual Conference of Orissa chapter meeting of Indian Society of Haematology and Transfusion Medicine, Cuttack; 13 April 2008
- ‘Bone marrow aspirate and biopsy in MDS’, 49th annual conference of ISHTM, pre-conference Workshop; Pondicherry; September 2008.
- ‘Laboratory diagnosis of acute leukemia’, Update on ALL, Calcutta Society of Haematology and Blood Transfusion. Kolkatta; 8–9 November 08
- Flow cytometry in acute leukemia, Update on ALL, Calcutta Society of Hematology and Blood Transfusion, KolKatta; 8–9 November 2008.
- ‘PRCA Aetiology and Pathology’, XV National CME in Haematology; Bombay Hospital, Mumbai; 3–6 January 2008.

- ‘Hb F: Physio-patho-biological aspects in acquired and hereditary diseases’, XV National CME in Haematology, Bombay Hospital, Mumbai; 3–6 January 2008.

Dr Seema Tyagi

- ‘Gene expression profiling: Basics and haematological applications’, XV National CME in Haematology and haematooncology, Bombay Hospital Mumbai; 24–26 January 2009.

Dr M. Mahapatra

- ‘Aplastic anaemia: Management guidelines’, XV National CME in Haematology, Bombay Hospital, Mumbai; 23–26 January 2009.
- ‘Clinical approach to splenomegaly’, 47th Annual conference of Tata Main Hospital Clinical Society, Jamshedpur, 28–29 March 2009.
- ‘Diagnosis and management of hypoplastic anaemia: Indian Perspective’, 47th Annual conference of Tata Main Hospital Clinical Society, Jamshedpur; 28–29 March 2009.

Dr Tulika Seth

- ‘Paediatric Myelodysplastic Syndrome’, 1st National Update on Myelodysplastic Syndrome, Mumbai; 26–27 July 2008.
- ‘Bone marrow failure syndromes’, XV National CME in Haematology and Haemato-oncology, Bombay Hospital Institute of Medical sciences, Mumbai; 23–25 January 2009.

Dr Pravas Mishra

- ‘Immunophenotypic panel selection for haemato-lymphoid neoplasms’, chaired session at the XV National CME in Haematology; 25 January 2009.
- ‘Will there be newer effective treatment in AML?’ XV National CME in Haematology; 25 January 2009.
- ‘How I treat CML’, Annual conference of Association of Physicians of India (API) Noida; 30 January 2009.
- ‘Complications of AML management’, Calcutta society of Haematology, , Calcutta Medical College; Kolkatta 8 February 2009.
- Presented AIIMS data on BMT, Indian bone marrow transplant registry meeting, Vellore; 4 April 2009.
- ‘Transplantation in Aplastic anaemia’, DSH meeting, Delhi; September 2009

National and International Conferences

Lectures delivered

Dr R. Saxena

- ‘How do I investigate for thrombophilia?’, APICON-2009; January 2009.

- ‘Interpretation of automated counter’, APICON-2009; January 2009.
- ‘Pathogenesis of thrombotic stroke in young: Indian scenario’, Annual Meeting of Delhi Society of Haematology, LHMC; August 2008.
- ‘Laboratory diagnosis of sickle cell disease’, IAPM Chennai December 2008.
- ‘Histiomonophagocytic syndromes (HMP)’, ISHTM Conference 2008, September 2008.
- ‘Prolonged PT/APTT’, ISHTM Conference 2008, September 2008. Classification of Myelodysplastic Syndromes: Indian Scenario. 1st National Update on Myelodysplastic Syndrome; July 2008.
- ‘Coagulation disorders—newer strategies in diagnosis’, Annual Meet of PHO, India Habitat Centre; New Delhi November 2008
- ‘Heparin induced thrombocytopenia: Diagnosis and management in SASAT’, Conference 2008, India Habitat Centre; New Delhi October 2008.
- ‘Prenatal diagnosis of β -Thal by cord blood HPLC’, Thalassaemia Symposium III; National Thalassaemia Welfare Society in association with Department of Paediatrics, LHMC and KSCH and Department of Haematology AIIMS, LHMC, New Delhi; August 2008.
- ‘Coagulation profile in polytrauma patients’, Trauma Conference, AIIMS; November 2008.

Dr H.P. Pati

- ‘PRCA: aetio-pathogenesis and diagnosis’, 49th annual conference of ISHTM, conference, at Pondicherry; September 2008
- Sharma P, Gupta SK, Kapoor R, Pati HP, Tyagi S. Haemophagocytic Syndrome Secondary to Tuberculosis: A Report of three rare cases, ISHTM, Pondicherry; 2008.

Dr M. Mahapatra

- Haemophilia: Issues in management. 64th Annual conference of Association of Physicians of India, Noida 29; January –1 February 2009.
- Leucocyte filters. Thalassaemia Symposium III National Thalassaemia Welfare Society in association with Department of Paediatrics, LHMC and KSCH and Department of Haematology, AIIMS; LHMC, New Delhi; August 2008.

Dr Tulika Seth

- ‘Paediatric Acute promyelocytic leukemia’, PHOCON 2008, 3rd National Meet, India Habitat Centre, New Delhi; 8–9 November 2009.
- ‘Bone marrow failure syndromes—case-based approach’, PHOCON 2008, 3rd National meet, India Habitat Centre, New Delhi; 8–9 November 2009.
- Panel discussion on bleeding and coagulation disorders in children. PHOCON 2008, 3rd National meet, India Habitat Centre, , New Delhi; 8–9 November 2009.

- ‘Use of peg-GCSF in children’ and ‘Palliative care national guidelines’, National Consultative Guidelines, PHOCON 2008, 3rd National meet, India Habitat Centre, New Delhi; 6 November 2009.
- ‘Introduction to Paediatric Palliative care’, XVI International conference of Palliative care, BRA-IRCH, AIIMS, New Delhi; 15 February 2009.
- Oral presentation, 46th National conference of Indian Academy of Paediatrics, PEDICON 2009, Bangalore; 25 January 2009.
 - HO/19(O) Evaluation of Feasibility, Outcome and Complications of The First 20 Allogeneic Paediatric Haematopoietic Stem Cell Transplants From A Large Government Hospital.
 - Oral presentation, 46th National conference of Indian Academy of Paediatrics, PEDICON 2009, Bangalore , 25 January 2009.
 - HO/22(O) Fanconi anemia: A clinical and genetic study of patients presenting with haematological manifestations.

RESEARCH

Funded Projects

Ongoing

1. Validation of Haemoglobin colour scale for Haemoglobin estimation: a multicentric study. R. Saxena, Funded by WHO (2008–2009). Funds: Rs 4 lakh. (approx).
2. Modulation of genes to understand the biology of stage progression in chronic myeloid leukemia patients. Funded by ICMR (2008–2011). Funds: Rs 8.9 lakh (for 1st year). .
3. Evaluation of molecular parameters affecting biology of chronic lymphocytic leukemia in India. R. Saxena, Funded by ICMR (2009–2012). Funds: Rs 6 lakh (approx.) for 1st year. R. Saxena. Funds: 6 lakh approx (for 1st year)
4. Phase II Study of NRX 195183 therapy for patients with relapsed or refractory acute Promyelocytic leukemia. R. Saxena. Funded by NuRx Pharmaceuticals Inc, US (2009–2010). Funds: Depending on number of patients recruited.
5. Molecular characterization and treatment of acute lymphoid leukemia on protocol modified MCP 841. International Network for Cancer Treatment and Research. R. Saxena. Funded by INCTR (2001–2009). Funds: Rs 4.5 lakh / year.
6. Quality assessment in Haemogram. R. Saxena. Funded by ISHTM (2003–2008). Rs 1.5 lakh/ year.
7. Role of Nitric oxide in the development of stroke. R. Saxena. Funded by DST (2008–2011). Funds: Rs 20 lakh.
8. Effect of genetic factors on variable clinical severity of HbE/αThalassaemia. T. Seth. Funded by AIIMS (2008–2010). Funds: Rs 2 lakh.

9. An open label, phase 1 dose escalation clinical trial of nrc-an-019 in patients with all phases of chronic myeloid leukemia, who are resistant or intolerant to imatinib mesylate. Pravas Mishra. Funded by NATCO (2008–2010). Rs 11 lakh / year.

Funded Research

Completed

1. Elucidation of molecular genetics of acute leukaemia. R. Saxena. Funded by ICMR (2005 onwards). Funds: Rs 5.5 lakh.
2. WD. R. Saxena. Funded by DST (2004 – July 2008). Funds: Rs 21.46 lakh.

Departmental Projects

Completed

1. A study of the prevalence and type of anaemia in lymphoid malignancies
2. Platelet aggregation in CML (2005–2008)
3. Molecular genetics of Acute myeloid leukaemia (2004–2009)
4. Molecular defects in von Willebrand's disease and their correlation with phenotype (2006–2009).
5. A Quantitative D-Dimer Assay for diagnosis and prediction of outcome in DIC (2007–2008).

Ongoing

1. Effect of glucocorticoids on vWF levels and its correlation with vWF gene promoter polymorphism
2. Role of alpha thalassaemia in pts with iron refractory microcytosis and normal HbA2
3. Role of FCM immunophenotyping in CLPD
4. Molecular Genetics underlying Inherited Deficiencies of Factors VIII ,IX, X and XIII (2006–2009)
5. Effect of modulating factors on Indian HbE patients (2006–2009)
6. Role of nitric oxide and the enzymes controlling its level, in the development of ischemic stroke in young Indians (2007–2010)
7. Role of PG3 antibody in detection of PML Rara in APML (2007–2009).
8. Detection of mutations underlying Gleevec resistance in CML (2006–2009).
9. Role of Molecular studies in pathogenesis of (MDS) in Indian patients (2005–2009).
10. Fanconi anemia molecular characterization
11. Iron deficiency anaemia: Prevalence of refractory IDA and response to iron in IDA.
12. Angiogenesis in bone marrow biopsy in myelofibrosis. With CD34 imuno-histochemistry.

13. Flow cytometric Characterization of Blasts in myelodysplastic syndrome.
14. Flow cytometric study of granulocyte and red cells in PNH

Collaborative Projects

Completed

1. Role of ART in HIV positive patients (with Medicine;)
2. Determination the prevalence of Clopidogrel Resistance in CAD and evaluation of the role of P2Y12 Gene Polymorphism in its pathogenesis (with Cardiology).
3. Development of new fluorescent biosensor for evaluation of Iron profiles in haematological disorders (with Department of Biomedical Engineering, IIT, Delhi;)
4. Evaluation of anaemia in patients with solid tumors (with Oncology;).

Ongoing

1. Zinc as an immunomodulator in the treatment of possible serious bacterial infections in infants more than 7 days and up to 4 months of age (with Paediatrics)
2. Evaluation of platelet receptor polymorphism and thrombogenic mutation in patients with coronary artery disease (with Cardiology).
3. Prevalence of DVT/ Pulmonary embolism in critically ill medical patients (with Medicine).

PUBLICATIONS

Publication in Journals including abstracts published in journals

1. Aggrawal DK, Bhargava R, Dolai TK, Singhal D, Mahapatra M, Rathi S, *et al.* An unusual presentation of eosinophilic variant of chronic myeloid leukaemia (eoCML). *Ann Hematol* 2009;**88**:89–90.
2. Ahmad F, Kannan M, Biswas A, Saxena R. Impact of 789Ala/Ala genotype on quantitative type of von Willebrand disease. *Ann Hematol* 2008.
3. Ahmad F, Kannan M, Ranjan R, Bajaj J, Choudhary VP, Saxena R. Inherited platelet function disorders versus other inherited bleeding disorders: An Indian overview. *Thromb Res* 2007. [Epub ahead of print].
4. Ahmad F, Kannan M, Ranjan R, Bajaj J, Choudhary VP, Saxena R. Inherited platelet function disorders versus other inherited bleeding disorders: an Indian overview. *Thromb Res* 2008;**21**: 835–41.
5. Anand H, Bakshi S, Saxena R. Transient leukemia. *Indian J Pathol Microbiol* 2009;**52**:257–9.
6. Bhargava R, Dolai TK, Singhal D, Mahapatra M, Mishra P, Rathod N, *et al.* Pure red cell aplasia associated with thymoma: Is thymectomy the cure? *Leuk Res* **33**:e17–e18.

7. Biswas A, Bajaj J, Ranjan R, Meena A, Akhter MS, Yadav BK, *et al.* Factor V Leiden: Is it the chief contributor to activated protein C resistance in Asian-Indian patients with deep vein thrombosis? *Clin Chim Acta* 2008;**392**:21–4.
8. Biswas A, Ranjan R, Meena A, Akhter MS, Yadav BK, Munisamy M, *et al.* Homocystine levels, polymorphisms and the risk of ischemic stroke in young Asian Indians. *J Stroke Cerebrovasc Dis* 2009;**18**:103–10.
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11. Biswas A, Tiwari AK, Ranjan R, Meena A, Akhter MS, Yadav BK, *et al.* Thrombin activatable fibrinolysis inhibitor gene polymorphisms are associated with antigenic levels in the Asian-Indian population but may not be a risk for stroke. *Br J Haematol* 2008;**143**:581–8.
12. Biswas A, Tiwari AK, Ranjan R, Meena A, Akhter MS, Yadav BK, *et al.* Prothrombotic polymorphisms, mutations, and their association with pediatric non-cardioembolic stroke in Asian-Indian patients. *Ann Hematol* 2008.
13. Chatterjee T, Panigrahi I, Mahapatra M, Pati HP, Kumar R, Naithani R, *et al.* Hairy cell leukaemia: Clinical, pathological and ultrastructural findings in Asian-Indians. *Indian J Cancer* 2008;**45**:41–44.
14. Chatterjee T, Panigrahi I, Mahapatra M, Pati HP, Kumar R, Naithani R, *et al.* Hairy cell leukemia: Clinical, pathological and ultrastructural findings in Asian-Indians. *Indian J Cancer* 2008;**45**:41–4.
15. Choudhary D, Naithani R, Mahapatra M, Kumar R, Mishra P, Saxena R. Efficacy of cyclosporine as a single agent therapy in chronic idiopathic thrombocytopenic purpura. *Haematologica* 2008;**93**:1113–15.
16. Kumar R, Naithani R, Mishra P, Mahapatra M, Seth T, Dolai TK, *et al.* Allogeneic haematopoietic SCT performed in non-HEPA filter rooms: Initial experience from a single centre in India. *Bone Marrow Transplant* 2009;**43**:115–19.
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22. Dolai TK, Kumar R, Chakrabarti P, Das A, Mahapatra M, Mishra P, *et al.* Actinomycetes species infection in a patient of T-cell acute lymphoblastic leukemia (ALL) presenting with loculated pleural effusion. *Pediatr Hematol Oncol* 2008;**25**:477–80.
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29. Kannan M, Yadav BK, Ahmad F, Saxena R. Role of RFLP using TspRI for carrier detection in Glanzmann's thrombasthenia: A report on two families. *Int J Lab Hematol* 2009. [Epub ahead of print].
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Chapters in Books

1. Sharma P, Asthana B, Saxena R. Platelet count: Intricacies and Pitfalls. In: Agarwal MB (ed). *Hematology Today*. Mumbai: 2009.

2. Rao S, Kar R, Saxena R. What all you need to know about HbA2. In: Agarwal MB (ed). *Hematology Today*. Mumbai: 2009.
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8. Seth T. Breaking bad news and counselling of leukemia patients.. In: Chakrabarti P (ed). *Management of acute leukemia in India –IHTM*.
9. Seth T. Support for families with acute Leukemia. In: Chakrabarti P (ed). *Management of acute leukemia in India –IHTM*.
10. Mishra P. Complications in acute myeloid leukemia management, an Indian perspective.. In: Chakrabarti P (ed). *Management of acute leukemia in India–IHTM*, .
11. Mishra P. Will there be newer effective treatment in AML.. *Hematology 2009*. Proceedings of the XV National CME in Haematology; 25 January 2009.
12. Mishra P. How I treat CMLL: Medicine? . In: AK Agarwal (ed). *The Association of Physicians of India; Update 2009*.

Book

1. Saxena R, Pati H. *Atlas for Hematopathology*,;New Delhi Jaypee Brothers 2008

AWARDS AND HONOURS

Dr R Saxena was awarded Life time achievement award in Haematology by Mumbai Hematology Group 2009; Distinguished career award at SASAT Conference 2008.

Dr H.P. PATI received Dr J.G. Parekh Oration, 49th annual Conference of India Society of Hematology and Transfusion Medicine, Pondicherry, September 2008.

Dr M. Mahapatra received JN Berry Award from Associations of Physicians of India (API), 63rd APICON-2008, Kochi, India;. Fellow , Indian College of Physicians (FICP).

Dr Pravas Mishra endeavour Executive Award. Department of Science and Technology, Australia, September.

Laboratory Investigations

The department has a well equipped haematology laboratory and conducted the following tests

Tests for anaemia

Test	No.
HPLC	1,714
Sickling	55
Hb electrophoresis	16
G6PD	1,015
S Iron	1,944
Coombs	518
CD55/CD59	252
PNH (Ham's test)	48
Sucrose lysis	48
Plasma haemoglobin	156
Urine hemosiderin	179
Osmotic fragility/incubated osmotic fragility	274
Heinz bodies	11
Methemoglobin	01
Cold agglutinins	05
Cryoglobulins	01
Iron stain	257
Molecular tests for a thalassaemia	35

Haemogram and biopsy

Haemogram	34,347
Reticulocyte count	3,697
Bone marrow aspirate	2,257
Biopsy	1,728
Reticulin special stain	129

Tests for Haemostasis

Short screening coagulogram	5,800
Factor assay	695
Inhibitors screening	378
Factor inhibitors assay	13
INR	5,318
Lupus anticoagulant	2,540
Platelet Function Test	1,790
D. Dimer	1,460
Fibrinogen	780
Proglob C	750
Protein C	250
Protein S	250
APCR	300
AT-III	200
P2GP	450
S. Homocysteine	150
VWD	140
DNA Parental detection	14
DNA : Carrier detection	43
FV Leiden	60
MTHFR	35
P2010	26
Thalassaemia molecular test	35

Tests for leukemia

Molecular studies for leukemias (BCRABL, 315 mut, t15; 17,t8;21,Inv16,FIT3)	506
Cytochemistry	409
LAP	225

Flow cytometry

	Acute leuk	CML	CD34	PNH	CLL	GTT
2008	75	3	19	22	8	10
2009	136	4	4	21	5	3
Total	211	7	23	43	13	13

PATIENT CARE

Inpatient treatment

Increasing number of patients of leukemias, aplastic anemia, idiopathic thrombocytopenic purpura, lymphomas, myelodysplastic syndrome, haemophilia, multiple myeloma and various other haematological disorders have been treated by the haematology department as indoor patients. Twenty allogeneic transplants were performed successfully. The department also has a Daycare Centre for chemotherapy, procedures and blood product transfusions for haematological patients.

Inpatients census

General ward patients	547 (C2, Haematology ward and others)
Private ward patients	378
TOTAL	925

Haematology Daycare Centre

Census of April 2008 to March 2009 of Hematology Daycare Centre

Month	Blood Transfusions	Bone Biopsy & Bone Marrow Aspirates	Chemo therapy	IT	Others	Total Admission
April	362	82	76	16	5	541
May	251	92	130	16	9	498
June	362	103	78	12	9	564
July	217	120	118	12	6	473
August	133	91	92	21	7	344
September	350	93	112	21	13	589
October	104	112	104	15	24	359
November	221	106	125	22	24	498
December	292	68	101	19	7	487
January	256	87	147	8	9	507
February	255	94	145	19	11	524
March	256	126	151	10	12	555
TOTAL	3059	1174	1379	191	136	5939

Clinical Apheresis Procedures

Single donor platelets (SDP)	870
Peripheral blood stem cell (PBSC) collection	19
Plasma pheresis	2

OPD

Out patient department runs on the third floor of the Amrit Kaur OPD block as per schedule below

Monday,Wednesday,Friday Regular Haematology 9.30 am to 6.00 pm

Monday Oncology Patients in Hematooncology clinic (HO).s

Specialty Care Clinics

Hematopoietic Stem Cell Transplant clinic Tuesday morning

Haemostasis Clinic (HC) Thursday morning

Long Term Leukemia survivor Clinic Saturday morning.

	Male	Female	Total (H)	Special clinics				Grand total
				HO	HC	HA	CML	
Old cases	9249	6166	15,415	6000	5000	4415	4520	19,935

	Male	Female	Total (H)	HS	HT	HL	Grand total
New Cases	1829	929	2858	1320	660	440	5278

External Haematology Proficiency Testing Programme

Dr R Saxena coordinated External Quality Assurance Programme in complete blood counts, red cell indices and peripheral blood smear in the Department of haematology along with Indian Society of Haematology and Transfusion Medicine . There were about 550 participating laboratories availing services of the programme. The EQAP programme was conducted on the basis of ISO-IEC guide-43 and WHO guidelines. All the specimens were prepared in the department and sent for analysis to the participating laboratories. The results were evaluated and communicated to the participating laboratories to take corrective steps in case the performance was out of acceptable range.

COMMUNITY SERVICES

The department of haematology provided consultative services to patients of thalassaemia, in coordination with National Thalassaemia Welfare Society. Care to haemophilia was provided in coordination with Haemophilia Federation of India.

SIGNIFICANT EVENTS

Dr R. Saxena Member , Reach the World Forum of International society of Thrombosis and Haemostasis,. President Elect, Indian Society of Haematology and Transfusion Medicine 2008–2009; Member Secretary - Institution Ethics Committee, AIIMS since August 2008;. Executive

Member, Indian society of Haematology and Transfusion medicine;, Member, Medical Advisory Board, HFI, 2005, Member, ICMR project review committee for Genetics, haematology, anatomy 2005, Coordinator ISHTM-IIMS EQAP. Since 2003; Member Subject expert committee for technical evaluation of proposals under women scientist scheme, Department of Science and Technology, Government of India. June 2005;, Member, Technical Specification for single bid equipment; Chairman, Technical Specification Committee for computer stationery

Dr H. Pati was elected Honorary secretary of India Society of Haematology and Transfusion Medicine for 3 years (2008–2011).

Dr M. Mahapatra continued as an Executive member of Indian Society of Haematology and Transfusion Medicine (ISHTM); Organizing Secretary, golden jubilee conference of Indian Society of Haematology and Transfusion medicine (ISHTM);Fellow, University of British Columbia after completing one year Fellowship in Leukemia and Bone Marrow Transplant, Vancouver, Canada.

9.15 Hospital Administration

Head

Shakti Kumar Gupta

&

(Medical Superintendent, Dr R.P. Centre for Ophthalmic Sciences, AIIMS)

D.K. Sharma

(Medical Superintendent, AIIMS, Main Hospital)

Additional Professor

Sidhartha Satpathy

(BRA-IRCH and Main Hospital)

Associate Professors

I.B. Singh
(Main Hospital)

Sanjay Arya
(Main Hospital)

Aarti Vij
(ORBO, CT & NS Centre)

EDUCATION

The Department of Hospital Administration is running a 2-year postgraduate programme for students in Hospital Administration. The present, . MHA (Masters in Hospital Administration) course entered its 43rd year of inception;. it was officially started in February 1966 for the first time in India and has since been recognized as a distinct post-graduate discipline by Medical Council of India The Residency Programme in Hospital Administration focusses on 'hands on' training, where Resident Administrators man the 'Control Room' of the hospital, round the clock as 'Duty Officers', and coordinate all the hospital activities .

The Department introduced a paradigm shift in the Academic programme by launching Integrated Learning Modules for the residents of Department of Hospital Administration from 1st January, 2008. This includes lectures, discussions, problem-based learning, case studies, journal club, etc. from 8.00 am – 9 a.m., 12 noon – 1 p.m. and 4 pm – 5 pm everyday. Each faculty member is assigned 'Moderator' for a specific period. Various guest lectures were also organized in the Department .

The Department of Hospital Administration became 1st department in AIIMS hospital to be ISO certified, receiving the prestigious ISO 9001:2000 certification in the month of October, 2008.

Faculty members conducted several training programmes for the doctors working in various organizations including Central and State Governments, Paramilitary Forces and in various PSUs such as IICM, Ranchi and also private sector management institutes.

- Training was also imparted to two WHO fellows from Myanmar for a period of one month in March 2009.
- Fifteen Students of Health Sector Management Programme (HSMP) from Boston University School of Management, USA , a one day sensitization programme in January 2009.
- Twenty Medical Superintendents of Coal India Ltd., Ranchi t in January 2009.

- One student from Deccan School of Management, Hyderabad for three months' observership from September to November 2008.
- Four officers from Armed Forces Medical College, Pune, two weeks' training in October 2008.
- Eleven students of MD (Community Health Administration/Diploma in Health Administration) from National Institute of Health and Family Welfare, New Delhi, two weeks' training in October 2008.
- Two students of Symbiosis Institute of Health Sciences, Pune, two and half months' training from May 2008 – July 2008.

CONTINUING MEDICAL EDUCATION

Conferences, seminars, workshops

- 'Planning and designing of healthcare facilities with focus on safe hospitals and patient safety'. South Asian Conference and CME on 'Synergy in Healthcare'. In collaboration with WHO and in association with The Indian Institute of Architects (NC) and The School of Planning and Architecture, New Delhi; November 2008.
- CME on 'Laws applicable to hospitals', AIIMS, New Delhi. In collaboration with Christian Medical Association of India, New Delhi; March 2009.
- Training Programme on 'Hospital Administration' for Medical Superintendents and GDMOs, of Coal India Ltd, Indian Institute of Coal Management, Ranchi.. January–February, 2009;
- 'Healthcare executive management development programmes', for senior Healthcare Executive Professionals. In collaboration with World Health Organization, Goa; April and September, 2008.
- Workshop on 'Standardization of syllabus for PG course in hospital administration', AIIMS; In collaboration with Medical Council of India and World Health Organization.
- October 2008. CME on 'Legal and ethical issues in medical practice', AIIMS; April 2008.

Lectures delivered

- 'Value-based project management', AIIMS; April 2008.
- 'Mass casualty incident and triage', AIIMS; August 2008.
- 'Role of national human rights commission in relation to hospitals—ethics in healthcare and research', AIIMS; January 2009.
- 'Drivers of childhood obesity – Indian context', AIIMS; January 2009.
- 'Medical tourism – scope in India', AIIMS; February 2009.
- 'Role of Mumbai Railway Vikas Corporation', in improving the sub-urban Railway System in Mumbai and improvement in the health of the travelling public—a case study; AIIMS; March 2009.

- ‘Merging accreditation, quality improvement and safety: a strategy for hospital excellence’, AIIMS; September 2008.
- ‘Earthquake risk mitigation for hospitals’, AIIMS; February 2008.
- Poster making, Collage making and Caricature drawing competition in the Annual festival of AIIMS, PULSE as a prelude to SASHCON-2008 on the theme ‘Planning and Designing of Healthcare Facilities with focus on Safe Hospitals and Patient Safety’; September 2008.

National and International Conferences*Lectures delivered*

Dr Shakti Kumar Gupta

- ‘Hospital networking in disaster management’, in the training programme on ‘Disaster healthcare management’, National Institute of Disaster Management, New Delhi; July 2008.
- ‘Safety in vascular surgery’, 15th Annual Conference of Vascular Society of India, Government Medical College, Chandigarh; 6–7 November 2008.
- ‘Challenges before Hospital Administrators vis-à-vis Changing Role of Hospitals’, 2nd Healthcare Executive Management Development Programme, Department of Hospital Administration in collaboration with WHO; 16 September 2008.
- ‘Leadership—a perspective’, 2nd Healthcare Executive Management Development Programme, Department of Hospital Administration in collaboration with WHO India office, Goa; 14 April 2008.
- ‘Public private partnership and outsourcing on 14th April, 2008 during Healthcare Executive Management Development Programme, Department of Hospital Administration in collaboration with WHO India office, Goa; 14 April 2008.
- ‘Public relations and media management’, 2nd Healthcare Executive Management Development Programme, Department of Hospital Administration in collaboration with WHO India office, Goa; 14 April 2008.
- ‘Equipment management—issues, challenges and strategies’, 2nd Healthcare Executive Management Development Programme, Department of Hospital Administration in collaboration with WHO India office, Goa; 15 April 2008.
- ‘Inventory management’, 2nd Healthcare Executive Management Development Programme, Department of Hospital Administration in collaboration with WHO India office, Goa; 15 April 2008.
- ‘Principles and logistics of disaster management’, 2nd Healthcare Executive Management Development Programme, Department of Hospital Administration in collaboration with WHO India office, Goa; 15th April 2008.

Dr D.K. Sharma

- Actively involved in teaching and training hospital administration residents.

- Delivered lectures in various training programmes/workshops organized by the department sponsored by Ministry of Health, HRD, personnel etc.
- Invited by various govt. and public sector organizations and professional associations to deliver lectures on various topics in the specialty of Hospital Administration.

Dr Sidhartha Satpathy

- ‘Approaches to accreditation of hospitals’; 17 April 2008. Conduct half-day Organizational Behavior Workshop, 2nd HxMDP organized by Department in collaboration with WHO India Office, Goa; 18th April 2008.
- Medical ethics, unsafe drugs and transplantation of human organ act with special reference to Human Rights’, Health and Human Rights, NIHFWS; 4–8 August 2008.
- ‘Accreditation of railway hospitals’, Facility Management, Infection Control and Information Management System during sensitization programme for Chief Divisional Medical Officers of Indian Railways, Railway Staff College, Vadodara; 8–9 September 2008.
- ‘Management of hospitals during strikes’, and ‘Disciplinary procedures in hospitals–CQI and accreditation–means and relationship for efficient health care’, ‘Right to information act in hospitals and conduct of OB Lab’, Health Care Executive Development Management Programme, Goa; 16–20 September 2008.
- ‘Hospital accreditation–an overview’, Strategic Management Programme for Senior Medical Doctors, Railway Staff College, Vadodara; 10 November 2008.
- ‘Quality needs in management of stores, medical equipment and equipment audit’, First contact-cum-training programme for Postgraduate Certificate Course in Quality Management and Accreditation of Health Care Organization, Academy of Hospital Administration; 14 November 2008.
- ‘Quality requirements in Clinical and Nursing Audit’, Terminal contact-cum-training programme for Postgraduate Certificate Course in Quality Management and Accreditation of Health Care Organization, Academy of Hospital Administration; 21 November 2008.
- Various hospital administration topics and conducted organizational Behavior Lab during Special Training Programme on Hospital Management and Administration for Medical Superintendents, GDMO’s and non-specialists of Coal India, IICM; 6–8 January 2009 and 2–5 February 2009.
- ‘Management of medical audit’ and ‘Quality needs in management of stores, medical equipment and equipment audit’, contact-cum training programme, 6th batch of Postgraduate Certificate Course in Quality Management and Accreditation of Health Care Organization; Academy of Hospital Administration; 16 January 2009.
- ‘Medical records–a legal perspective’, ‘Laws applicable to hospitals’ and panelist for RTI Act during Panel Discussion, Board Room, AIIMS, organized by Department of Hospital Administration and Christian Medical Association of India; 21 March 2009.

- ‘Quality of sanitation hospital waste management and control of hospital infection’ and ‘Quality needs in store management, equipment audit’, contact-cum training programme for 7th Batch of Post Graduate Certificate Course in Quality Management & Accreditation of Health Care Organization at Academy of Hospital Administration; 27 March 2009.
- ‘Violence against doctors—an overview’ and ‘Steps to avoid litigation’; National Conference on Litigation and Violence in Medical Practice, AIIMS, New Delhi; 31 August 2008.
- Panelist during National Workshop on ‘Standardization of syllabus for PG Course in Hospital Administration’, in collaboration with MCI and WHO-India, AIIMS; 18–19 October 2008.
- Chaired the session on ‘Accreditation of Hospitals’, South Asian Conference & CME on Synergy in Health Care (SASHCON-2008), AIIMS; 3–6 November 2008.

Dr Sanjay Arya

- Various Hospital Administration topics during special training programme on ‘Hospital management and administration’, for Medical Superintendents, GDMOs and non-specialists of Coal India Ltd., IICM, Ranchi, January 2009.
- ‘Hospital Administration for MSc’ Nursing Students, RAK College.
- ‘Hospital evacuation plan’, National Institute of Disaster Management (Ministry of Home Affairs); 9 July 2008.
- Invited as Faculty to deliver lecture on ‘Patient safety’, Interns Orientation Programme, CMET, AIIMS.
- ‘Hospital disaster preparedness’, Heart Care Foundation; March 2008.

Dr Aarti Vij

- 2nd International Health Care Quality Conclave on ‘Enabling safety in healthcare organizations’, Indian Health Care Quality Forum (IHCQF), New Delhi; 12–13 September 2008.
- Chaired the Symposium on ‘Promotion of deceased organ donation’, Department of Renal Transplant Surgery, PGIMER, Chandigarh; 7 February 2009.
- ‘Issues and challenges in organ transplantation’, Department of Hospital Administration, AIIMS; 14 October 2008.
- ‘Organ donation’, 23rd National Eye Donation Fortnight, Dr R.P. Centre for Ophthalmic Sciences, AIIMS; 8 September 2008.
- ‘Organ retrieval banking organization’, MSc Nursing Students, AIIMS; 23 June 2008.
- ‘Organ donation and transplantation’, Jamia Millia Islamia, New Delhi; 6 August 2008.

Conferences, Seminars, Workshops

Dr Shakti Kumar Gupta

- Chairman, South Asian Conference, 'Synergy in healthcare (SASHCON)', in collaboration with WHO and in association with The Indian Institute of Architects and The School of Planning and Architecture, New Delhi; 3–6 November 2008.
- Programme Director, 'Healthcare executive management development programmes', for senior Healthcare Executive Professionals, Department of Hospital Administration, AIIMS in collaboration with World Health Organization, Goa; 14–18 April 2008 and 16–20 September 2008.
- Programme Director, Training Programme on 'Hospital administration' for Medical Superintendents, GDMOs, and non-specialists of Coal India Ltd., Indian Institute of Coal Management, Ranchi, Department of Hospital Administration, AIIMS; January–February 2009.
- Chairman, 'Legal and ethical issues in medical practices', Department of Hospital Administration, AIIMS; 30 April 2008.
- Chairman, 'Laws applicable to hospitals', Department of Hospital Administration, AIIMS in collaboration with Christian Medical Association, New Delhi; AIIMS, New Delhi; March 2009.
- Chairman, National workshop on 'Standardization of Syllabus for PG Course in Hospital Administration', Department of Hospital Administration, AIIMS in collaboration with Medical Council of India and World Health Organization, AIIMS, New Delhi; 18–19 October 2008.

Dr D.K. Sharma

- Attended National Conference on 'Government procurement', Indian Institute of Materials and Management, New Delhi.

Dr Sidhartha Satpathy

- Programme co-coordinator, training programme on Hospital Management and Administration for Medical Superintendents, GDMOs and non-specialists of Coal India at IICM and CME on Clinical issues during field visit to AIIMS; January 2009.

Dr Sanjay Kumar Arya

- Interaction meet on Implementation of Bio-medical Waste (MandH) Rules in India and Proposed Action Plan on at Hotel Samrat by CPCB; 8 August 2008.
- National Advocacy Workshop on Health Promoting Hospitals (in collaboration with World Health Organization), NASC Complex, ICAR, New Delhi; 11–13 August 2008.
- Co-author in Paper presented 'Outsourcing support services—the know-how', 2nd National Conference HART-2008 (Hospital Administration Recent Trends), Chandigarh; 11–12 October 2008.
- Chief Organising Secretary, SASHCON 2008, AIIMS; 3–6 November 2008.

- ‘Government procurement–towards efficiency and transparent systems’, Hotel Shangri-la, New Delhi; 20 November 2008.
- ‘Behavioral skills for senior health administrators’, attended one week training programme in Management Development Programme, NIHF, New Delhi; 24–28 November 2008.
- Facilitated District Communication Strategy Workshop under the programme MIC, Shri Chatrapati Sahuji Medical University, Lucknow; 27 February 2009.
- Facilitated District Communication Strategy Workshop, Darbhanga Medical College; 22 March 2009.

Dr Aarti Vij

- Attended awareness seminar on Injury Prevention, a Social Responsibility organized by Jai Prakash Narayan Trauma Centre, (JPNATC), AIIMS, New Delhi; 12 March 2009.
- Attended and Chaired in the Symposium on ‘Promotion of deceased organ donation’, Department of Renal Transplant Surgery, PGIMER, and Chandigarh; 7th February 2009.
- Attended SASHCON organized, Department of Hospital Administration, AIIMS; 3–6 November 2008.
- Attended and delivered a guest lecture in the 2nd International Health Care Quality Conclave on ‘Enabling safety in health care organizations’, Indian Health Care Quality Forum (IHCQF), New Delhi; 12–13 September 2008.
- ‘Organ donation’, 23rd National Eye Donation Fortnight, Dr R.P. Centre for Ophthalmic Sciences, AIIMS; 8 September 2008.
- Attended Healthy Lifestyle Exhibition 2008, Department of Dietetics, AIIMS; 18 August 2008.
- ‘Organ donation and transplantation’, Jamia Millia Islamia, New Delhi; 6 August 2008.
- ‘Organ retrieval banking organization’, MSc Nursing Students of AIIMS; 23 June 2008.

RESEARCH

Departmental Projects

Completed

1. Study the awareness among doctors and nurses regarding pharmacovigilance, extent of adverse drug reaction reporting and evaluate the impact of various interventions to determine the most suitable method
2. Cost analysis of robotic urologic procedures in AIIMS
3. Cost analysis of minimal invasive surgical procedures in the department of surgery, at AIIMS
4. Determining the cost of training undergraduate medical (MBBS) students at AIIMS
5. A Cost analysis study of in-patient care services at AIIMS

6. Study the level of satisfaction amongst the employees of AIIMS
7. To study economics of Health Care Associated Infection (HAI) in operated surgical cases in AIIMS

Ongoing

1. To study System of Empanelment of private hospitals on CGHS panel
2. Costing of Neuro-Surgery ICU
3. Cost Analysis of Bone Marrow Transplant (allogenic)
4. Costing of Bio-medical Waste Management system
5. Costing of Renal Transplant
6. A comparative study of Operation Theatre disinfection and sterilization practices in selected hospitals in Delhi
7. A study to evaluate the Trauma Care System for Delhi Metropolis
8. A study to evaluate competencies of Indian Healthcare Leaders
9. A study of Process of outsourcing of services in selected hospitals of Delhi
10. Study of Inpatient Medical Records of AIIMS as a prerequisite for Accreditation

PUBLICATIONS

Journals

1. Lathwal A, Sharma DK, Madan N, Sharma NK. Management of dengue outbreak by AIIMS: A case study. *Journal of the Indian Hospital Association XXXIV & XXXV (1 to 4): 46–54.*
2. Pathni RK, Satpathy S, Kailash S. Need for tele follow-up: A study at a public sector Quaternary referral hospital in India (Manuscript ID: JTT-08-12-006.R1) accepted for publication in *Journal of Tele medicine and Tele care* (in press).
3. Singh IB (Dr), Singh IB (Mr), Devi SL, Devi SD. Robotics for human welfare–Application in Health Care– *Journal of Hospital Administration* (Official Journal of Indian Hospital Association, New Delhi) 2007–2008; 36–44.

PATIENT CARE

The Department of Hospital Administration is closely associated with the provision of administrative support to various departments for delivery of patient care and control of costs in the hospital services. The department has been responsible for bringing quality care standards in patient care services.

As per the need for efficient functioning of the patient care areas various renovations and upgradation have been planned and commissioned in the main hospital. An advanced, new laundry is also being added.

C.N. Centre

- OPD Computerization
- Renovation of NS-3 & NS-6 Wards with state-of-the art facilities
- Renovation of NS ICUB (in process)
- Patient Safety Initiative: Initiated patient safety programme at C.T. Centre. Following have been implemented in phase-I; (a) Conformity to Patient's identification Bands for all admissions (b) Incident Reporting (c) Implementation of Surgical Safety Check List (d) Patient falls report and (e) Bed sores.
- Bio Medical Waste Management: An initiative to streamline bio medical waste management process and monitoring has started in C.N. Centre. Co-ordination for VVIP care at C.N. Centre
- Part Time Social Guides: 34 number of social guides have been recruited and deployed in the C.N. Centre for the patient care including Medical Record Section, N.S. Centre, Medical Record Section, C.T. Centre, May I Help you counter, C.N. Centre OPD, Blood Bank, C.N. Centre, MSSO Room, CTC & N.S. Centre, patient transfer, assistance to physically challenged and senior citizens at C.N. Centre.

Organ Retrieval Banking Organization (ORBO)

- Organ Retrieval Banking Organization (ORBO) coordinated Organ and Tissue donations and transplantation. Twelve whole bodies were also donated through ORBO. 1546 persons pledged for organ donation on motivation of ORBO. Awareness programmes with various NGOs, Schools, and Colleges etc were conducted. Collaboration with Dadhichi Deh Dan Samiti with ORBO to promote the noble cause of organ and tissue donation. Training was imparted to Grief counsellors. Orientation Programme on Organ Donation and Transplant Coordination was imparted to MSc Nursing students.
- Second Pancreas and kidney combined transplantation in the country was successfully coordinated; on 24th November 2008.

AWARDS AND HONOURS

Dr Shakti Kumar Gupta was appointed as Inspector to carry out the physical and other teaching facilities available at Narayana Medical College, Nellore for starting MD (Hospital Administration) course under NTR University of Health Sciences, Vijaywada, February 2009; Member; Institutional Advisory Authority (IAA); B.P. Koirala Institute of Health Sciences (BPKIHS), January 2009; Member; expert team for setting up Medical College in Thimpu, Bhutan by Ministry of External Affairs, Government of India, December 2008; Expert in Academic Programmes and Course Curriculum on Health Care Engineering, DCR University of Science and Technology, Haryana, December 2008; Consultant, WHO, Development of Training Module on Hospital Management

Training, Kathmandu, Nepal, 16–24 November 2008; Appointed ,Honorary Consultant, Hospital Projects/Equipment Planning and Procurement for Government Medical College and Associated Hospitals, Jammu ,Health and Medical Education Department, Chief Secretariat, Srinagar, Government of J&K, October 2008; Member; Expert Committee Meeting for preparation of the modules on Patient Safety and Infection Control (PSIC) ; Indira Gandhi National Open University, New Delhi October, 2008; Member; Expert Group for developing a model Hospital Disaster Management Plan Template for Delhi region by National Institute of Disaster Management, IP Estate, New Delhi September, 2008; External Examiner, MD (Medical Administration) Part-II Examination, Post Graduate Institute of Medicine, University of Colombo, Srilanka, May 2008; Resource Person for the Multi-Hazard HOPE Course Development–Course Finalisation workshop, April, 2008, National Society for Earthquake Technology- Kathmandu, Nepal; Nominated as a Member of the Academic Council of Jammu University for the triennial period (2006 – 2009) vide Notification no. 08/January/Gen/03 by University of Jammu; Appointed as an Honorary Resource Guest faculty for the training on Professional Development Course for the district level senior medical officer of Punjab by State Institute of Health and Family Welfare, Government of Punjab.

Dr D.K. Sharma served as Chairman/Member of various intra- as well as extra mural policy making and decision making committees of AIIMS as well as other organizations including Ministry of Health and Family Welfare, Central Pollution Control Board, Government of NCT of Delhi, etc; was invited as Chief Guest/ Guest of Honour/ Guest faculty etc. in various National and International symposia, workshops and conferences; nominated as Chairman/Principal Member of various Committees of Bureau of Indian Standards (BIS), India on hospital planning, medical equipments, surgical instruments, disposables and dressings

Dr Sidhartha Satpathy was appointed Editor of *Journal of Academy of Hospital Administration (JAHA)*; Member of Technical Committee, National Accreditation Board for Hospitals & Healthcare providers (NABH), under aegis of Quality Council of India (QCI). Conducted pre and final assessment of various applicant hospitals for NABH accreditation ; and finalized the NABH guide book (2nd ed); Member of Bureau of Indian Standards (MHR-14) involved in preparation/review of Indian Standards on Health Care Facilities. Completed review and re-drafting of Standards on ‘Matrix of Services for Hospitals’; Expert member of National Accreditation Board for Certification Bodies (NABCB) under aegis of QCI; Expert member of National Accreditation Board for Personnel & Training (NRBPT) under aegis of QCI. Conducted office assessment of several organizations to determine compliance with prescribed standards; External examiner for M.D. (Medical Administration) at Postgraduate Institute of Medicine (PGIM), University of Colombo, 12–17 May 2008 and 15–20 February 2009; Member of Technical Committee for evaluation of Master Plan/Block Plans of six AIIMS like Institutions under PMSSY, Ministry of Health & Family Welfare, Government of India; External Examiner for Postgraduate Certificate Course in Hospital Management for 13th Batch at National Institute of Health and Family Welfare, 31 July – 4 August 2008; Member of Technical Committee to examine Detailed Project Report (DPR) for construction of medical college and hospital complex at 6 AIIMS like institutions under PMSSY, Ministry of Health and Family Welfare, Government of India; Member of ‘Task force on public private partnership in health care’, by Federation of Indian Chambers of Commerce and Industry (FICCI); Member of Sectional Committee on Bio-medical Waste Management (MHD-22) at Bureau of Indian Standards (BIS).

Dr I.B. Singh was selected as Appraiser by the National Board of Examination, New Delhi for the subject Health Administration including Hospital Administration at the Indian Spinal Injuries Centre, New Delhi vide letter no. NBE/Appraisal-Jan to June 2008/2008/3518-4818, dt. June, 2008; elected as a Member of the National Academy of Medical Sciences (India) vide letter no. 30(4)/208/NAMS/8919 dt. 19 August 2008; elected Fellow of the International Medical Sciences Academy in recognition of his outstanding contribution for the advancement of medical sciences on 11 September 2008;

Dr Sanjay Kumar Arya visit to Gorakhpur as a part of Central Team of Senior Specialists constituted by O/o D.G.H.S., Ministry of Health and Family Welfare; 13–16 May 2008; Participated as an expert in the technical evaluation of Medical Equipments for cardiology, internal medicine, general medicine, trauma and emergency department. under PMSSY scheme of Ministry of Health and Family Welfare, Noida Hindustan Latex Limited, Procurement & Consultancy Division, 17 July 2008; invited as an external expert in the Technical Evaluation for purchase of equipment PGIMER, Chandigarh ; 10 September 2008 visited Tata Memorial Hospital, Mumbai as a part of delegation nominated by Director, AIIMS to study the working at Tata Memorial Hospital, October 2008; invited for evaluation of theory answer sheets in the specialty of Health Administration and Hospital Administration at National Board of Examinations, Dwarka Office, New Delhi, 29 January, 2009; nominated as Inspector of National Board of Examination for Accreditation of Government. Medical College, Chandigarh for DNB in Health & Hospital Administration, 12–14 February 2009.

Dr Aarti Vij conferred with Young Women Achievers Award by FICCI Federation House, Tansen Marg, New Delhi for the contribution in medical profession by Mrs. Renuka Chowdhury, Hon'ble Minister for Women and Child Development, 23 April 2008; Letter of Appreciation from Shri Man Mohan Singh, Hon'ble Prime Minister of India for effective co-ordination and efficient management of the Medical Care Services at C.N. Centre; Letter of appreciation from Prof. A. Sampath Kumar, Chief Cardio Thoracic Centre for providing the best medical care (administrative and Management) to VVIP Care at C.N. Centre; selected as Member of National Human Rights Commission to inspect the hospitals of Delhi; Chief Guest in the 19th Organ Donation Festival organized by Dadhichi Deh Dan Samiti, 8 June 2008.

VISITING SCIENTIST

1. Dr Gado Tshering, Health Secretary, Ministry of Health, Royal Government of Bhutan; March 2009.
2. Mr P.C. Sehgal, M.D., Mumbai Railway Vikas Corporation, Mumbai; March 2009.
3. Dr Reinhard Huss, Nuffield Centre for International Health and Development, University of Leeds; March 2009.
4. Professor J.K. Das, Head, Medical Care and Hospital Administration, NIHF, New Delhi, AIIMS; February 2009.
5. Mr Lyonpo Zangley Dulyak, Minister of Health, Royal Government of Bhutan; February 2009
6. Mr Mukesh Singh, IPS, SSP Investigations, National Human Rights Commission, New Delhi, January, 2009.

7. Dr. Paul Chang, Managing Director, Asia Pacific Joint Commission International, Singapore; September 2008
8. Professor Suresh S. David, CMC, Vellore; August 2008
9. Professor N.K. Arora, Executive Director, ENCLLEN; August 2008.
10. Professor Myaoo Dy. Minister for Health, Government of Union of Mynmmar, July 2008.
11. Professor Mohd. Masood Ahmed, Principal, Deccan School of Management, Hyderabad; July 2008.
12. Dr Sanjeev Singh, Amrita Institute of Medical Sciences, May 2008.
13. Dr John C. Wade, Leader, Vice President, Saint Luke's Health System, Kansas City, Missouri, USA, April 2008.
14. Professor Raymond J. Fabius, Board of Directors Member, American College of Physician Executives.

9.16 Laboratory Medicine

Professor & Head

A.K. Mukhopadhyay

Professor

M. Irshad

Additional Professor

Sarman Singh

Associate Professor

Subhadra Sharma

Assistant Professors

(Trauma Centre)

Purva Mathur

S. Arulselvi

Scientists

A.K. Srivastava S-IV

Vandita Vasudev S-III

EDUCATION

Short-term training

Fifteen trainees — 3 from CCS University, Meerut; 1 from I.P. College, Bulandshar. U.P.; 1 from L.N. Mithila University, Darbhanga; 1 from Bundelkhand University, Jhansi; 1 from Allahabad Agricultural Institute (Deemed University); 1 from Lovely Professional University, Jalandhar; 1 from B. R. Ambedkar University, Agra; 1 from Jamia Hamdard, New Delhi; 1 from Punjab Technical University, Jalandhar and 4 foreign students from DPR Korea (Ministry of Health and Family, Government of India) underwent short term training in Laboratory Medicine. From this year, 50 students of BSc (Hons) Nursing from the College of Nursing, AIIMS were trained in phlebotomy and laboratory services.

National and International conference

Lectures delivered

Dr A.K. Mukhopadhyay

- ‘Connection, Confrontation and Unity of Two Titans: Local and non-local Science’, International Conference on ‘*Science and Spiritual Quest*’, Tiruchirapalli, Tamilnadu; 27–29 December 2008:
- ‘Two titans local science and the science of non-locality: Their clash and unity’, International Conference, Lakshmibai National Institute of Physical Education, Gwalior; October 2008.
- ‘Consciousness, psyche and nature’, Morarji Desai National Institute of Yoga (MDNIY); 29 September 2008.

- ‘Integral model of science’, Academic Staff College, JNU Special Winter School on Frontier of Humanities; 09 January 2009.
- ‘Local and non-local Science’, Academic Staff College, JNU, Special Winter School on Frontier of Humanities; 12 January 2009.
- ‘Individuation’, Academic Staff College, JNU Special Winter School on Frontier of Humanities; 13 January 2009.

Dr M. Irshad

- ‘Laboratory exposure to Interns’, AIIMS; 7 February 2009.

Dr Sarman Singh

- ‘Research ethics in animal studies’, Central Council for Research in Unani Medicine, , Delhi; 3 June 2008.
- ‘Immunology’, Boston College, Gwalior; 13 June 2008.
- ‘HIV-TB coinfection and emergence of drug resistance’, during XVII International AIDS Conference in Mexico City, Mexico; 3–8 August 2008.
- ‘Microbiological investigations for detecting MRSA’, Symposium on ‘Methicillin Resistant Staphylococcus aureus(MRSA) Kathmandu, Nepal; 22–24 August 2008 .
- ‘Viral hepatitis: Indian scenario’, Indo-Bulgarian DST meeting on ‘Contemporary state of the VIH infection in Bulgaria’, 16–18 October 2008.
- ‘Diagnosis of Tuberculosis’, MICROCON 2008, Pune; 21–25 October 2008.
- ‘TB diagnosis in India’, Project kick-off meeting, Brussels, Belgium, 14–15 November 2008.
- ‘Mechanisms and clinical implications of drug resistance in tuberculosis’, International TB Symposium, MGR Medical College, Gwalior; 1 December 2008.
- ‘HIV-TB: Coinfection’, International Tuberculosis Symposium, ICGEB Delhi; 1–3 December 2008.
- ‘HIV and Hepatitis C virus coinfection’, International Conference on ‘Biotechnological Approaches to Neuroimmuno modulation and Infectious Diseases’, NIPER, SAS Nagar, Punjab; 11–13 December 2008.
- Key note lecture on ‘Microscope to microarray’, XIX National Congress of Veterinary Parasitology, Ludhiana; 3 February 2009.
- ‘CNS HIV infections’, Central India Institute of Medical Sciences, Nagpur; 8 February 2009.
- ‘immunodiagnostics for infectious diseases’, Mahatma Gandhi Institute of Medical Sciences, Wardha; 13–14 February 2009.
- ‘HIV and tuberculosis’, Second National Conference, Jaipur; 27 February 2009.
- ‘HIV and hepatitis infections’, Second National Conference, Jaipur; 28 February 2009.

Conference attended

Dr M. Irshad

- as a delegate in the CME on Legal and Ethical Issues in Medical Practice, AIIMS,; 30 April 2008.

RESEARCH

Funded projects

Completed

1. Optimization of carbohydrate protein conjugate as vaccine for prevention of enteric fever. M. Irshad,. Funded by DBT (2004–2007).
2. Development of rapid diagnostic test for detection of autoantibodies in Myasthenia Gravis by plate and Dot blot ELISA. M. Irshad. Funded by ICMR (2004–07).
3. Prevalence and significance of transfusion transmitted virus (TTV) and association of lipoprotein (a) with apoprotein A and B in various forms of liver diseases. M. Irshad. Funded by ICMR (2005–08).
4. Transmission of drug resistant hepatitis B virus close family contacts of HBV-related chronic liver disease patients. Sarman Singh. Funded by DST for 3 years (2006–2009). Funds: Rs 12.10 lakh.

Ongoing

1. Assessment of risk factor associated with Alzheimer's disease and Vascular dementia. A.K. Mukhopadhyay. Funded by ICMR (2007–10).
2. Study of oxidative stress risk factors in Alzheimer's disease and vascular dementia in Geriatric patients. A.K. Mukhopadhyay. Funded by ICMR (2008–11).
3. Effect of Yoga on Serum Interleukin Levels in Adolescents with Depression. A.K. Mukhopadhyay. Funded by CCRYN (2008–11).
4. Cloning, sequencing and expression of different genomic regions of transfusion transmitted virus (TTV) prevalent in Indian populations. M. Irshad. Funded by ICMR (2008–10).
5. Role of Hepatitis C virus (HCV) core protein in diagnosis and pathogenesis of HCV infection. M. Irshad. Funded by ICMR (2008–11).
6. Identification of *Leishmania donovani* reservoir(s) in various animal species of endemic areas using species-specific antibodies and PCR technique. Sarman Singh. Funded by DST for 3 years (2007–2010).
6. Genotypic characterization of *Mycobacterium tuberculosis* in clinical isolates from Pulmonary tuberculosis by using spoligotyping and IS 6110 RFLP analysis. Sarman Singh. Funded by UGC (Fellowship) for 5 years (2004–2009).
7. Proteomic analysis of *M. tuberculosis* during the stage of acquisition of resistance to Isoniazid and Rifampicin. Sarman Singh. Funded by DBT for 3 years (2006–2009).

9. Transmission of drug resistant Hepatitis B Virus in close family Contacts of HBV-related chronic Liver disease patients. Sarman Singh. Funded by DST for 3 years (2006–2009).
8. Detection of Hepatitis A, E, Salmonella, *E. histolytica* and *Giardia lamblia* from drinking water samples using novel multiplex PCR. Sarman Singh, Funded by DBT for 3 years (2007–2010).
9. To study the molecular mechanism (s) of miltefosine induced drug resistance in *Leishmania donovani*. Sarman Singh. Funded by CSIR (2004–2009).
10. Inhibition of kinetoplast DNA replication using topoisomerase inhibitors. Sarman Singh. Funded by ICMR (2004–2009).
11. The role of TNF-TNF α , TNF γ and the success of anti-tubercular therapy in Immune Restoration Disease in HIV/MTB co-infected patients responding to ART. Sarman Singh Funded by Australia-India Council for 3 years (2006–2009).
12. A Novel multiplex PCR Assay for simultaneous detection and differentiation of *Mycobacterium tuberculosis*, *M. avium* complex and other Mycobacterium species directly from clinical samples of suspected tuberculosis cases. Sarman Singh. Funded by DBT for 3 years (2007–2010).
13. Isolation and purification of active compounds with anti-leishmanial activity of Unani Medical Plants. Sarman Singh. Funded by CCRUM for 3 years (2008–2011).
14. Zinc supplementation in Childhood TB patients in Delhi, India Sarman Singh. Funded by INDIACLEN for 3 years (2008–2011).

Departmental Projects

1. Book Project: The new Science for Consciousness. The Mandate and the Agenda
2. Role of Interleukin-1, 6 and 10 and TNF- α in Acute Pancreatitis
3. Preparation and characterization of VI-Polysaccharide-Protein conjugate for immunization against Salmonellae
4. HCV genotypes and its relation with liver diseases
5. Epidemiology of viral hepatitis in Indian communities
6. To assess the impact of viral hepatitis on steatosis of liver
7. Role of TTV infection in liver and renal diseases
8. Epidemiological studies on CRF in Indian Communities
9. Cloning, sequencing and expression of TTV related polypeptides
10. Genotyping of TTV in Indian population
11. Effect of HCV core expression on oxidative status
12. Comparative evaluation of various PCR primers for the rapid and sensitive diagnosis of tuberculosis

13. Standardization and evaluation of Multiplex PCR for the species specific diagnosis of various Mycobacterial infections
14. To study the prevalence of ESBL of urinary pathogens using disk diffusion method and e-Test.
15. To study the immune response in acute Toxoplasmosis using Western Blot Method.
16. Comparative evaluation of Smear, LJ Culture, MGIT-960 Bactec Culture and Bacteriophage tests for the diagnosis of Tuberculosis
17. Comparative evaluation of various TORCH test kits
18. Blood borne infections after needle prick injury in Health Care workers of AIIMS
19. *Toxoplasma gondii* IgG avidity assays in pregnant women attending AIIMS
20. Sequence based diagnosis of Mycobacterial isolates from HIV positive and HIV negative patients
21. Nested polymerase chain reaction for the diagnosis of congenital CMV infection
22. Opportunistic infections in AIDS patients attending AIIMS

Collaborative Projects

1. Transmission rate of HBV and HCV in family members of dually infected patient (with Gastroenterology)
2. Hepatitis B viral load monitoring in patients undergoing Anti-HBV therapy using Quantitative Real-Time PCR (with Gastroenterology)
3. Prevalence and treatment response of coccidian parasitic infections in HIV positive patients at AIIMS (with Medicine)
4. To study reintroduction of anti-tuberculosis drugs and risk factors for anti-tuberculosis treatment induced hepatotoxicity (with Medicine)
5. Study of Mycobacteremia in Patients with milliary and extrapulmonary tuberculosis (with Medicine)

PUBLICATIONS

1. Verma KK, Mahesh R, Srivastava P, Ramam M, Mukhopadhyaya AK. Azathioprine versus betamethasone for the treatment of parthenium dermatitis: A randomized trolled study. *Indian J Dermatol Venereol Leprol* 2008;**74**:453–57.
2. Mukhopadhyay, AK. A radical view of information: On its nature and science. *Frontier Perspective* 2008;**16**:19–29.
3. Mukhopadhyay AK. Two titans local science and the science of non-locality their clash and unity. In the proceedings of International Conference on Stress Management. Lakshmbai National Institute of Physical Education, Gwalior: Welcome Offset Printers; 2008:4–12.

4. Irshad M, Dhar I, Singh S, Kapoor S. Comparison of serological and nucleic acid based assays used to diagnose Hepatitis C virus (HCV) infection in acute and chronic liver diseases. *International Journal of Health Science* 2007;**1**:3–10.
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6. Irshad M, Shiwani Singh, Agarwal SK, Joshi YK. Torque Teno Virus: Its prevalence and isotypes in North India. *World Journal of Gastroenterology* (2008);**14**:6044– 51.
7. Irshad M, Singh S. Hepatitis C Virus (HCV): Review of Immunological Aspects. *International Reviews of Immunology* 2008;**27**:1– 21.
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11. Dey A, Sharma P, Redhu NS, Singh S. Kinesin Motor Domain of *Leishmania donovani* as future vaccine candidate. *Clin Vaccine Immunol* 2008;**15**:836–842. (IF- 2.0)
12. Gopinath K, Kumar S, Singh S. Prevalence of mycobacteremia in Indian HIV infected patients detected by MB/BacT automated culture system. *Eur J Clin Microbiol Infect Dis* 2008;**27**:423–431. (IF- 2.33)
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14. Singh S. Scaling Up Anti-Mycobacterial Drug Susceptibility Testing Services in India: It is High time. *Indian J Med Microbiol* 2008; **23**:209–211.
15. Kumar P, Srivatsava MV, Singh S, Prasad HK. Filtration of CSF improves isolation of Mycobacteria. *J Clin Microbiol* 2008;**46**:2824–5. (IF- 3.445)
16. Sankar MM, Gopinath K, Singla R, Singh S. *In- vitro* antimycobacterial drug susceptibility testing of Non-Tubercular Mycobacteria by Tetrazolium Microplate Assay. *Ann Clin Microbiol Antimicrob* 2008;**15**: (IF- 2.4).
17. Singh S, Saluja TP, Kaur M, Khilnani GC. Comparative evaluation of FastPlaque assay with PCR and other conventional in-vitro diagnostic methods for the early detection of Pulmonary Tuberculosis. *J Clin Lab Analys* 2008; (IF- 1.117).
18. Sharma U, Singh S. Insect vectors of *Leishmania*: distribution, physiology and their control. *J Vector Borne Dis* 2008;**45**:255–72.

Chapter in Books

1. Mukhopadhyay AK. Brain mind and consciousness. In: Rangaswamy (ed). *Project history of Indian science, philosophy and culture (PHISPC), Vol. XII, Part 6*. New Delhi: Centre for studies in Civilization; 2009:159–91.
2. Mukhopadhyay AK. Connection, confrontation and unity of two titans: Local and non-local science. In: Mishra SC, Nagulapalli SK, Ghosh S (eds). *Science and spiritual quest*. Published jointly by Bhakti Vedanta Institute, Calcutta and NIIT, Tiruchirapalli, Tamilnadu; 2008;129–44.

PATIENT CARE

Total tests performed: 69,76,788

Centralized collection centres

Blood Collection

For department	No. of Specimen
Laboratory Medicine	1,54,365
Blood Bank	3,298
Microbiology	18,433
Miscellaneous	24,367
(Samples collected from other clinics)	
Total	2,00,463

Emergency Laboratory Service (Round-the-clock)

Critical Care Laboratory

Clinical Biochemistry

Haemogram and Body Fluids

Test	Number	Test	Number
Amylase	12,191	Hb	93,794
Bilirubin (T)	41,965	TLC	93,794
Bilirubin (D)	5,764	Platelets	93,794
Creatinine	29,032	Proth Time	23,212
Glucose	19,245	MP	3,855
Urea	87,137	CSF	7,380
Sodium	91,128	Urine	1,228
Potassium	91,128	Microbiology blood culture	6,319
Cl.	18,773	Microbiology CSF	3,215

Calcium	18,773	Gram Stain	1,507
T. Ca	18,773	Slide Stain Giemsa	1,456
pH	18,773	Stool Hanging Drop	372
CSF (Protein)	5,475	MCV	93,794
ABG	6,482	MCH	93,794
		MCHC	93,794
		PCV	93,794
		RBC	93,794
		Others*	14,358
Total	4,64,639	Total	8,13,254
GRAND TOTAL	12,77,893		

* Repeat test, trial test, quality control sample, internal Q.C. etc.

Note: Arterial blood gas (ABG) includes, pH, pCO₂, pO₂, BE, BEecf, BB, HCO₃, st HCO₃, TCO₂, st. pH, CH⁺, O₂ saturation, A-aDO₂, RQ, dBE/dTHb, all measured as a single test within the same time frame

Hb, TLC, MCV, MCHC, PCV, RBC are measured by single reagent, within the same time frame

Clinical Biochemistry

Routine investigations

Test	Blood	Urine	Fluid
Sugar	1,04,629	7,345	3,058
Urea	2,10,494	350	3,057
T. Protein	1,95,285	–	3,058
Albumin	1,95,285	–	3,058
24h Albumin	–	7,707	–
Bilirubin			
-Total	1,99,142	–	–
-Conjugated	1,99,142	–	–
Alk. Phosphatase	2,06,755	–	–
Cholesterol	54,306	–	–
Na	1,73,911	4,875	–
K	1,73,911	4,875	–
Calcium	1,39,148	6,596	–
Phosphate	1,28,763	5,280	–
Uric Acid	1,33,314	4,360	–

Amylase	–	–	–
Creatinine	2,08,198	10,297	–
SGOT	2,11,934	–	–
SGPT	2,11,934	–	–
ABG	5,895		
pCO ₂	5,895	–	–
pH	5,895	–	–
pO ₂	5,895	–	–
HCO ₃	5,895	–	–
CO ₂	5,895	–	–
A-aDO ₂	5,895	–	–
O ₂ saturation	5,895	–	–
BE	5,895	–	–
Total	27,99,206	51,685	12,231

Other Investigations

(done by Dr M. Irshad, on request, not as routine service)

Test	Number
HCV- RNA	300
TTV-DNA	500
Superoxide dismutase	150
Total Antioxidant	150
Apoprotein A	200
Apoprotein B	200
Lp(a)	200
CK	50
LDH	50
GGT	–
TG	100
LDLC	100
HDLC	100
Light chains (k/lambda)	600
TOTAL	2,700
GRAND TOTAL	28,65,822

Service from room no. 18 (under HoD).

Adenosine Deaminase Assay (ADA) 1337

TOTAL 1337

Haematology Section

Test	OPD	Ward
Hb	82,288	68,574
TLC	82,288	68,574
PCV	82,288	68,574
DLC	78,145	68,574
ESR	78,252	40,800
D/M	78,310	68,574
PLT	82,288	68,574
Retic Count	12,312	9,155
ABS Count	34,141	11,229
Malarial Parasite	51,588	5,637
Thick Smear		
MCV	82,288	68,574
MCH	82,288	68,574
MCHC	82,288	68,574
RBC	82,288	68,574
BT	1,229	–
CT	1,229	–
PT	7,504	9,800
B/C	1,348	1,121
Others*	14,521	11,550
Total	10,16,883	7,75,032
GRAND TOTAL		17,91,915

* Repeat test, trial test, Quality Control Sample, Internal QC etc.

Note: Hb, TLC, PCV, DLC, Platelet, MCV, MCHC, RBC are measured by single reagent, within the same time frame

Microbiology Section

Routine Investigations

A. Urine

Name of the Test	OPD	Ward	Total
Medical board			14,210
Routine	67,134	49,172	1,16,306
Microscopic	100,701	73,758	1,74,459
pH	33,567	24,586	58,153
Specific gravity	33,567	24,586	58,153
Acetone	33,567	24,586	58,153
Bile pigment/salt	33,567	24,586	58,153
Urobilinogen	33,567	24,586	58,153
Blood	33,567	24,586	58,153
Bence Jones protein	204	280	484
Chyluria	118	195	313
Porphobilinogen	44	40	84
Myoglobinuria	2	4	6
Microalbumin	20	–	20
Urine cultures	13,905	–	13,905
Strain identifications tests	10,610	–	10,610
Antibiotic sensitivity	2,246	–	2,246
Subtotal	3,96,386	2,70,965	6,81,561

B. Faecal investigations

Wet mount- saline	7,324	2,554	9,878
Wet iodine stain	7,324	2,554	9,878
Occult blood in stool	3,260	1,030	4,290
Fat globules	70	246	316
Special stains for stool Z-N stain, Modified Z-N stain, Trichrome and chromotrope	1,220	1,696	2,916
Subtotal	19,198	8,080	27,278

C. Semen investigations

Routine	11,880	–	11,880
Morphology	3,329	–	3,329
Fructose	631	–	631
Subtotal	15,840	–	15,840

D. Sputum investigations

Z-N Staining for AFB	12873	4068	16941
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E. Sputum investigations

Z-N Staining for AFB	–	–	3,883
Concentration/decontami-nation	–	–	3,883
AR Staining	–	–	154
LJ Culture and subculture	–	–	4,749
BACTEC culture	–	–	6,351
Drug Sensitivity by MGIT 960	–	–	458
DST by Agar proportional	–	–	62
DST by Tetrazolium Microplate assay	–	–	52
Mycobacterial strains maintained	–	–	2,500
Non tubercular mycobacterium isolate maintained	–	–	100
Biochemical tests for culture identification	–	–	52
MB BACT Blood Culture for TB	–	–	450
Culture cryo preserved	–	–	110
Subtotal	–	–	22,804
Total A			7,64,424

Specialized investigations

Serology and Molecular Biology

Name of the tests	Total
<u>TORCH</u>	14,601
Toxoplasma gondii IgG	1,054
Toxoplasma gondii IgM	1,280
Rubella IgG	1,220
Rubella IgM	1,384
Cytomegalo virus IgG	1,970
Cytomegalo virus IgM	2,240
Herpes Simplex virus IgG	1,265
Herpes Simplex virus 2 IgG	1,265
Herpes Simplex virus (1+2) IgM	1,385
Toxoplasma gondii IgG avidity	185
Rubella IgG avidity	535
Cytomegalovirus IgG avidity	292
Parvo virus B19 IgG	263
Parvo virus B19 IgM	263
<u>Viral Markers and HIV</u>	50,190
Anti HAV IgM	1,622
HBs Ag	16,526
Anti HBcIgM	894
HBe Ag	1,652
Anti HBe	890
Anti HBs	1,592
Anti HCV antibody	10,166
HEV IgM	2,004
Toxo DAT	800
HIV (1+2) ELISA	10,570

HIV Spot Test	1666
HIV Westernblot	08
HBs Ag (spot)	1800
<u>Others Serology</u>	1694
Measeles IgG	204
Measles IgG	204
Mumps IgM	180
Mumps IgG	180
Varicella IgG	271
Varicella IgM	271
EBV IgG	192
EBV IgM	192
<u>PCR Tests</u>	4207
<i>Toxoplasma gondii</i> PCR	75
Cytomegalovirus PCR	215
<i>Leishmania</i> PCR	280
TB PCR	6089
Miscellaneous	182
HHV-6 PCR	15
EBV PCR	20
HSV (192) PCR	25
CMV (RT PCR)	25
PCR(Giardia lamblia)	100
PCR (<i>E. histolytica</i>)	100
PCR (Salmonella spp.)	100
PCR (Hepatitis E)	25
DNA isolation	325
HBV DNA Quantitative	260

HBV DNA Qualitative	40
HCV RNA Quantitative	108
Miscellaneous	182
<u>Others</u>	947
Culturing of Salmonella	252
Gel electrophoresis	645
Sequencing	50
<u>NASBA</u>	192
HIV viral load	144
HSV NASBA	48
<u>Leishmania</u>	2,708
Maintenance of <i>Leishmania</i> Clinical isolates	1,248
Serology(anti rKE-16 antibody test)	410
Giemsa staining	410
Culture	80
DNA isolation	280
PCR	280
<u>Laboratory animals</u>	393
Subtotal B	7,4,932
Grand Total A+B	8,39,356

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Dr A.K. Mukhopadhyay; nominated as Member of Nominating Council of Infosys Science Foundation Award; nominated as Chairperson for setting up the Course Curriculum of the Degree/ Diploma of the Medical Laboratory Technology in NIPM & RIPM as member of the National Task Force Committee under DGHS, Government of India; nominated as Expert in Selection Committee of Delhi State Cancer Institute; nominated as Expert in Selection Committee of Nuclear Power Corporation of India Ltd; nominated as Hon'ble Board Member of Editorial Board in *IJBST*, *IJMST*, *IJLST*; continued to remain as Reviewer for *Indian Journal of Clinical Biochemistry* and *International Journal of Medicine and Medical Sciences*; Cambridge Nobel Laureate, Brian D. Josephson personally acclaimed the paper of Dr A.K. Mukhopadhyay on 'Radical view of information: On its nature and science', and distributed its electronic version to his colleagues

Dr M. Irshad was nominated as the Reviewer for articles of Blackwell Publishers and Elsevier Publishers; Hon'ble Member of Editorial Board in *IJBST*, *IJMST*, *IJLST*, since August, 2008; Hon'ble Member of Editorial Board in *IJBLST*, *IJBSPT*, *IJBSAHM*, January, 2009; selected as a member in National Tobacco Control Programme, since 2008.

Dr Sarman Singh was awarded with prestigious Hari Om Ashram Alembic Research Award (Subcategory: 'Dr B.C. Roy Award') of Medical Council of India, for the year 2006; iwas Nominated, Chairman, Institutional Ethics Committee, of CARE Foundation, Namakkal, Tamilnadu; nominated, Member-Advisory Board, Dr B Lal Institute of Biotechnology, Jaipur; nominated, Member of the IAEC of ICGB; is Government of India Nominee for the IAECs of Jawaharlal Nehru University, New Delhi and Delhi Armed Forces Medical College, Delhi; nominated, Member of DST-SERC Task Force for the Fast Track Research Projects for Young Scientists; nominated, Member of Expert Committee of ICMR to evaluate and inspect the procurement of Equipments at ICMR Institutes; invited by International AIDS Society as guest speaker on HIV-TB co-infection during the World AIDS Conference held at Mexico, August 2008; was invited as Chief Guest to inaugurate the "Biotechnology Update" of IP Degree College of CCS University, Meerut.

Dr Singh had been the Chairman, Organising Committee, Second National Conference of Tropical Parasitology (Tropacon-2) New Delhi, October 30- November 2, 2008

Dr. S. Sharma received Dr S. Radha Krishnan memorial award 2008, awarded on 6th September, 2008 Scroll of Honors by Delhi Siksha Evam Khel Vikas Sangh. Healthy Universe Foundation;

VISITING SCIENTIST

Professor Leonid Margolis, NIH, USA; Professor Brian Wigdahl and Professor Zafar Khan of Drexel University, Philadelphia, USA; Dr Suresh Kumar, Department of Parasitology, University of Malaya, Malaysia visited Clinical Microbiology section of the Department and exchanged their research activities.

9.17 Medicine

Professor & Head

S.K. Sharma

Professors

Rita Sood
A. B. Dey

Ashok Kumar
Rohini Handa

Randeep Guleria
G. C. Khilnani

Associate Professors

Naveet Wig
Rajiva Gupta

Ashutosh Biswas

Uma Kumar

Assistant Professors

Sanjeev Sinha

Naval K. Vikram

Anant Mohan

EDUCATION

Short- and long-term training

Seventeen postgraduate and undergraduate students from South Asia, UK, Singapore, Hong Kong and Germany underwent training in the Department of Medicine

Continuing Medical Education

Professor S.K. Sharma organized the following:

- Chairperson ,Medicine Update 2008, jointly organized with Association of Physicians of India (API) Delhi State Chapter, AIIMS; 10 August 2008.
- Expert group Meeting for Forming Consensus Recommendations on Adult Immunization at AIIMS; 6–7 December 2008.
- Workshop, ‘Sleep disorders and demonstration of polysomnography’, 64th Annual Conference of Association of Physicians of India (APICON 2009), Greater Noida, NCR; 30 January 2009.
- Jointly with Ranbaxy Science Foundation XXII Round Table Conference on ‘Challenges of MDR/XDR Tuberculosis in India’, India Habitat Centre, New Delhi; 13 December 2008.
- Workshop, ‘Mechanical ventilation’, 64th Annual Conference of Association of Physician of India (APICON 2009), Greater Noida, NCR; 31 January 2009.
- Symposium, ‘Venous Thromboembolism (VTE)’, 64th Annual Conference of Association of Physician of India (APICON 2009), Greater Noida; 31 January 2009.

Dr Rita Sood was

- Organizing chairperson for the National workshop on ‘Teaching learning methods in Health Professions Education’, The workshop was attended by more than 40 faculty members from various medical, nursing and dental colleges;

- 10–12 November 2008.
- Organizing chairperson for the in-house workshop on ‘Ethics in healthcare’; 7–9 August 2008.
- Co-organizing secretary for the collaborative workshop (CEU-CMET)–1st Annual clinical epidemiology research methods and leadership workshop.

Dr Ashutosh Biswas organized National Workshop on ‘Management of dengue fever’, About 50–60 doctors attended this workshop from different parts of India funded by Ministry Of Health and Family Welfare and WHO, AIIMS; 25–26 June 2008.

Dr Rajiva Gupta organized (i) workshop on Rheumatology clinical for postgraduates; 21 February 2009. (ii) Rheumatology Update 2009; 22 February 2009.

Dr Anant Mohan

- Co-Organizing Secretary of ‘Medicine Update’, AIIMS; August 2008.
- Clinical Tutor/ Faculty in the ‘Basic Bronchoscopy Course’, Royal Preston Hospital, UK; 4 March 2009.

Dr Sanjeev Sinha

Organized Delhi State AIDS Control Society Training Programme for Management of HIV/AIDS for Doctors and Nurses, AIIMS; October 2008.

National and International Conferences

Lectures delivered

Professor S.K. Sharma

- Key note address on ‘Challenges of HIV-TB co-infection’, Workshop on Training Programme for Prevention, Control and Management of HIV/AIDS. Jointly organized by the All India Institute of Medical Sciences and Delhi State AIDS Control Society, AIIMS; 18 October 2008.
- ‘Clinical management of TB-HIV Co-infection- Newer developments’, National CME Programme on ‘Challenges on the road ahead for TB Control’ of National Task Force for the involvement of Medical Colleges in RNTCP of India Jointly organized by the All India Institute of Medical Sciences and Central TB Division (Ministry of Health and Family Welfare, Government of India), AIIMS; 22 October 2008.
- ‘Therapeutic challenges in the management of MDR and XDR Tuberculosis’, 21st Round Table Conference ‘Challenges on XDR tuberculosis in India’, Ranbaxy Science Foundation, India Habitat Centre, New Delhi; 13 December 2008.
- ‘Evidence-based indications for deep venous thrombosis prophylaxis in medical diseases’, 64th Annual Conference of Association of Physician of India (APICON 2009), Greater Noida; 31 January 2009.

Dr Rita Sood

- ‘long case examination’, Course faculty in Workshop on ‘Skills teaching and Assessment’, CMC, Ludhiana; 5 April 2008.
- Student assessment, Validity and reliability in assessment, Project management and developing educational scholarship
- Course faculty in 2nd PSG-FAIMER Regional Institute Faculty Development Programme in Medical Education at Coimbatore, Tamil Nadu; 15–23 April 2008. sessions conducted:
- Conducted a panel and an interactive session on ‘Giving effective educational feedback’, Course faculty in Workshop on ‘Assessment and student feedback’, Sikkim Manipal Institute of Medical Sciences, Gangtok, Sikkim; 12–14 May 2008.
- ‘Project management, qualitative research and Educational scholarship’, Course faculty in Fourth GSMC-FAIMER regional Institute Course in Medical Education; KEM Hospital and GSMC, Mumbai; 15–18 June 2008.
- ‘Student assessment, MCQs and item analysis’, ‘One-minute preceptor and Giving effective feedback’, Course faculty in First Advanced MUHS workshop for medical teachers, MUHS, Pune; 6–8 August 2008.
- ‘What is integrated teaching and why do we need it?’, National workshop on Integrated Teaching, Kameinini Institute of Medical Sciences, Narketpally, Andhra Pradesh, 25–26 July 2008.
- Panelist for a panel discussion on ‘Healing head and heart’ (Teaching values in health care), 15th National conference on ‘Mind, body and medicine’, Mount Abu, Rajasthan; 27–29 July 2008.
- ‘Teaching of ethics to students/ residents’, workshop on Ethics in healthcare, AIIMS; 7-9 August 2008.
- ‘Essentiality of ‘spirit of scientific enquiry (research)–An integral part of medical curriculum at undergraduate and postgraduate level’, International update on Excellence in Medical Education at MGIMS, Sewagram, Wardha, 12–13 September 2008.
- Chaired a symposium on ‘Need of the hour: Re-moulding medical curriculum’, International Update on Excellence in Medical Education, MGIMS, Sewagram, Wardha; 12–13 September 2008.
- Conducted sessions on ‘One minute preceptor’ and ‘Learning theories and adult learning principles’, National workshop on ‘Teaching learning methods in Health Professions’ Education’, AIIMS; 10–12 November 2008.
- Presented the ‘Country report- Undergraduate medical education in India’, 3rd Executive Meeting of the South East Asian Regional Association of Medical Education, Bangkok, Thailand; 10–11 January 2009.
- Guest faculty for the MUHS Deans’ consultation meeting on ‘Capacity Building in Medical Education and Leadership’; 12–13 January 2009.
- Conducted session on ‘Written communication’, Interns orientation programme, AIIMS; February 2009.

- ‘Erythema nodosum—a sign of systemic disease’, Annual conference of Association of Physicians of India, Noida; 30 January – 1 February 2009.
- Chaired a session on ‘Avian influenza’, Annual conference of Association of Physicians of India, Noida; 30 January – 1 February 2009.
- ‘Quality-based medical education—a vision’, Commemorative International workshop of Medical Council of India, New Delhi; 1-3 March 2009.
- ‘Teaching learning methods’, Session on postgraduate training, Annual conference of Indian Association of Medical Microbiologists, India Habitat Centre, New Delhi; 28 March 2009.

Professor Randeep Guleria

- ‘Management of Asthma—Chronic persistent as well as acute exacerbations and Pulmonary Rehabilitation’, Refresher course in Obstructive Airway Diseases.
- Speaker, scientific programme on ‘Management of Pulmonary Diseases’, Bangkok, Pattaya.
- ‘Avian Influenza in West Bengal and Tripura’, Vigyan Bhawan, New Delhi; 16 July 2008.
- Participated in the workshop of key Indian and US Investigator and Collaborators on Environment Risks and Respiratory Diseases, INDO-US programme ICMR.
- ‘Interstitial lung disease’, Heart Lungs and Critical Care Congress 2008, American College of Chest Physician, Hyderabad.
- Visited Flood devastated areas of Surat, Gujarat on the request of the Ministry of Health, Gujarat Government to offer AIIMS expertise for patients of Leptospirosis and Viral haemorrhagic fever; 28–29 August 2008.
- ‘Management of pulmonary embolism’, LRS Institute of Tuberculosis and Respiratory Diseases; 18 July 2008.
- Chaired, NAPCON–2008, Lucknow; 6–9 November 2008.
- Member and Attended the Scientific Advisory Committee (SAC), National Institute of Virology, Pune; 16–17 December 2008.
- Chaired, Medicine Update 2008, MAMC, New Delhi; 12 December 2008.
- Attended three days training programme as resource person for the clinicians on ‘Influenza’, NIHFW, Ministry of Health & Family Welfare, Government of India, New Delhi.
- ‘Difficult asthma’, 34th Workshop on ‘Respiratory allergy: Diagnosis and management’, VP Chest Institute, Delhi; 18 February 2009.
- ‘Snoring can kill’, Refresher Course Programme, IMA College of General Practitioners Kanpur; 22 January 2009.
- chaired symposium ‘Tobacco-related lung disease in Asia– actions to avert the epidemic’, 14th World Conference on Tobacco or Health, Mumbai, 8–12 March 2009.

- Attended three days training programme as resource person for the clinicians on ‘Influenza’, NIHF, Ministry of Health & Family Welfare, Government of India, New Delhi; 28–30 January 2009.
- Attended three days training programme as resource person for the clinicians on ‘Influenza’, NIHF, Ministry of Health & Family Welfare, Government of India, New Delhi; 11–13 February 2009.
- Attended the South East Asia Network on ‘Respiratory diseases’, PGIMER, Chandigarh; 20 March 2009.

Professor G.C. Khilnani

- ‘Steroids in ICU: When, how much and how long’, Conference on ‘Critical care’, (5th Jaipur Conference of Critical Care Medicine), Indian Society of Critical Care Medicine (Jaipur Chapter), Jaipur, 10–13 April 2008.
- ‘Ventilator associated pneumonia’, Conference on Critical care (5th Jaipur Conference of Critical Care Medicine), Indian Society of Critical Care Medicine (Jaipur Chapter), Jaipur; 10–13 April 2008.
- ‘Health effects of air pollution’, ‘Air pollution and human health’, Indian association of Air Pollution Control’, Delhi; 23 September 2008.
- ‘NIV in COPD’ 10th Joint National Conference of National College of Chest Physicians and Indian Chest Society (NAPCON 2008), Lucknow; 6–9 November 2008.
- ‘Ventilator associated pneumonia’, Symposium on ‘Heart, lung and critical care’, Hyderabad, 7–10 August 2008.
- ‘Management of tobacco abuse’, 2nd Annual Conference and Medical seminar cum CME, Border Security Force; 2 December 2008.
- ‘Mechanical ventilation—a clinical and practical update for physicians’, APICON CME programme, Association of Physicians of India, Greater Noida; 29 January 2009.
- ‘Treatment of VAP: Current recommendations’, Workshop on ‘Mechanical ventilation’, Criticare 2009 (Annual Conference of Indian Society of Critical Care Medicine), 18–22 February 2009.
- ‘Pneumonia in ICU: The CAP and HAP’, Criticare 2009 (Annual Conference of Indian Society of Critical Care Medicine); 18–22 February 2009.
- ‘Steroids must be used in ICU’, Workshop on ‘Mechanical ventilation’, Criticare 2009 (Annual Conference of Indian Society of Critical Care Medicine), 18–22 February 2009.
- ‘MDR and XDR Tuberculosis’, 24 March (World TB Day) Indian Medical Association, Meerut Branch, Meerut; 24 March 2009.
- ‘Indian perspective on indoor air pollution and health’, Indo–US Workshop on ‘Research and intervention strategies for indoor air pollution and health’, Indo-US programme on Environmental and Occupational Health ;Neemrana Fort Palace, Rajasthan; 2–4 March 2009.

Dr Ashutosh Biswas

- ‘MDR tuberculosis’, 36th Annual Conference’, Tata Motor Medical Society, Tata Motor Hospital, Jamshedpur, 20 April 2008.
- ‘A typical presentation of leprosy in referral Hospital’, NLEP—National Review Meeting for State Leprosy Officers, Thiruvanthapuram, Kerala; 4–5 December 2008.
- ‘Diagnosis, management and epidemiology of dengue’, 15th B.P. Koirala Institute of Health Sciences Anniversary Celebration, Dharan, Nepal; 7 September 2008.
- ‘Occupational exposure and PEP for HIV among HCW’, HIV/AIDS training workshop, AIIMS.

Dr Uma Kumar

- ‘Prevalence of pulmonary artery hypertension and its predictors in systemic sclerosis’, APICON 2008, Kochi, India.

Dr Rajiva Gupta

- ‘An approach to joint pain’, ESI Hospital, New Delhi; 7 May 2008.
- ‘Guidelines for biologics use in RA’, IRA task force meeting; 25 May 2008.
- ‘Osteoporosis’, CME, CMC Vellore; 2 August 2008.
- ‘Anti TNF therapy at RHCH – an Audit’, RHCH, Winchester, UK; August 2008.
- ‘Interesting cases of Indian SLE and challenges in their management’, SGH, Southampton UK, August 2008.
- ‘Osteoporosis awareness in community’, Andover War Memorial Hospital, Andover, Hampshire; August 2008.
- ‘Young lady with polyarthritis’, Rheumatology CME, SMS Medical College, Jaipur; 18 October 2008.
- ‘An approach to vasculitis’, Rheumatology CME, SMS Medical College, Jaipur, 18 October 2008.
- ‘Meeting for Indian guideline’, RA, Delhi; 19 October 2008.
- ‘Scleroderma revisit’, IRACON 2008, Pune.
- Convener, Workshop on ‘Clinical methods in medicine’, MAMC, CME; 12 December 2008.
- Chairperson, Rheumatology session, MAMC CME 2008.
- Invited to participate in Observational study, workshop organized by NIH, US, Lucknow; 9–11 December 2008.
- Intern orientation programme—Good prescription writing; 9 February 2009.
- Live TV talk on ‘Arthritis’, for DD News; 1 February 2009.

- Moderator CPC – Rheumatology Update 2009, AIIMS.
- ‘Optimizing the early use of anti THF therapy: Can we target the right patient?’, Fulford advisory board meeting, Delhi; 29 February 2009.
- Poster Quiz, APICON 2009
- Scleroderma revisit – IRACON 2008, Pune
- Study the treatment outcome in Indian systemic sclerosis patients with ILD–Preliminary Result from single centre. BSR, Liverpool (UK)
- ‘Dyslipidemia in Indian SSc patients with reference to lipoprotein a (Lpa)’, BSR, Liverpool (UK).
- ‘Pregnancy outcome in Indian systemic sclerosis patients’, BSR, Liverpool (UK).
- ‘Autonomic nervous system dysfunction in rheumatoid arthritis’, BSR, Liverpool (UK).

Dr Sanjeev Sinha

A paper presented on Role of Microbicides in HIV/AIDS’, New Delhi.

- Workshop on ‘ASHA’, UCLA, Los Angeles, USA; May 2008.
- A paper presentation on ‘The role of Vitamin D in susceptibility to HIV and tuberculosis’, American College of Chest Physician, Philadelphia, USA; October 2008.
- ‘OIs in HIV/AIDS: 5 common one’, APICON, Greater Noida; January 2009.
- Chair the session on ‘Neurological diseases’, APICON, Greater Noida; January 2009.
- ‘Evidence-based clinical practice guidelines on adult Immunization’, API; 2009 (Member of expert group).

Dr Anant Mohan

- Chaired a session and delivered lecture on ‘Applied anatomy of the airways’, National Symposium on Bronchoscopy, V. P. Chest Institute; June 2008.
- ‘Clinical features and management of influenza’, National Symposium on Influenza, V. P. Chest Institute, Delhi; 22 September 2008.

Dr Naval Kishore Vikram

- ‘Novo Nordisk Oration’, XIX Annual CME of Delhi State Chapter of API, New Delhi; 18–19 October 2008.

RESEARCH

Funded projects

Completed

1. Evaluation of management strategy for pulmonary embolism (Multicountry international project). Professor SK Sharma. Funded by International Atomic Energy Agency (IAEA), Vienna, Austria for 4 years (2004–2008). Funds: Rs 1.80lakh.
2. Incidence of deep venous thrombosis (DVT) among patients admitted in medical wards and intensive care unit (ICU) of a tertiary care hospital (A study protocol). Professor S.K. Sharma. Funded by Pfizer India Ltd for 3 years (2006–2008). Funds: Rs 5.7 lakh.
3. A population based study of prevalence and risk factors in sleep disordered breathing in south Delhi [Designated as South Delhi Sleep Study Cohort (SDSSC)]. S.K. Sharma. Funded by Pfizer India Ltd for 2 years (2006–2008). Funds: Rs 5 lakh.
4. Treatment outcome and drug resistance among CAT II pulmonary tuberculosis under Revised National TB Control Programme (RNTCP). Professor S.K. Sharma. Funded by RNTCP NCT of Delhi for 3 years (2005–2008).
5. Prognostic utility of various acute phase reactants in acute exacerbation of chronic obstructive pulmonary disease. Anant Mohan.

Ongoing

1. International, multi-centre, randomized, double blind study to compare the overall mortality in acutely ill medical patients treated with enoxaparin versus placebo in addition to graduated elastic stockings. S.K. Sharma. Funded by Reliance Clinical Research Services (P) Ltd for 2 years (2008–2009). Funds: Rs 12.88lakh.
2. Prevalence of metabolic syndrome in obstructive sleep apnea and the effect of treatment with continuous positive airway pressure (CPAP) on metabolic syndrome. S.K. Sharma. Funded by Pfizer India Ltd for 2 years and 6 months (2008–2010). Funds: Rs 16.20.lakh.
3. A Phase II, placebo-controlled, double-blind, randomized trial to evaluate the anti-bacterial activity, safety, and tolerability of TMC207 in subjects with sputum smear-positive pulmonary infection with multi-drug resistant *Mycobacterium tuberculosis* (MDR-TB). S.K. Sharma. Funded by Tibotec BVBA, General De Wittelaan LIIB3, Mechelen, Belgium for 3 years (2008–2011). Funds: Rs 26.24lakh.
4. Comparison of tuberculin skin test (TST) and interferon-release assay in latent TB infection and tuberculosis disease. S.K. Sharma. Revised National TB Control Programme NCT of Delhi for 3 years (2008–2011). Funds: Rs. 5 lakh.
5. Sustaining research momentum over the coming decades: Mentoring the next generation of researchers for tuberculosis. S.K. Sharma. European Union Frame Programme 7 (2008–2011). Funds: 67.84 lakh.

6. Efficacy and safety of immunomodulator (*Mycobacterium w*), as an adjunct therapy in Cat II pulmonary tuberculosis long with assessment of Immunological parameters (Double-blind, randomized, Placebo-controlled, Multicentre Clinical Trial). S.K. Sharma. Funded by Department of Biotechnology, Ministry of Science and Technology, Government of India and Cadila Pharmaceuticals Ltd. Principal Investigator and National Coordinator for 6 years (2004–2010). Funds: 1. 31,lakh.
7. Antiretroviral treatment (ART) Centre for free treatment of HIV/AIDS patients (National AIDS Control Organization (NACO); Ministry of Health and Family Welfare; Government of India). S.K. Sharma. Funded by Delhi State AIDS Control Society. Funds: Rs 4.5 lakh (Initially one year likely to get extended indefinitely, 2005-ongoing till date).
8. Nodal Centre for free treatment of TB. S.K. Sharma. Revised National TB Control Programme NCT of Delhi through the area District TB Centre. Funded by Ministry of Health & Family Welfare, Government of India (Initially one year likely to get extended indefinitely, 2005-ongoing till date). Funds: Rs 4.32 lakh.
9. Efficacy of thrice weekly intermittent short course anti-tuberculosis chemotherapy in tuberculosis patients with and without HIV infection. S.K. Sharma. Funded by National AIDS Control Organization (NACO); Ministry of Health and Family Welfare; Government of India for 3 years (2006–2009); Funds: Rs 45.42 lakh.
10. Role of oral vitamin D as an adjunct therapy in Category I Pulmonary Tuberculosis along with assessment of immunological parameters (Double-blind, Randomized, Placebo-Controlled, Clinical Trial). S.K. Sharma. Funded by Department of Biotechnology, Ministry of Science and Technology, Government of India for 3 years (2006–2009) Funds: Rs 90.90 lakh.
11. Efficacy of oral zinc administration as an adjunct therapy in Category I Pulmonary Tuberculosis along with assessment of immunological parameters (Double-blind, Randomized, Placebo-Controlled, Multicentre Clinical Trial). S.K. Sharma. Funded by Department of Biotechnology, Ministry of Science and Technology, Government of India for 3 years (2006–2009). Funds: Rs 63.38 lakh
12. Evaluation of the efficacy of thrice weekly DOTS regimen in TB pleural effusion at six months (multicentre project). S.K. Sharma. Funded by Revised National TB Control Programme NCT of Delhi for 3 years (2006–2009). Funds: Rs 14.36lakh.
13. Efficacy and safety of immunomodulator *Mw* as an adjunct therapy in category I (new sputum smear positive) pulmonary tuberculosis, along with assessment of immunological parameters (Double-blind, Randomized, Placebo-Controlled, Multicentre Clinical Trial). S.K. Sharma. Funded by Department of Biotechnology, Ministry of Science and Technology, Government of India for 3 years (2006–2009). Funds: Rs 76.81 lakh.
14. Programme support for immuno-proteomics based diagnosis of infectious diseases. S.K Sharma. Funded by Department of Biotechnology, Ministry of Science and Technology, Government of India for 3 years (2006–2009). Funds: Rs 173lakh.

15. Impact of HIV infection on latent TB among patients with HIV-TB co-infection (Facility has been designated as National Facility). S.K. Sharma. Funded by Department of Biotechnology, Ministry of Science and Technology, Government of India for 3 Years (2007–2010). Funds: Rs 220lakh.
16. Design and development of Personal use respiratory devices for patients with respiratory failure. Dr Randeep Guleria. Funded by Ministry of Communication and Information Technology (till June 2009). Funds: Rs 22.85 lakh.
17. Assessment of nutritional and antioxidant enzyme status in mechanically ventilated critically ill patients. Effects on mortality and strategies for improving nutritional support. Randeep Guleria. Funded by Department of Science and Technology (till September 2009). Funds: Rs 22 lakh.
18. Double blind randomized placebo controlled trial of herbal compound MA-364 in patients with mild to moderate bronchial asthma. Randeep Guleria. Funded by Maharishi Ayurveda (till September 2009). Funds:.
19. Serum leptin nutritional status and inflammatory markers in chronic obstructive pulmonary disease. Relationship with dyspnea and severity of disease. Dr Randeep Guleria. Funded by ICMR (till March 2010). Funds: Rs 19 lakh.
20. Clinical implications of circulating DNA and protein markers in lung cancer. Randeep Guleria. Funded by: ICMR (till December 2010). Funds: Rs 19.93lakh.
21. An Interventional Nutritional study in subject with newly Diagnosed active Tuberculosis (TB). Randeep Guleria. Funded by GSK (till July 2009). Funds: Rs 12.8 lakh.
22. Genetic Metabolic and Hormonal Profile in Obstructive Sleep Apnea Syndrome. Randeep Guleria. Funded by Department of Science and Technology (till April 2011). Funds: Rs 24 lakh.
23. A randomized double-blind placebo controlled exploratory study to assess the safety and efficacy of multiple doses of ACZ885 in COPD. Randeep Guleria. Funded by Novartis (till March 2010). Funds:.
24. To evaluate the efficacy and safety of fixed dose combination of formoterol and fluticasone dry powder inhaler in the management of partly controlled and uncontrolled Asthma prospective study. Randeep Guleria. Funded by Ranbaxy India (till April 2009).
25. Pharmaco-genetics of Methotrexate in Rheumatoid arthritis. R. Gupta. Funded by DST.
26. Study the effect of statin on lipid profile and disease activity in rheumatoid arthritis. R. Gupta. Funded by AIIMS. Funds: Rs 2 lakh.
27. Cutaneous vasculitis–aetiological and pathological study. R. Gupta. Funds: Rs 2 lakh.
28. Study of the prevalence of respiratory virus infections in hospitalized patients with acute exacerbation of chronic obstructive pulmonary disease and bronchial asthma and their impact on morbidity and mortality. Anant Mohan. Funded by Indian Council for Medical Research(ICMR) for 3 years (2007–2010). Funds: Rs 12.64 lakh.

29. Mitochondrial DNA Mutations in Lung Cancer. Funded by Department of Biotechnology (2008–2011). Funds: 19.2 lakh.
30. Study of the variability in systemic inflammation in patients with chronic obstructive pulmonary disease due to smoking and non-smoking related causes. Funded by Indian Council of medical Research (ICMR) (2009–2012). Funds: Rs 28 lakh.
31. Body fat and its relationship with metabolic syndrome indicators in overweight pre-adolescents and adolescents. Funded by International Atomic Energy Agency, Vienna. Funds: Rs 12 lakh.
32. Investigation of genetic basis, and gene-lifestyle interactions in generalized and regional obesity, insulin resistance and diabetes in Asian Indians. Funded by Department of Biotechnology, Government of India. Funds: Rs 46 lakh.
33. Oxidized low-density lipoprotein antibodies: pathogenic implications for vascular involvement in patients with autoimmune diseases and type 2 diabetes mellitus. Funded by AIIMS. Funds: Rs 2 lakh.
34. Effect of outdoor and indoor air pollution on children's health in Delhi. A controlled study. Professor G.C. Khilnani.. Funded by Ministry of Environment and Forest for 3 years Funds: Rs 5.6 lakh,. per year for three and half years)
35. A Phase IIIB Multicentre, Randomized, Double-Blind, Double-Dummy Study to Compare the Efficacy and Safety of Abatacept Administered Subcutaneously and Intravenously in Subjects with Rheumatoid Arthritis, Receiving Background Methotrexate, and Experiencing an Inadequate Response to Methotrexate. Uma Kumar. Funded by British Meyer Squibb (till 2010).
36. A randomized, open label study in Asia-Pacific Region Comparing the safety and efficacy of Etanercept with usual DMARD therapy in subjects with Rheumatoid Arthritis. Uma Kumar. Funded by Wyeth (till 2009).
37. Study of early versus delayed initiation of antiretroviral therapy for HIV infected patients with tuberculosis on Antituberculosis chemotherapy in Indian subjects. S. Sinha. Funded by NACO (A collaborative UCLA, USA and AIIMS project). Funds: Rs 45 lakh.
38. Study of prevalence and types of baseline HIV drug resistance in the antiretroviral treatment-naive and previously treated HIV infected Northern India population. S. Sinha. Funded by NACO (A collaborative UCLA, USA and AIIMS project). Funds: Rs 45 lakh.
39. Nevirapine versus Efavirenz-based highly active antiretroviral therapy regimens in antiretroviral-naive patients with HIV and Tuberculosis infection in India. S. Sinha. Funded by NACO. Funds: Rs 35 lakh.
40. Role of Vitamin D in susceptibility of tuberculosis in HIV (A collaborative Harvard Medical School, USA and AIIMS project). S. Sinha.
41. ASHA HIV health promotion intervention. S. Sinha. Funded by NIH, USA. . Funds: Rs 12.5 lakh.

Departmental Projects

Completed

1. Study the therapeutic window in rheumatoid arthritis
2. Screening for catastrophic antiphospholipid syndrome
3. Study of neuropathy associated with rheumatoid arthritis
4. Serum nitrite as a discriminatory marker for inflammatory back pain
5. Treatment outcome and drug resistance among category II pulmonary tuberculosis patients under RNTCP
6. Critical Appraisal of Assessment in Key Clinical Disciplines in Undergraduate Course , AIIMS (CMET)
7. Hospitalisation for rheumatic diseases—a prospective study
8. Efficacy of oral Sildenafil in pulmonary artery hypertension in Scleroderma- A hospital based study
9. To study the therapeutic window in Rheumatoid arthritis
10. Screening for catastrophic antiphospholipid antibody syndrome
11. Assessment of nutritional profile and CRP levels in patients with respiratory failure who are on mechanical ventilation
12. Evaluation of 18- FDG PET-CT and comparison with CT findings in patients with mediastinal lymphadenopathy due to tuberculosis and sarcoidosis
13. Dynamics of commensal flora and development of nosocomial infections in the critically ill. Clinical profile of frail elderly patients in hospital setting
14. Evaluation of side effects of Anti retroviral therapy in patients with HIV/AIDS.
15. To study the pregnancy outcome in systemic lupus erythematosus with special reference to cyclophosphamide therapy
16. Role of 18 FDG CT PET in diagnosis and assessment of Systemic Necrotising Vasculitis
17. Study the effect of DMARD on lipid profile in rheumatoid arthritis with special reference to lipoprotein A and oxidized LDL
18. Pregnancy outcome in Indian systemic sclerosis
19. Prevalence and clinical significance of antiphospholipid antibodies in systemic sclerosis
20. Neurocognitive functions in AIDS patients and response to antiretroviral therapy
21. Evaluation of efficacy and adverse effects of antiretroviral drugs in treatment naïve HIV patients at AIIMS

Ongoing

1. Study the clinical and laboratory correlations of hand abnormalities in scleroderma
2. Study the etiology of reactive arthritis in Indian patients
3. Atherosclerosis in Ankylosing Spondylitis
4. Dyslipidemia among HIV infected patients with Antiretroviral Therapy
5. Evaluation of side effects of Anti retroviral therapy in patients with HIV/AIDS
6. Evaluation of 18- FDG PET-CT and comparison with CT findings in patients with mediastinal lymphadenopathy due to tuberculosis and Sarcoidosis
7. Dynamics of commensal flora and development of nosocomial infections in the critically ill
8. Study the prevalence of Clostridium difficile in nosocomial diarrhea in patients admitted in Medicine ICU
9. Prognostic utility of various acute phase reactants in acute exacerbation of COPD
10. Clinical profile of frail elderly patients in hospital setting
11. Endothelial dysfunction in systemic sclerosis
12. Utility of PET scan in assessing extent of disease and response to treatment in Sarcoidosis
13. Study of the prognostic utility of various inflammatory markers in patients with acute exacerbation of chronic obstructive pulmonary disease
14. Study of Non Alcoholic Fatty Liver Disease and Atherosclerosis in Asian Indians.
15. Endothelial dysfunction in systemic sclerosis
16. Cognitive dysfunction in systemic lupus erythematosus
17. Gastrointestinal manifestations in systemic sclerosis
18. Viral Hepatitis Co-infection among HIV/AIDS
19. Evaluation of risk factors associated with hospital mortality: A case control study
20. Dyslipidemia among HIV infected patients receiving antiretroviral therapy, a prospective observational study
21. Study of bone mineral density in young adult with JIA
22. Evaluation of Disease activity by Imaging modalities in TA
23. Serum IL-6 Level as marker of Disease activity in Ankylosing Spondylitis without peripheral arthritis

Collaborative Projects

Completed

1. Study of etiological risk factor profile in paediatric strokes (with Paediatrics)
2. Role of 18-FDG PET-CT scan in diagnosis and assessment of disease activity in primary systemic necrotizing vasculitis (with Nuclear Medicine and Cardiac Radiology)
3. To study the pregnancy outcomes in patients with SLE with special reference to cyclophosphamide therapy (with Obstetrics and Gynaecology)
4. Holmium radiosynovectomy in refractory arthritis (with Nuclear Medicine)
5. Evaluation of patients with mediastinal lymphadenopathy using 18 FDG PET Scan and its correlation with histopathology (with Department of Surgery)
6. Role of 18 FDG PET Scan in the diagnosis and evaluation of pulmonary nodules (with Surgery)
7. Modulation of neutrophil CR1 expression by IFN- γ and immune complexes, its relationship with CR1 density polymorphism and significance in SLE. (with Biochemistry)
8. Role of complement regulatory protein DAF, MCP and CD59 in pathophysiology of SLE (with Biochemistry)
9. Phenotyping and genotyping characterization of clinical isolates of Candida Species (with Microbiology).
10. Cytokine gene polymorphism and their possible association with immune restoration disease in HIV-TB co-infected patients (with Microbiology).
11. Immunological characterization of HIV-1 Clade-C virus (with Microbiology).
12. Genetic characterization of HIV-1 subtype-C envelope including V3 antibodies (with Biochemistry).
13. Cutaneous vasculitis—etiopathological and clinico-pathological correlation (with Dermatology)
14. Endothelial Dysfunction in Rheumatoid Arthritis (with Radiology)
15. Hospitalisation for Systemic Rheumatic Diseases (with Dermatology, Gastroenterology and Hospital Administration)
16. Diagnosis of visceral Leishmaniasis by use of PCR on patient blood (with Microbiology).
17. A Study of Haematological Abnormalities in HIV/AIDS (with Haematology).
18. Effect of IFN- δ and immune complex on neutrophil-CR1 transcript and its relationship with CR1 density polymorphism (with Biochemistry)
19. HIV/AIDS:

20. Prevalence and treatment response of Coccidian parasitic infections in HIV positive patients at AIIMS (with Laboratory Medicine)
21. Diagnosis of Symptomatic Visceral Leishmaniasis by Use of the Polymerase Chain Reaction on Peripheral Blood Samples (with Microbiology)
22. Existing status of Faculty Development in Medical Education in India (with CMET)
23. Prevalence and Treatment Response of Coccidian Parasite Infection in HIV Positive Patients at AIIMS (with Laboratory Medicine)

Ongoing

1. Complement regulatory proteins and their significance in the pathophysiology of systemic lupus erythematosus (with Biochemistry)
2. Prevalence of Metabolic Syndrome and its selected socio-behavioral determinants among females aged more than 20 years residing in an urban resettlement colony, South Delhi (with Community Medicine)
3. Comparison of serum and dietary erythrocyte magnesium in obese and non-obese children and its relation to insulin resistance (with Paediatrics)
4. Impaired glucose tolerance in children and adolescents with cystic fibrosis (with Paediatrics)
5. Endothelial nitric oxide synthase gene polymorphism and rheumatoid arthritis (with Biochemistry)
6. Expression and modulation of complement receptors: significance in the pathophysiology and prognosis of autoimmune disorders (with Biochemistry)
7. Determination of relative fraction of integrated and unintegrated viral DNA and plasma viral RNA in HIV-1 infected individuals (with Biochemistry).
8. To study the immunogenic effect of Kinesin motor domain gene against visceral Leishmaniasis (with Laboratory Medicine)
9. Study of Mycobacteremia in Patients with Extrapulmonary and Disseminated Tuberculosis (with Laboratory Medicine)
10. Study of acute febrile illnesses with Cytopenias (with Haematology)
11. A comparative study of Pain status in Fibromyalgia patients and healthy controls (with Physiology).
12. Psychosocial aspect of chronic pain syndrome (with Psychiatry)
13. Arthroscopic elbow synovectomy in Rheumatoid arthritis: its effectiveness and MRI correlation (with Orthopaedics)
14. A study of chronic exposure to magnetic field on pain status of fibromyalgia patient (with Physiology)

15. Expression and modulation of leukocyte Complement Receptor 1 and CD59 (Protectin) in relation to rheumatoid arthritis (with Biochemistry)
16. Endothelial Nitric Oxide Synthase Gene Polymorphism and Rheumatoid arthritis (with Biochemistry)
17. DNA amplification study by polymerase chain Reaction (PCR) to detect sub-clinical *Pneumocystis carinii* Pneumonia (PCP infection and colonization in ‘at risk’ patients with or without respiratory symptoms. Funded by Department of Science and Technology (DST). (with Microbiology)
18. Primary drug resistance studies by Genotypic and Phenotypic analysis in HIV – Indian subtype C infected individual (with Microbiology).
19. Brachial plexus neurotization with phrenic and or intercostals nerves and its effect on pulmonary function (with Neurosurgery).
20. Study of genetic diversity and phylogenetic analysis of *Pneumocystis jirovecii* obtained from patients with clinical diagnosis of *Pneumocystis carinii* pneumonia (PCP). Funded by CSIR (2008–2011). (with Microbiology)
21. Study of genetic polymorphism of dihydropteroate synthase (DHPS) gene in *Pneumocystis jirovecii* isolates and its correlation with treatment failure and clinical outcome in patients with *Pneumocystis carinii* pneumonia. Funded by DST (2009– 2012) (with Microbiology).
22. “Detection & quantification of *Pneumocystis jirovecii* in respiratory samples using real time PCR in patients with HIV infections. Funded by ICMR (2009–2012). (with Microbiology)
23. Double masked Placebo controlled parallel group multicentre dose ranging study within an optional extension to assist efficacy and safety of LX 211 as therapy in subjects with active fight threatening non-infectious intermediate anterior and intermediate posterior pan uveitis. Funded by Global sponsored Lux biosciences (with Dr R.P. Centre for Ophthalmic Sciences).
24. Double masked Placebo controlled parallel group multicentre dose ranging study within an optional extension to assist efficacy and safety of LX 211 as therapy in subjects with active fight threatening non-infectious anterior uveitis. Funded by Global sponsored Lux biosciences (with Dr R. P. Centre for Ophthalmic Sciences).
25. Double masked Placebo controlled parallel group multicentre dose ranging study within an optional extension to assist efficacy and safety of LX 211 as therapy in subjects with clinically quiescent fight threatening non-infectious intermediate anterior and intermediate posterior and pan uveitis. Funded by Global sponsored Lux biosciences (with Dr R.P. Centre for Ophthalmic Sciences)
26. Existing status of Faculty Development in Medical Education in India (with CMET).
27. Study of Mycobacteremia in Disseminated Tuberculosis (with Laboratory Medicine)
28. Reference diagnostic range for serum free light chains in Indian Subjects. Comparison with multiple myeloma (with Haematology)

29. Modulation of neutrophil CR1 expression by IFN- γ and immune complexes, its relationship with CR1 density polymorphism and significance in SLE (with Biochemistry)
30. Role of complement regulatory protein DAF, MCP and CD59 in pathophysiology of SLE (with Biochemistry)

PUBLICATIONS

Journals

1. Agarwal SK, Misra A, Aggarwal P, Bardia A, Goel R, Vikram NK, *et al.* Waist circumference measurement by site, posture, respiratory phase, and meal time: Implications for methodology. *Obesity (Silver Spring)* 2009 Jan 22.
2. Ait-Khaled N, Pearce N, Anderson HR, Ellwood P, Montefort S, Shah J, ISAAC phase three study group. Global map of the prevalence of symptoms rhinoconjunctivitis in children: The International Study of Asthma and Allergies in Childhood (ISAAC) Phase Three. *Allergy* 2009;**64**:123–48. [Professor SK Sharma was the Principal Investigator for the study from India (name listed in the Appendix in online supplement)].
3. Beasley R, Clayton T, Crane J, von Mutius E, Lai CKW, Montefort S, Stewart A, ISAAC phase three study group. Association between paracetamol use in infancy and childhood, and risk of asthma, rhinoconjunctivitis, and eczema in children aged 6–7 years: Analysis from Phase Three of the ISAAC programme. *Lancet* 2008;**372**:1039–48. [Professor S.K. Sharma was the Principal Investigator for the study from India (name listed in the Appendix in online supplement)].
4. Bharaj P, Chahar HS, Pandey A, Diddi K, Dar L, Guleria R, *et al.* Concurrent infections by all four dengue virus serotypes during an outbreak of dengue in 2006 in Delhi, India. *Virol J* 2008;**5**:1.
5. Bhardwaj S, Misra A, Khurana L, Gulati S, Shah P, Vikram NK. Childhood obesity in Asian Indians: A burgeoning cause of insulin resistance, diabetes and sub-clinical inflammation. *Asia Pac J Clin Nutr* 2008;**17**:167–170.
6. Bhatt SP, Guleria R, Luqman-Arafath TK, Gupta AK, Mohan A, Nanda S, Stoltzfus JC: Effect of tripped position on objective parameters of respiratory function in stable chronic obstructive pulmonary disease. *Indian J Chest Disease Allied Sci* 2009;**51**:83–5.
7. Bhushan B, Guleria R, Misra A, Pandey RM, Luthra K, Vikram NK. Obstructive sleep apnea correlates with C-reactive protein in obese Asian Indians. *Nutr Metab Cardiovasc Dis* 2009;**19**:184–9.
8. Bhushan B, Guleria R, Misra A, Luthra K, Vikram NK. TNF-alpha gene polymorphism and TNF-alpha levels in obese Asian Indians with obstructive sleep apnea. *Resp Med* 2009;**103**:386–92.
9. Bjorksten B, Clayton T, Ellwood P, Stewart A, Strachan D, ISAAC Phase III Study Group. Worldwide time trends for symptoms of rhinitis and conjunctivitis: Phase III of the International study of asthma and allergies in childhood. *Pediatr Allergy Immunol* 2008;**19**:110–24. [Professor S.K. Sharma was the Principal Investigator for the study from India (name listed in the Appendix in online supplement)].

10. Palaniswamy C, Kumar U, Selvaraj DR, Pandey B, Handa R, Alappan NK, *et al.* Tuberculous mycotic aneurysm of aortic root: An unusual cause of cardiac tamponade. *Tropical Doctor* 2009;**39**:112–13.
11. Chatterjee R, Batra J, Das S, Sharma SK, Ghosh B. Genetic association of acidic mammalian chitinase with atopic asthma and serum total IgE levels. *J Allergy Clin Immunol* 2008;**122**:202–8.e7.
12. Das CJ, Seth A, Debnath J, Kumar U, Sharma SG, Aron M. Aspergillus colonisation of pulmonary rheumatoid nodules: A Rare Cause of ‘Bull’s Eye’ appearance. *Indian J Chest Dis Allied Sci* 2009;**51**:41–3.
13. Du Z, Sharma SK, Spellman S, Reed EF, Rajalingam R. KIR2DL5 alleles mark certain combination of activating KIR genes. *Genes Immun* 2008;**9**:470–80.
14. Goel K, Gupta N, Misra A, Poddar P, Pandey RM, *et al.* Predictive equations for body fat and abdominal fat with DXA and MRI as reference in Asian Indians. *Obesity (Silver Spring)* 2008;**16**:451–6.
15. Goel R, Misra A, Kondal D, Pandey RM, Vikram NK, *et al.* Identification of insulin resistance in Asian Indian adolescents: classification and regression tree (CART) and logistic regression based classification rules. *Clin Endocrinol (Oxf)* 2008. [Epub ahead of print].
16. Goswami R, Ray D, Sharma R, Tomar N, Gupta R, Sreenivas V. Presence of spondyloarthopathy and its clinical profile in patients with hypoparathyroidism. *Clin Endocrinol (oxf)* 2008;**68**:258–63. [Epub 2007 Sep 4].
17. Gupta R, Mirdha BR, Guleria R, Mohan A, Kabra SK, Kumar L, *et al.* Use of different primer directed sequence amplification by polymerase chain reaction for identification of *Pneumocystis jirovecii* in clinical samples. *Indian J Chest Dis Allied Sci* 2008;**50**:321–28.
18. Gupta R, Deepanjai S, MM Thabab, P Kaur, S Gupta. Successful twin pregnancy on cyclophosphamide therapy in a patient with lupus nephritis. *Rheumatol International* 2009;
19. Gupta R, Kavimandan A, Kumar R. Does CT-PET predict disease activity in Takayasu’s arteritis? *Scand J Rheumatol* 2008;**37**:237–9.
20. Habibi S, Wig N, Agarwal S, Sharma SK, Lodha R, Pandey RM, *et al.* Epidemiology of nosocomial infections in medicine intensive care unit at a tertiary care hospital in northern India. *Trop Doct* 2008;**38**:233–5.
21. Hadda V, Vikram NK, Jain V, Chopra A, Goel A, Sood R. Body aches, tender bones and rapid loss of weight: A case report. *Cases Journal* 2009;**2**:37 [doi:10.1186/1757-1626-2-37].
22. Jain D, Sharma MC, Sarkar C, Suri V, Sharma SK, Singh S, Das TK. Tubular aggregate myopathy: a rare form of myopathy. *J Clin Neurosci* 2008;**15**:1222–6.
23. Kadiravan T, Piramanayagam P, Banga A, Gupta R, Sharma SK. Lemierre’s syndrome due to community-acquired methicillin-resistant *Staphylococcus aureus* infection and presenting with orbital cellulitis: a case report. *J Med Case Reports* 2008;**2**:374.

24. Kadiravan T, Soneja M, Hari S, Sharma SK. Images in Clinical Tropical Medicine. Disseminated Cysticercosis. *Am J Trop Med Hyg* 2009;**80**:699.
25. Kadiravan T, Sharma SK. Medical Management of genitourinary tuberculosis. *Indian J Urol* 2008;**24**:362–8.
26. Khilnani GC, Hadda V. Management of severe sepsis: Role of ‘bundles’. *Indian J Chest Dis Allied Sci* 2009;**51**:27–36.
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2. Sharma SK, Mohan A. Tuberculosis and Other Mycobacterial Diseases. In: Rakel RE, Bope ET (eds). *Conn's Current Therapy 2009*. USA: Saunders Elsevier; 2009:282–90.
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PATIENT CARE

Chest Clinic

New cases	2077
Old cases	4031
Total	6108

Rheumatology Clinic

New cases registered	352
Number of follow up visits	7919
Total	8271

Rheumatology Procedures

Intravenous pulses of steroids and cyclophosphamide	492
Joint and soft tissue injections	1905
Synovial fluid aspirations	80

Adult Haematology Clinic

New cases	78
Old cases	305

Infectious Diseases Clinic

New cases	414
Old cases	475

Sleep Related Breathing Disorders (SRBD) Clinic

New cases	307
Old cases	166

Antiretroviral centre

Total registered	4550
ART started	1733
On ART and regular follow-up	1002
Total	1061
ART started 2008–2009	261

AIIMS DOTS Centre

Total cases on DOTS	175
CAT I	120
CAT II	35
CAT III	20

Laboratories***Respiratory laboratory***

Spirometry procedures	3321
Diffusion capacity estimation	328
Body Box (Plethysmography) measurements	160
Oxymetries	1125

Bronchoscopy Laboratory

Fiberoptic bronchoscopy performed	564
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Sleep laboratory

Sleep studies	306
CPAP titrations	131
Anthropometries	306
Body composition	306

ADA/ACE Laboratory

Adenosine deaminase tests	244
ACE tests	210

Clinical Immunology Laboratory

Number of blood samples received	9874
Number of tests done	24,346

Test	Number
RF	5223
ANA	6867
Anti-dsDNA	1772
C3	1544
Serum IgG, IgA and IgM	1833
Cryoglobulins	100
ANCA	1997
aCL	3302
Anti-LKM-1	877
ASMA	831
Synovial fluid examination (Including polarizing light microscopy)	80

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Professor SK Sharma received following honours: Fellow, National Academy of Sciences, India (NASI), Allahabad, 2008. Rabindranath Tagore Oration – 2010, Indian College of Physicians (ICP), Association of Physicians of India (API). Editor, *Indian Journal of Chest Diseases and Allied Sciences* since 2001, Davidson's Clinical Cases (Edinburgh) (1st ed), 2008, Monograph, 'Adult Immunization', Association of Physicians of India (API) 2009 Guest Editor, Special issue of IJMR on Sleep Medicine, 2009, Section Editor, Pulmonology section, API Textbook of Medicine, 8th edition since 2008, Associate Editor, *Indian Journal of Tuberculosis (IJT)* since 2006. Member, Editorial Board of the following journals: *Lung India* since 2004, *Indian Journal of Sleep Medicine* since 2005, *Chest* (American College of Chest Physicians) since 2006, *The Open Tropical Medicine Journal* since 2008, *Indian Journal of Medical Research*, 2009, Advisory Board: *ChestIndia* edition (American College of Chest Physicians) 2000–2006, *Journal of Association of Physicians of India (JAPI)* since 2000 *Journal of Indian Academy of Clinical Medicine* 2002–2007, *Clinical Medicine* by Kumar and Clark Textbook (6th ed.) 2005, *Davidson's Principles and Practice of Medicine* (20th ed.) 2006, *Davidson's Principles and Practice of Medicine* (21st ed.) (in press), *Open Infectious Journal* 2008.

He is a Fellow, American College of Chest Physicians since 1988, National College of Chest Physicians (India) since 1989, Indian College of Physician since 2005, American College of Physicians since 2005 Indian Chest Society since 1988, World Association of Sarcoidosis and other Granulomatous Diseases (WASOG) 1989, American Thoracic Society since 1989, National Academy of Medical Sciences of India since 1993, Association of Physicians of India since 1995, International Union Against Tuberculosis and Lung Diseases since 1999, Indian Association of Sarcoidosis and other Granulomatous Disorders (IASOG) since 2003, Indian Society of Critical Care Medicine since 2004.

He is a Member, Scientific Advisory Committee of Infectious Diseases, Indian Council of Medical Research since 2004; World Lung Health [initiative of International Union Against Tuberculosis and Lung Diseases (IUATLD)] since 2004; Joint Steering Committee for collaboration between the two institutions All India Institute of Medical Sciences, Ansari Nagar, New Delhi and University of Minnesota, Minneapolis (USA).

He has been appointed as a Co-ordinator of IMPACT (Indian Medical Professional Association's Coalition Against Tuberculosis) on behalf of the Association of Physicians of India (API) to fight jointly against tuberculosis by forming a coalition for a period of 5 years since 2008.

He continues to be the Chairperson of National Task Force on The Involvement of Medical Colleges in TB Control Programme of India, Ministry of Health and Family Welfare, Govt. of India; DOTS-Plus Committee of Ministry of Health and Family Welfare, Govt. of India for MDR-TB; Central Standing Committee for Operational Research on RNTCP related project, Ministry of Health & Family Welfare, Govt. of India; Drugs Purchase Selection Committee, All India Institute of Medical Sciences hospital, New Delhi.

He was an Expert Member for Selection Committee for the post of Professor in Respiratory Medicine at VP Chest Institute under Delhi University, for the post of lecturer in Respiratory Diseases at University College of Medicine, Delhi. He was member Selection Committee for admission for DNB course in Respiratory Medicine, LRS Institute of TB and Respiratory Diseases (Ministry of Health & Family Welfare, Govt. of India), New Delhi, 2009. He was a member of Tuberculosis and HPV Vaccine Development Group meeting at National Institute of Immunology 2008. He was a member of committee for Drugs Controller General (India) [DCG(I)] in matters related to regulatory approval of clinical trials for Investigational New Drugs (IND) since 2008. He was a member of Scientific Committee of APICON 2009 and has been appointed as a member, Expert Group for Pulmonology, The Association of Physicians of India, 2009. He was Expert Member, Selection Committee for the post of Additional DG to Deputy DG and Deputy DG to Senior Deputy DG; Research Officer to Senior Research Officer and Senior Research Officer to Additional Director General at ICMR, New Delhi, 2009. He was member, Annual meeting of the Research Area Panels/Scientific Advisory Committee (RAP/SAC), National Institute of Immunology (NII), 2009 and is an Expert Member for, Joint Monitoring Mission of the World Bank and World Health Organization and Ministry of Health and Family Welfare, GOI, New Delhi, April 2009 to evaluate performance of RNTCP. Professor SK Sharma was Chairperson of the Curriculum Committee of the Medical Council of India for making postgraduate curriculum on Tropical Medicine, Infectious Diseases and Chest and TB in March 2009.

Professor SK Sharma continues to be the reviewer for the following journals: *The Lancet*, *The Lancet Infectious Disease*, *American Journal of Respiratory and Critical Care Medicine (Blue Journal)*, *Chest* (American College of Chest Physicians), *Indian Journal of Tuberculosis*, *Indian Journal of Chest Diseases and Allied Sciences*, *Indian Journal of Medical Research*, *Infection Genetics and Evolution*, *Clinica Chimica Acta*, *Pharmacological Research*, *Respiration*, *Journal of Laboratory and Clinical Medicine*, *Biomedcentral Infectious Disease*, *Journal of Molecular and Cellular Proteomics*, *Cytokine*, *Respiratory Medicine*, *Respirology*, *Sleep Medicine*, *Expert Review of Respiratory Medicine*, *Allergologia et immunopathological*

Professor Rita Sood was on the International Advisory Board of 7th edition of Text book of Clinical Medicine by Kumar & Clark, Executive Committee member of South East Asian Regional Association of Medical Education (SEARAME). Member, Association for the Study of Medical Education in Europe (ASME), Member Faculty Council, Indian College of Physicians; on Editorial Board ‘*South East Asian Journal of Medical Education*’ (SEAJME), published from Chulalongkorn University, Bangkok, Thailand. Member, Advisory Board, *Journal of Association of Physicians of India*, *Journal of Indian Academy of Clinical Medicine*. Reviewer — *International Journal of Medical Education*, *Medical Teacher*, *Yonsei Medical journal*, *Postgraduate Medical Journal*, *NMJI*, *JAPI*, *J Indian Academy of Clinical Medicine*.

She was invited as Temporary Advisor to WHO for the Expert group meeting to review and finalize the module on ‘Teaching of ethics in undergraduate medical curriculum’ at WHO, SEARO, New Delhi, 25–26 September’ 2008; attended 3rd Executive Committee Meeting of SEARAME at Chulalongkorn University, Bangkok, 10–11 January 2009. She was a chancellor’s nominee for 2 years on the selection committee of Pd B D Sharma University of Health Sciences, Rohtak, for the selection of teaching faculty. She was invited as technical expert by the Ministry of HRD for selection of fellows for commonwealth fellowships. She was an expert for Medical Council of India for undergraduate and postgraduate (competence based) curriculum revision in Medicine, October 2008 and for the development of undergraduate and postgraduate curriculum in Family Medicine. She was also invited faculty for the 3rd National convention on ‘Testing and Evaluation’ held at New Delhi on 18–20 February 2009, organized by the National testing service, Mysore. She was nominated expert by the Medical Council of India to develop the curriculum for the Basic and Advanced courses on Medical education for the teaching faculty.

Professor Randeep Guleria was an Adviser, Board for the interview of candidates, qualified in the Combined Medical Services, Examination 2007, UPSC. He was member of the interview board to interview the candidates for the post of Civilian Medical Officer, UPSC, 22nd August 2007. He was also Adviser, Board for the interview candidates for Assistant Professor (TB and Chest Disease), UPSC He was member of the Project Review Committee on “Leprosy, Tuberculosis and Other Chest Diseases” of the ICMR, Project advisory Committee on Nutritional profile of Assam, Manipur and Meghalaya, ICMR, and member of the Expert Committee constituted by the Ministry of Health and Family Welfare to visit Leptospirosis affected areas in Surat, Gujrat, Scientific Advisory Committee of National Institute of Virology, Pune and Joint Monitoring Committee on Avian Influenza Constituted by the Government of India, Ministry of Health and Family Welfare. He was nominated, resource person for the Refresher Training for the Rapid Response Teams on Avian Influenza held at Panjim, Goa, 11–15 November 2007. He was invited by the International Atomic Energy (IAEA) as consultant at a meeting on Justification of patient exposure in medical imaging at the IAEA’s Headquarters, Vienna; 10–14 December 2007.

He was External Examiner for DM (Pulmonary Medicine) PGIMER, Chandigarh and External Examiner for M.D. (Medicine) University of Kashmir, B.P. Koirala Institute of Health Sciences, Dharan, and Delhi University. He was member of the expert Committee/ Interview Board to select the Associate Professor (Chest & TB) in the department of Medical Education, H.P, DNB course in Respiratory Medicine at LRS Institute of Tuberculosis and Respiratory Diseases, New Delhi, Commonwealth

Scholarship 2008 by the Ministry of Human Resource & Development, Govt. of India, New Delhi and for the interview to the post of Scientist – B (Medical) at the TRS, Chennai.

Professor G.C. Khilnani was elected (unopposed) as Vice president of National College of Chest Physicians for a period of two years. He was awarded ‘ICS oration’ award by the Indian Chest Society. He served as course Director of the Workshop on Non-invasive ventilation during the 10th Joint National Conference of National College of Chest Physicians and Indian Chest Society (NAPCON 2008), Lucknow, 6–9 November 2008. He served as Chairman for the Committee on ‘Health effects of air pollution’ by Central Pollution Control Board, Ministry of Environment and Forests. He served as examiner for Diplomate for National Board (DNB Medicine), and External examiner for Practical examination for MD Medicine Examination at Jodhpur, University of Rajasthan on 18–19 May 2008. He served as External Expert for selection of faculty posts (Professor of Pulmonary Medicine) at PGIMS Rohtak, faculty posts in Pulmonary Medicine at SGPGI Lucknow, faculty posts of Senior Professor of Medicine at PGIMS Rohtak, faculty posts for Autonomous Medical Colleges of Madhya Pradesh at Bhopal and faculty posts for Department of Medicine at BPKIHS, Dharan, Nepal.

He participated in the workshop for development of SEA Network for Chronic Respiratory Diseases held at PGIMER Chandigarh and in Indo-US workshop on ‘Research and Intervention Strategies for Indoor Air Pollution and Health’ held under aegis of Indo–US program on Environmental and Occupational Health Neemrana Fort Palace, Rajasthan, 2–4 March 2009. He was Chairman for Technical Advisory Committee for examining and approving Technical specifications for equipments for Dept of Critical care and Anaesthesia for Institute of Liver and Biliary Sciences, Vasant Kunj, New-Delhi. He was a member of Data and Safety Monitoring Board (DSMB) titled ‘Zinc as an immunomodulator in the treatment of possible serious bacterial infections in infants more than 7 days and up to 2 months of age’.

Dr Naveet Wig received Masters Degree in ‘Health Services’ from University of California Los Angeles, USA. He continued to be Member of Technical Resource Group, National AIDS Control organization.

Dr Ashutosh Biswas was conferred membership of New York Academy of Sciences, (NYAS) and membership of International AIDS Society, (IAS). He was a member of Government National Committee for Quality Assurance of anti TB drugs. He was also a member of Review Committee of International Journal ‘*CHEST*’. He was a member of Technical Advisory committee in planning the strategies of clinical management of Dengue Fever, National Vector Borne Diseases Control Programme. Ministry of Health and Family Welfare. He is also a member of Government of India, National leprosy eradication programme for workshop on facilitation skills for strategies planning through logical framework approach, Central leprosy division, Ministry of Health & Family Welfare, Government of India.

Dr Uma Kumar was awarded International Scholarship ,Japanese College of Rheumatology, 2008. She has been the External Examiner for MBBS (Medicine), S N Medical College, Agra and MBBS (Medicine) PMCH, Patna. She was expert for interview of specialists in ESI Corporation. She was nominated ,planning and monitoring board, JSS University, Mysore, Karnataka and advisory

committee, BLDE University, Bijapur, Karnataka. Rheumatism scholarship, Australian Rheumatology Association –Asia Pacific League Against 2008. Associate Editor, Indian Journal of Rheumatology, 2007-2009 Joint Secretary, Delhi Rheumatology Association, 2008-2010.

Dr Rajiva Gupta was Member, International Advisory Board of Davidson's - Principles and Practice of Medicine – 21st edition, member of International Advisory Board of Kumar and Clark – Clinical Medicine – 7th edition and member of International Advisory Board of Bates' Guide to Physical Examination and history taking – 10th ed. He was awarded Zydu's Oration 2008 for scientific contribution in Rheumatology; Executive Member – Indian Rheumatology Association.

Dr Anant Mohan was awarded the UK Commonwealth Fellowship for 2008–2009 in Chest Medicine at the Royal Preston Hospital, Lancashire Teaching Hospitals NHS Trust, UK, reviewer Journal of Supportive Care in Cancer, Indian Journal of Medical and Paediatric Oncology.

Academic, Administration, Finance, Engineering, Library, Central Facilities, etc

Professor S.K. Sharma was the Chairperson, AIIMS Drug Purchase Selection Committee, the Institute Medical Board, Operational Research in TB (Ministry of Health and Family Welfare, Government of India), and the National Task Force on Involving Medical Schools in DOTS programme. He was also Member of the Drug Selection Committee of National AIDS Control Organization, Governing Body, L.R.S. Hospital, New Delhi. Dr. Rajiva Gupta was member of Horticulture & Sanitation Advisory Committee of AIIMS and member of Environmental (Horticulture, Sanitation, DPORC) Advisory Committee, AIIMS. Dr. Anant Mohan was a member of the Institute Medical Board. Dr Sanjeev Sinha was faculty member of core committee of AIIMS for DOTS under Revised National Tuberculosis Control Programme and Faculty member of core committee of AIIMS for Antiretroviral therapy unit for HIV/AIDS patients. He was Member , Medical Board Antarctica Expedition, Government of India.

9.18 Microbiology

Professor and Head

J.C. Samantaray

Professor

S. Broor

R. Chaudhry

A. Kapil

Additional Professors

B.R. Mirdha

B.K. Das

L. Dar

Associate Professors

B. Dhawan

M. Vajpayee

I. Xess

Assistant Professors

S. Sood

U.B. Singh

EDUCATION

Short- and long-term summer training

Short-term summer training was provided to 2 students (MSc) and long-term training was provided to 10 students (MSc) from various institutes/ universities. Short-term summer training was provided to 1 MD student.

Continuing Medical Education (CME)

Dr Madhu Vajpayee Organized workshop 'ICTC Sensitization Programme' for Doctors, Counsellors and Nurses with support from DSACS; 13–14 February 2009.

Dr Urvashi B. Singh organized one day symposium (CME) on the occasion of World TB Day on 'I am stopping tuberculosis'; 24 March 2009.

National and International Conferences

The Department organized 'AIIMS Microbiology symposium' an academic meeting of the alumni; 7 March 2009.

Dr B.R. Mirdha, Executive Member of Indian Association of Medical Microbiology (Delhi Chapter) was the Co-organizer of 1st Annual Conference of Indian Association of Medical Microbiologists; 23–24 March 2009.

Fourteen papers were presented in various national and international conferences.

Lectures delivered

Dr Shobha Broor

- 8th Asia Pacific Congress of Medical virology, Hong Kong; 26–28 February 2009.

- Influenza virus Surveillance in community based setting in India', Indo-US Vaccine Action Programme Discussion Group meeting on 'Indo-US regional Avian Influenza Surveillance', Hyderabad; 16–18 October.
- 'Spectrum of viral ARI in children', 38th Conference of India Virological Society, Chandigarh: PGIMS; 12–15 December 2008.

Dr Rama Chaudhary

- 'Emerging food-borne bacteria', ILSI-India/ICMSF Conference; 22 October 2008.
- 'Recent Advancement in Probiotics/Prebiotics for Health Promotion', panel discussion on 'Gaps in knowledge and the way forward', ILSI-India/ICMSF Conference in session I; 20 February 2009.
- 'Mycoplasma pneumoniae: Clinical spectrum and new disease association', CME on 'Emerging trends in Mycoplasmas', Indira Gandhi Medical College, Shimla; 26 March 2009.

Dr Lalit Dar

- Update on Infectious Diseases. 'Antiretroviral drug resistance', Department of Microbiology, Safdarjung Hospital and BLK Memorial Hospital in association with Department of Gastrointestinal Infections, HPA, UK India Habitat Centre, New Delhi; 20 November 2008.

Dr Benu Dhawan

- Indo-German Combined Workshop/brainstorm meeting on 'Zoonoses and animal models of infectious diseases'. Animal models of *Staphylococcus aureus* including MRSA, ICMR, New Delhi; 15 September 2008.
- Update on Infectious Diseases. 'Therapeutic options for MRSA and VRE'. Departments of Microbiology, Safdarjung Hospital & BLK Memorial Hospital in association with Department of Gastrointestinal Infections, HPA, UK, India Habitat Centre, New Delhi; 20 November 2008.
- 'Molecular Diagnosis of *Ureaplasma urealyticum* and *Mycoplasma hominis*', CME on 'Emerging trends of Mycoplasmas', Department of Microbiology, Indira Gandhi Medical College, Shimla; 26 March 2009.

Dr Urvashi B. Singh

- Focus on Newer Investigations and Management of TB in Co-morbid States, at the annual CME of East Delhi Physicians Association, New Delhi; 14 December 2008.
- 'Tuberculosis—interesting clinical cases', 32nd National Congress of Indian Association of Medical Microbiologists, Pune; 23–25 October 2008.
- 1st International Conference of South East Asia Region (The Union) and 63rd National Conference on 'Tuberculosis and chest diseases', (SEAR, NATCON 2008), Tuberculosis Association of India 'Interplay of multiple genetic markers for genotyping of *Mycobacterium tuberculosis* isolates from India', Mumbai, India Habitat Centre, New Delhi; 8–10 September 2008.
- 3rd International Workshop on MDRTB Drug Resistance Mutations and Transmission of TB in Delhi, India, The Foundation for Medical Research, Mumbai, Pune; 8–10 August 2008.

RESEARCH

Funded Projects

Completed

1. Cloning and Expression of *Mycoplasma pneumoniae* P1 gene and its fragments to study their role in cytoadherence. R. Chaudhry. Funded by ICMR for 3 years (February 2005–January 2008). Funds: Rs 17 lakhs.
2. Development of a DNA Biosensor for detection of *Neisseria gonorrhoeae* in clinical samples. Seema Sood. Funded by Ministry of Science and Technology, Department of Biotechnology, Government of India for three years (May 2007–May 2010). Funds: Rs 53.736 lakh.
3. Development of multiplex real time quantitative PCR assay to detect *Chlamydia pneumoniae*, *Legionella pneumophilla* & *Mycoplasma pneumoniae* in community acquired pneumonia. R. Chaudhry. Funded by DBT for 3 years (February 2005–August 2008). Funds: Rs 34.65 lakhs.
4. DNA amplification study by Polymerase Chain Reaction (PCR) to detect sub-clinical *Pneumocystis carinii* infections and colonization in ‘at risk’ patients with or without respiratory symptom. B.R. Mirdha. Funded by DST (2004–2007). Funds: Rs 18 lakhs.
5. Detection, Identification and Molecular Characterization of Intestinal Coccidia and Microsporidia in patients with chronic diarrhea and Malabsorption Syndrome. B.R. Mirdha. Funded by ICMR [Project No. (No. 5/3/3/12/2005-ECD-I)]. Funds: Rs 9 lakhs.
6. Evaluation of cytokine profile and TH1/ TH2 shift in HIV infected Indian patients. MVajpayee. Funded by ICMR, New Delhi.
7. Molecular characterization of invasive and non-invasive *Haemophilus influenzae*. B Das. Funded by DST. Funds: Rs 20 lakhs.
8. Optimization of carbohydrate – protein conjugates as vaccine for prevention of enteric fever. S Sood. Funded by Ministry of Science and Technology, Department of Biotechnology, Government of India for three years (2004–2007). Funds: Rs 36.58 lakhs.
9. Phenotypic and Genotypic Characterization of Methicillin and Mupirocin Resistance in *Staphylococci*. B. Dhawan. Funded by Department of Biotechnology, New Delhi for three years (2005–2009). Funds: Rs 28.16 lakhs.
10. Prevalence of intestinal coccidiosis and other parasitosis in ‘at risk’ individuals. Intramural Project (2005–2008). B.R.Mirdha. Funds: Rs 0.35lakhs.
11. Study of carbapenemase production amongst nosocomial isolates of gram-negative bacteria in a tertiary care hospital. A. Kapil. Funded by ICMR New Delhi for 3 years (2005–2008). Funds: Rs 12 lakhs.

Ongoing

1. Clinico-Epidemiologic and Molecular Characterization of Extended-Spectrum Beta Lactamase (ESBL) Producing *Klebsiella* spp., *E. coli* and *Enterobacter* spp causing Nosocomial and Community Infections. A. Kapil. Funded by ICMR, New Delhi for 3 Years (2007–2010). Funds: Rs 10 lakh.

2. Cloning and Expression of flagellin Gene of *Salmonella* Typhi: An immunodiagnostic approach. R. Chaudhry. Funded by ICMR for 3 years (September 2007– September 2010). Funds: Rs 24 lakh (approx).
3. Detection and Identification of Thermophillic Campylobacter Spp. (*C. jejuni*, *C.coli*, *C.upsaliensis* and *C.lari*) and Molecular Sub-Typing of Campylobacter jejuni in Faecal Samples of Diarrheic Patients and in Food samples Using PCR, PCR-RFLP and PFGE. R. Chaudhry. Funded by ICMR for 3 years (March 2007–March 2010). Funds: Rs 17 lakh.
4. Detection of *Ureaplasma urealyticum* and *Mycoplasma hominis* in patients with biovars with lower genitourinary tract infection by PCR assay: Association of *Ureaplasma urealyticum* biovars with clinical outcome. B. Dhawan. Funded by ICMR for 3 years (August 2006–August 2009). Funds: Rs 10.88 lakh.
5. Expert Group on Antibiotic Susceptibility Testing (EGAST) 2008: Observational Plan. Funded by Pfizer, Mumbai for 6 months Funds: Rs 2 lakh.
6. HIV National Reference Laboratory (NRL) and External Quality Assurance Scheme (EQAS). M Vajpayee (November 2009 onwards)/ Lalit Dar (April-October 2008). Funded by NACO.
7. HIV voluntary counselling and testing centre. Madhu Vajpayee (November 2009 onwards)/ Lalit Dar (April–October 2008). Funded by NACO.
8. Mechanisms of resistance to Ciprofloxacin in *Salmonella typhi*. Funded by ICMR, New Delhi. 3 years (2005–2008). Funds: Rs 12 lakh.
9. Molecular Tracking of community–associated methicillin resistant *Staphylococcus aureus* strains disseminating in a tertiary hospital. B. Dhawan. Funded by ICMR for three years (2009–2012). Funds: Rs 14,66 lakh.
10. Pneumolysin (Ply)-tpA DNA construct as a vaccine candidate against *Str. Pneumoniae*. Bimal Das. Funded by Department of Science and Technology (DST) (2006). Funds: Rs 20 lakh.
11. Pneumococcal surface protein A (Psa A) tPA DNA construct as vaccine Candidate against *Str. Pneumoniae*. Bimal Das. Funded by Department of Biotechnology (DBT). Funds: Rs 23 lakh.
12. Study of Genetic diversity of *Pneumocystis jiroveci* isolates from patients with interstitial lung diseases. B.R. Mirdha. Funded by CSIR (2008–2010). Funds: Rs 17 lakh.
13. To Study colonization and immunomodulatory effect of probiotic strain in Indian Children. R. Chaudhry. Funded by DBT for 3 years (June 2006–May 2009). Funds: Rs 97 lakh.

Collaborative Projects

Completed

1. Diagnosis of visceral leishmaniasis by use of the Polymerase chain reaction (PCR) on patient blood (with Medicine and Institute of Pathology).
2. Study of emerging parasitic agents (Intestinal Coccidia and Microsporidia) in aetiologies of Malabsorption Syndrome (with Microbiology, Gastroenterology and HNU and Paediatrics).

Ongoing

1. A study on treatment of Genital Tuberculosis-Randomized Controlled Trial of either discontinuation at 6 months or continuation till 9 months after initial response to 6 months RNTCP category I treatment. Urvashi B. Singh. Funded by Ministry of Health (with Department of Obstetrics and Gynaecology)
2. Administration of *Lactobacillus rhamnosus* GG for the prevention and treatment of *Clostridium difficile* infection and subsequent diarrhea in Indian population. R. Chaudhry. Funded by DBT for 18 months (December 2007–May 2009). Funds Rs 37.30 lakh. (with The Energy Research Institute)
3. Assessment of Intestinal permeability in Chronic Liver Disease and its Complications. Seema Sood. (with Gastroenterology)
4. Comprehensive proteomics profiling of CSF proteins from patients of different meningitis infections for biomarker discovery (JNU, Delhi). A Kapil. Funded by DBT, New Delhi (2008–2011).
5. Detection of mycobacterial pathogens in Crohn's disease patients. Urvashi B. Singh. Funded by Department of Biotechnology, Ministry of Science and Technology, Government of India. (with Gastroenterology and Human Nutrition)
6. Determination of mechanisms of resistance to ciprofloxacin in *Salmonella enterica* serotype Typhi. Seema Sood. Funded by ICMR (2008–2011).
7. Development of Nanosilver Nanohydrogels for Biomedical Applications. A Kapil. Funded by DBT (2009–2011). (with IIT, New Delhi)
8. Diagnosis of genital tuberculosis in infertile women and the effect of antitubercular therapy. Urvashi B. Singh. Funded by ICMR, New Delhi. (with Obstetrics and Gynaecology)
9. Efficacy and safety of immuno-modulator (*Mycobacterium w*) Mw as an adjuvant therapy in Category II and multi-drug resistant pulmonary tuberculosis along with reduction in the duration of therapy and to study immunological parameters. Urvashi B. Singh. Funded by Department of Biotechnology, Ministry of Science and Technology, Government of India and Cadila Pharmaceuticals Ltd. Funds: Rs 526.54 lakh.
10. Efficacy of thrice weekly intermittent short course antituberculosis chemotherapy in tuberculosis patients with and without HIV infection. Urvashi B. Singh. Funded by National AIDS Control Organization (NACO); Ministry of Health and Family Welfare; Government of India. Funds: Rs 4.5 lakh.
11. Efficacy and safety of immuno-modulator Mw as an adjunct therapy in Category I (new sputum smear positive) pulmonary tuberculosis, along with assessment of immunological parameters (Double-blind, Randomized, Placebo-Controlled, Multicentre Clinical Trial). Urvashi B. Singh. Funded by Department of Biotechnology, Ministry of Science and Technology, Government of India. Funds: Rs 7.6 lakh.

12. Efficacy of oral zinc administration as an adjunct therapy in Category I Pulmonary Tuberculosis along with assessment of immunological parameters (Double-blind, Randomized, Placebo-Controlled, Multicentre Clinical Trial). Urvashi B. Singh. Funded by Department of Biotechnology, Ministry of Science and Technology, Government of India.
13. Evaluation of the efficacy of thrice weekly DOTS regimen in TB pleural effusion at six months (Multicentre project) with Department of Medicine. Urvashi B. Singh. Funded by National AIDS Control Organization (NACO); Ministry of Health and Family Welfare; Government of India.
14. Microscopy Centre for Directly Observed (DOTS) Therapy, Short-Course with Department of Medicine. Urvashi B. Singh. Funded by Ministry of Health, Government of India, Ministry of Health.
15. Molecular characterization of *Giardia intestinalis* isolates and study of genotype-clinical phenotype correlation (with Microbiology, Gastroenterology, Paediatrics)
16. To study the diagnostic value of Quantiferon gold test in detecting latent TB infection in end stage renal disease patients on renal replacement therapy. Urvashi B. Singh. Funded by ICMR, New Delhi.
17. Role of oral vitamin D as an adjunct therapy in Category I Pulmonary Tuberculosis along with assessment of immunological parameters. Urvashi B. Singh. Funded by DBT, Department of Science, Government of India. Funds: Rs 50 lakh.
18. Treatment outcome and drug resistance among CAT II pulmonary tuberculosis under Revised National TB Control Programme (RNTCP) of India. Urvashi B. Singh. Revised National TB Control Programme NCT of Delhi. Funds: Rs 4.9 lakh.
19. Multisite monitoring of human influenza in India –phase I. Broor S, Dar L, Kabra SK Krishnan A. Funded by Department of Health human Services USA (DHHS) and ICMR(2004–2009). Funds: Rs 467, lakh
20. Acute respiratory viral infections in rural India. Broor S, Sullender WM, Fowler K, Pandav CS. Funded by NIH (MCHDR) and ICMR (2007–2009). Funds: Rs 36. lakh
21. An RNA interference based approach to study the simultaneous inhibition of RSV and hMPV. Broor S, Dar L, Malhotra P. (ICGEB). Funded by Department of Biotechnology (DBT) (2007–2009). Funds: Rs 35.26 lakh.
22. Direct and indirect protection by influenza vaccine given to children in India. Broor S, Sullender WM, (UAB ,USA) Fowler K (UAB, USA), Krishnan A. Funded by Centres of Disease Control and Prevention USA (2008–20011). Funds: Rs 10,36.lakh
23. Addressing Emerging Infectious Diseases in the republic of India: Influenza Disease. Mishra AC, Broor S, Chadha M, Sidebella H, Krishnan A, Sanjay Rai. Funded by Centres of Disease Control and Prevention USA (2008–2010). Funds: Rs 2,07. lakh
24. Rapid low cost molecular detection of influenza virus infections. Broor S, Sullender WM. Funded by Vaccine Action Programme NIH, USA (2008–2010). Funds: Rs 22.36 lakh.

25. Respiratory virus infections; rapid low cost molecular detections. Shobha Broor, Wayne Sullender (UAB). S.K. Kabra. Funded by MCHDR-ICMR (2008–2010). Funds: Rs 22.5 lakh
26. Norovirus infections in pediatric acute gastroenteritis and asymptomatic children Shobha Broor, Shinjini Bhatnagar. J.C. Samanta Ray. Funded by ICMR (January 2008–March 2009). Funds: Rs 5.1 lakh
27. Cloning and expression of respiratory syncytial virus G protein in bacterial and mammalian expression vector. Shobha Broor. Shama Parveen (Jamia Milia Islamia), A Srinivasan. Funded by Department of Biotechnology (DBT) (July 2008–July 2011). Funds: Rs 29.7 lakh.

PUBLICATIONS

Journals

1. Anirudhan D, Bakhshi, Xess I, Broor S, Arya LS. Etiology and outcome of oral mucosal lesions in children on chemotherapy for acute lymphoblastic leukemia. *Indian pediatrics* 2008; 45:47–51.
2. Arora J, Singh UB, Naga S, Rana T, Porwal C, Kaushik A, *et al.* Predominant *Mycobacterium tuberculosis* strains among different ethnic subpopulations of India. Accepted for publication in *Infect Genet Evol.*
3. Banerjee B, Deb R, Dar L, Mirdha BR, Pati SK, Thareja S, *et al.* High frequency of parasitic and viral pathogens in patients with ulcerative colitis. Report from tropical country. *Scand J Gastro* 2009;44:325–31
4. Behera B, Mathur P, Das A, Kapil A, Sharma V. An evaluation of four different phenotypic techniques for detection of metallo-beta-lactamase producing *Pseudomonas aeruginosa*. *Indian J Med Microbiol* 2008;26:233–7.
5. Bharaj P, Chahar HS, Pandey A, Diddi K, Dar L, Guleria R, *et al.* Concurrent infections by all four dengue virus serotypes during an outbreak of dengue in 2006 in Delhi. *India Virol J* 2008;5:1.
6. Bhatla N, Dar L, Patro AR, Kumar P, Pati SK, Kriplani A, *et al.* Human papillomavirus-type distribution in women with and without cervical neoplasia in north India. *Int J Gynecol Pathol* 2008;27:426–30.
7. Bhowmik D, Dinda AK, Xess I, Sethuraman G, Mahajan S, Gupta S, Agarwal SK, Guleria S, Tiwari SC. Fungal panniculitis in renal transplant recipients. *Transpl Infect Dis* 2008; 286–9.
8. Broor S, Bharaj P, Chahar HS. Human metapneumovirus: a new respiratory pathogen. *J Biosci* 2008;33:483–93.
9. Chaudhry R, Joshy L, Kumar L, Dhawan B. Changing pattern of *Clostridium difficile* associated diarrhoea in a tertiary care hospital: A 5 year retrospective study. *Indian J Med Res* 2008;127: 377–82.
10. Chaudhry R, Pandey A, Das A, Broor S. Infection potpourri: Are we watching? *Indian J Pathol Microbiol* 2009;52:125.

11. Chaudhry R, Pandey A, Das A, Broor S. Infection potpourri: Are we watching? *Indian J Pathol Microbiol* 2009;**52**:125.
12. Chaudhry R, Pandey A, Chandel D, Dhawan B, Gupta DK, Panigrahi P. Pulmonary involvement in leptospirosis: A diagnostic enigma. *Indian J Chest Dis Allied Sci* 2009;**51**:53–5.
13. Chauhan NK, Mendiratta S, Mojumdar K, Vajpayee M. Effect of Mother to Child Transmission Intervention Strategies and Clinical, Haematological, Immunological Characteristics in Children Born To HIV-1 Infected Mothers in India. Accepted for publication in *Journal of Pediatric Infectious Diseases*.
14. Dar L, Pati SK, Patro AR, Deorari AK, Rai S, Kant S, *et al*. Congenital cytomegalovirus infection in a highly seropositive semi-urban population in India. *Pediatr Infect Dis J* 2008;**27**:841–3.
15. Das A, Arora J, Rana T, Porwal C, Kaushik A, Gaur G, *et al*. Congenital tuberculosis: An entity–underestimated, laboratory support in aid of Cantwell criteria. *Annals of tropical pediatrics* 2008;**28**:137–41
16. Dhawan B. *Mycoplasma pneumoniae*: An emerging pulmonary pathogen. *Indian J Med Res* 2008;**128**:107–9.
17. Gupta E, Dar L, Broor S. Concurrent infection by two dengue virus serotypes among dengue patients. *Indian J Med Microbiol* 2008;**26**:402–3.
18. Gupta R, Mirdha BR, Guleria R, Luthra K, Mohan A, Agarwal SK. Use of different primer directed sequence amplification by polymerase chain reaction for identification of *Pneumocystis jirovecii* in clinical samples. *Indian Journal of Chest and Allied Diseases* 2008;**50**:321–7.
19. Habibi S, Wig N, Agarwal S, Sharma SK, Lodha R, Pandey RM, *et al*. Epidemiology of nosocomial infections in medicine intensive care unit at a tertiary care hospital in northern India. *Trop Doct* 2008;**38**:233–5.
20. Hill J, Beriwal S, Chandra I, Paul VK, Kapil A, Singh T, *et al*. Loop-mediated isothermal amplification assay for rapid detection of common strains of *Escherichia coli*. *J Clin Microbiol* 2008;**46**:2800–4.
21. Nag HL, Neogi DS, Nataraj AR, Ajay Kumar V, Yadav CS, Singh U. Tubercular Infection after arthroscopic anterior Cruciate Ligament reconstruction. *The Journal of Arthroscopic and Related Surgery* 2009;**25**:131–6.
22. Joshy L, Chaudhry R, Chandel DS. Multiplex PCR for the detection of *Clostridium botulinum* and *C. perfringens* toxin genes. *Indian J Med Res* 2008;**128**:206–8.
23. Jyoti Arora, Urvashi Balbir Singh, Naga Suresh and Jitendra Nath Pande: Interplay of multiple genetic markers for genotyping of *Mycobacterium tuberculosis* isolates from India. Communicated to *Journal of Microbiological Methods*.
24. Kadhiravan T, Wig N, Renuka K, Kapil A, Kabra SK, Misra A. Is nalidixic acid resistance linked to clinical virulence in *Salmonella enterica* serovar Typhi infections? *J Med Microbiol* 2008;**57**:1046–8.

25. Kalra V, Sharma S, Sahu J, Sankhyan N, Chaudhry R, Dhawan B, *et al.* Childhood acute transverse Myelitis: Clinical profile, outcome, and association with antiganglioside antibodies. *J Child Neurol* 2009.
26. Kaushal M, Sreenivasa BC, Sidharth S, Sidharth DG, Mirdha BR, Makharia GK, *et al.* Tropical mayhem: A chronic viral disease with superadded parasitic infection. *J Med Microbiol* 2008;**57**:232–235.
27. Khatter S, Singh UB, Arora J, Rana T, Seth P. Mycobacterial infections in human immunodeficiency virus seropositive patients: Role of nontuberculous mycobacteria.. *Indian J Tuberc* 2008;**55**:28–33.
28. Mendiratta S, Vajpayee M, Malhotra U, Kaushik S, Dar L, Mojumdar K, *et al.* Characterization of Gag and Nef-specific ELISpot-based CTL responses in HIV-1 infected Indian individuals. *Med Microbiol Immunol* 2009;**198**:47–5.
29. Panigrahi P, Parida S, Pradhan L, Mohapatra SS, Misra PR, Johnson JA, *et al.* Long-term colonization of a *Lactobacillus plantarum* synbiotic preparation in the neonatal gut. *J Pediatr Gastroenterol Nutr* 2008;**47**:45–53.
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31. Saha DC, Xess I, Zeng WY, Goldman DL. Antibody responses to *Cryptococcus neoformans* in Indian patients with cryptococcosis. *Med Mycol* 2008;**46**:457–53.
32. Saha DC, Xess I, Jain N. Evaluation of conventional & serological methods for rapid diagnosis of cryptococcosis. *Indian J Med Res* 2008;**127**:483–8.
33. Sood S, Rachna, Singh R, Sumana G, Bala M, Samantaray JC, *et al.* The sequences for the primers and probe to be used on the Biosensor and for PCR for the detection of *Neisseria gonorrhoeae* in clinical samples have been validated by the GenBank. The accession numbers for the primer set and the probe are 2706 and 2705 respectively. The sequences have been derived from the *Opa* gene of *N. gonorrhoeae*.
34. Singh R, Xess I, Ramavat AS, Arora R. Basidiobolomycosis: A rare case report. *Indian J Med Microbiol* 2008;**26**:265–7.
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36. Sood S, Kapil A. Antimicrobial resistance and Enterococcal infections. *Indian J Med Res* 2008;**129**:162–7.
37. Sood S, Kapil A. An update on *Trichomonas vaginalis* *Indian J STD and AIDS*, 2008; **29**:7–14.

38. Sood S, Malhotra M, Das BK and Kapil A. Enterococcal infections and antimicrobial resistance. *Ind J Med Res* 2008;**128**:111–21.
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41. Vajpayee M, Kaushik S, Sreenivas V, Mojumdar K, Mendiratta S, Chauhan NK. Role of immune activation in CD4+ T-cell depletion in HIV-1 infected Indian patients. *Eur J Clin Microbiol Infect Dis* 2009;**28**:69–73.
42. Vajpayee M, Mojumdar K, Raina M, Mishra S, Sreenivas V. HIV voluntary counselling and testing: An experience from India. *AIDS Care* 2008:1–8.
43. Varma-Basil M, Dwivedi SK, Kumar K, Pathak R, Rastogi R, Thukral SS, *et al.* Role of *Mycoplasma pneumoniae* infection in acute exacerbations of chronic obstructive pulmonary disease. *J Med Microbiol* 2009;**58**:322–6.
44. Varshney AK, Chaudhry R, Saharan S, Kabra SK, Dhawan B, Dar L, *et al.* Association of *Mycoplasma pneumoniae* and asthma among Indian children. *FEMS Immunol Med Microbiol.* 2009.
45. Yadav P, Makharia G, Mirdha BR, Bhatnagar S, Dattagupta S. Intestinal coccidial and microsporidial infections in patients with chronic diarrhea and malabsorption. *J Gastroenterol and Hepatol* 2008;**23**:A95–A96.

Chapters in Books

1. Sharma N, Chaudhry R. Prebiotic and probiotics in gastrointestinal tract infection (Forthcoming book). In: Vashnavi C. Gastrointestinal infection. Chandigarh: Postgraduate Institute of Medical Sciences (PGIMS). 1st ed. New Delhi: Paragon Internal Publisher (2008).
2. ‘Neem’ ‘Neem-A Treatise’. Dr. BR. Mirdha (Eds), Singh KK, Suman Phogat Alka Tomar, Dhillon RS Kalyani, New Delhi: I.K. International Publishing House; 2009. 486-494.
3. Sood S. *Microbiology for nurses*. 2nd ed. New Delhi: ELSEVIER; (Reprint–2008): 1–399.

PATIENT CARE

Bacteriology

Bacteriology Laboratory

Clinical samples

Pus	22,305
Urine	24,906
Blood	34,730

Sputum/ Throat/Tracheal swabs	18,896
CSF	9801
Stool	2510
Total	1,13,202
Sexually Transmitted Diseases	
<i>Clinical samples</i>	
High vaginal swabs (HVS)	350
Semen	509
Expressed prostatic secretions (EPS)	100
Urethral discharge	01
Vaginal/Cervical discharge	08
Total	968
<i>Antimicrobial susceptibility testing</i>	
HVS	74
Semen	52
EPS	32
Urethral discharge	–
Cervical discharge	–
Total	158
<i>Hospital Infection control and water testing laboratory</i>	
Water sample	1158
Swabs (Thioglycolate Broth)	9,056
Air sampled (MSA)	4305
CSSD samples received (Central sterile supply department)	1,620
Total	16,129
<i>Serology laboratory</i>	
Widal	4192
VDRL	6171
ASLO	60
Total	10,423
<i>Anaerobic bacteriology</i>	
Anaerobic culture	317

Antimicrobial sensitivity	20
Faecal culture for <i>C. difficile</i>	261
ELISA for <i>C. difficile</i> toxin	261
<i>Leptospira</i> culture	160
<i>Leptospira</i> serology for IgM antibodies	
– By ELISA	160
– By Lepto dri-dot	40
<i>Campylobacter jejuni</i>	
– Culture	28
– Serology	28
<i>Legionella pneumophilla</i>	
By ELISA	58
<i>Polymerase Chain Reaction (PCR)</i>	
<i>Salmonella typhi</i>	36
<i>Leptospira</i>	33
<i>Legionella pneumophilla</i>	34
<i>Campylobacter jejuni</i>	28
<i>C. difficile</i>	98
Mycoplasma	
<i>Mycoplasma pneumoniae</i> IgM, IgG, IgA antibodies by ELISA	58
<i>Mycoplasma pneumoniae</i> culture	58
<i>Mycoplasma hominis</i> culture	208
<i>Ureaplasma urealyticum</i> culture	208
<i>Antibiotic Susceptibility</i>	
<i>Mycoplasma hominis</i>	26
<i>Ureaplasma urealyticum</i>	43
<i>Chlamydia pneumoniae</i>	
By ELISA	58
<i>Polymerase Chain Reaction (PCR)</i>	
<i>Mycoplasma pneumoniae</i>	34
<i>Mycoplasma hominis</i>	208
<i>Ureaplasma urealyticum</i>	208

<i>C.trachomatis</i>	208
Total	2879
Parasitology laboratory	
<i>Serological Investigations</i>	
<i>Toxoplasma gondii</i> serology for IgG antibodies by ELISA	28
Hydatid diseases serology by Indirect haemagglutination test	155
Amoebic serology of IgG antibodies by ELISA	176
<i>Investigation for Malaria</i>	
Fluorescent staining (Acridine Orange)	2734
Giemsa staining	2734
Quantitative Buffy Coat (QBC) Assay	987
HRP-II antigen detection	322
<i>Investigation for Kala-Azar</i>	
Fluorescent staining (Acridine Orange)	128
Giemsa staining	128
Quantitative Buffy Coat (QBC) Assay	230
Kala-azar serology (rk-39)	418
Aldehyde test	418
<i>Examination of faecal samples for intestinal parasitosis</i>	
Direct and concentration	338
Culture	30
Modified acid-fast and special staining for intestinal coccidia	3380
Tissue specimens (homogenates)	68
<i>Examinations of aspirates</i>	
Sputum, pus and others	168
<i>Investigation for filariasis</i>	
Direct and concentration	74
Acridine orange	74
Thin and thick smear	74
Hetrazan provocative test	15

Other Investigations

Broncho-alveolar lavage (BAL), induced sputum 210

Tracheal aspirate, Nasopharyngeal aspirates for

Pneumocystis jiroveci infection

Cerebrospinal fluid examination for free living amoebae (FLA) 105

Total 16,036

Tuberculosis laboratory

ZN smear and culture on LJ medium 9,900

rapid culture on Bactec 3,185

Anti-tubercular drug sensitivity done on bactec 880

PCR for *Mycobacterium tuberculosis* 3,470

Total 17,435

Virology laboratory including HIV laboratory

Viral Serology

Dengue 665

HSV 50

HIV 5260

CMV 20

Chikungunya 25

Measles 125

CMV antigen (pp65) 70

PCR

Dengue 25

HIV DNA 50

HSV 85

CMV 165

HSV Culture 10

Tzanck slide 35

Total 6585

Immunology

CD4 Test 5000

Mycology and ICP Laboratory

BAL	1290
Urine	1799
CSF	745
Sputum	125
Swab	191
Pus	210
Miscellaneous	934
Tissue/Biopsy	217
Nail/Hair/skin	109
Bone Marrow	131
Blood	1963
Fungal serology	
Cryptococcus	291
Aspergillus	19
Histoplasma	11
Total	8035

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Dr J.C. Samantaray was elected as the treasurer of the Biotechnology Society of India.

Best Poster Award: Lal P, Kapil A, Das BK and Sood S. Diversity of Acquired Amp C β -lactamases in *Enterobacteriaceae* in a Tertiary care Hospital in North India. IAMM- Delhi Chapter, SJH; 26 April 2008.

Dr Madhu Vajpayee was awarded International Scholarship to attend Conference on Retroviruses and Opportunistic Infections CROI, Boston, USA, 3–6 February 2008. He nominated Member, International Advisory Board of International AIDS Research and Training Programme, University of Washington, Seattle, National Institute of Health, USA.

Professor Rama Chaudhry was the President of Indian Association of Mycoplasmologists (IAM).

Dr Arti Kapil was awarded the DBT overseas fellowship as a guest researcher at CDC Atlanta, GA, USA for a period of 3 months, 15 October 2007 -15 January 2008. She was awarded Certificate of Course Mastery by CDC, Atlanta in Laboratory Safety, Occupational Emergency Programme and General Responsibilities

Dr B.R. Mirdha received Fellowship from Indian Society for Malaria and Other Communicable Diseases and selected as Governing Body Member of Shaheed Bhagat Singh College, Delhi University.

Dr Seema Sood has been elected as member of the National Academy of Medical Sciences – NAMS (India). The admission to Membership and Award of Scroll was made at the Annual Convocation of the Academy, 27 October 2007, Guru Nanak Dev University, Amritsar. She also received the Best Poster Award for ‘Synthesis of size controlled ZnO nanoparticles’ at the International Conference on Nanomaterial Toxicology (ICONTOX-2008), Lucknow, 5–7 February 2008.

Dr Shobha Broor was awarded Fellowship of Indian Academy of Medical Sciences (FNAMS).

VISITING SCIENTISTS

1. Dr Dick van Soelingen, Head of the National Mycobacteria Reference Laboratory National Institute of Public Health and the Environment, Bilthoven, The Netherlands visited the laboratory between; 21 July – 7 August 2008. and delivered a lecture
2. Dr Uma Malhotra, Assistant Professor, University of Washington; 9–15 February 2009.
3. Dr Wayne Sullender, Professor of paediatric infectious diseases, University of Alabama, USA visited the Virology laboratory thrice in relation with various ongoing collaborative projects.
4. Dr Joshua Mott and other members of CDC Influenza division visited the Virology laboratory in relation with ongoing collaborative projects titled ‘Academics, administration, finance, engineering, library, central facilities, etc’.

9.19 Nephrology

Professor and Head

S.C. Tiwari

Professor

S.K. Agarwal

Associate Professors

S. Gupta
(on leave)

D. Bhowmik

S. Mahajan

Education

Long-term training

Department mainly runs a 3-year DM Nephrology course for post-MD (Medicine) candidates, who get selected by AIIMS on the basis of merit. Five candidates were admitted to the DM course. Postgraduates in Internal Medicine are posted on a rotational basis for a short-period of 1–2 months. At present the department has twelve DM students.

Short-term training

Department has allowed doctors from Army hospital (R&R) for attending teaching schedule. Nurses from JP Narayan Apex Trauma Centre were trained for dialysis to take care of patients in trauma centre for dialysis. Dr Bindu Amitabh, physician from Safdarjung hospital was trained for renal transplant for three months.

Continuing Medical Education

Lectures delivered

Professor S.C. Tiwari

1. 'Recent advances in management of ARF', Postgraduate Nephrology 2008, Shimla; 18–20 April 2008.
2. 'Conflict management and attitude in board room', Department of Hospital Administration, AIIMS; 9 August 2008.
3. 'Integration of medical education', Pt. J.N.M. Medical College, Raipur, Medical Council of India; 21 October 2008.

Dr S.K. Agarwal

1. 'Primer in Renal Transplantation', National CME on 'Renal transplantation', Department of Nephrology, Sri Ramchandra University, Chennai; 11–12 April 2008.
2. 'Management of HCV during dialysis', DIALYSISCON 2008, Lucknow

3. 'Liver Disease during Dialysis', DIALYSISCON 2008, Lucknow; 11–14 September 2008.
4. 'Management of Hepatitis B and C in Renal Replacement Therapy' Kolkata Nephrology Forum; 20 September 2008.
5. 'Newer immunosuppressant in renal transplantation', 9th Asian Congress of Urology, New Delhi; 2–5 October 2008.
6. 'Targeted screening of CKD in high risk population', INSACON-2008, Dubai; 12–13 October 2008.
7. 'Etiopathogenesis of Nephrolithiasis', Annual Medicine Update, Maulana Azad Medical College, New Delhi; 11–13 December 2008.
8. 'Magnitude of CKD in India', Symposium on 'CKD prevention', 39th Annual Conference of Indian Society of Nephrology, Pune; 17–20 December 2008.
9. 'Renal transplantation: Current perspective', 64th Annual Conference of API, Noida; 29–1 February 2009.
10. 'Recent advances in management of lupus nephritis', Rheumatology update-2009, Delhi Rheumatological Association, New Delhi; 22 February 2009.

Dr D. Bhowmik

- 'Approach to urinary tract infections in children and vesico-ureteral reflux', Nephrocon 2009, Bhopal., 'Peeping into the future: Stem cells and renal disease' Nephrocon 2009, Bhopal.,
- 'Fluid and electrolyte therapy', Medicine Update, Department of Medicine, Maulana Azad Medical College, New Delhi.

Dr S. Mahajan

1. 'Quality of life issues in APD', Annual conference of Peritoneal Dialysis Society of India, DIALYSISCON 2008, Lucknow; September 2008.
2. 'AKI: Newer diagnostic and therapeutic modalities', Annual Medicine Update MAMC, Delhi; November 2008.
3. 'Basics of peritoneal dialysis', AIIMS Nursing Update, Delhi; March 2009.

RESEARCH

Funded projects

Ongoing

Validation and development of predicting formula for measuring GFR in Indian adults. S.K. Agarwal. Funded by ICMR, New Delhi (August 2006 – August 2009). Funds: Rs17 lakh.

Assessment of QuantiFERON test for the diagnosis of latent TB in renal replacement therapy. S.K. Agarwal. Funded by ICMR, New Delhi (May 2007 – May 2010). Funds: Rs 11 lakh.

A randomized double blind placebo controlled four arm parallel group multicentric multinational trial comparing weekly intravenous administration of Abetimus to weekly intravenous administration of placebo in patients with a history of SLE related renal disease. Funded by Lajolla Pharmaceutical Company California, USA. S.K. Agarwal. Funded by Lajolla Pharmaceutical Company, California, USA. (February 2007 – February 2009). Funds: Rs 12 lakh.

Detection of HCV core antigen (HCVc-Ag) for Diagnostic Screening of HCV Infection in Patients on Maintenance Haemodialysis'. S.K. Agarwal. Funded by ICMR, New Delhi (November 2007 – November 2010). Funds: Rs 27 lakh.

Completed

Spectrum of bone disease in chronic kidney disease patients on haemodialysis

Efficacy and tolerability of extraneal in CAPD patients (randomized open label study)

Departmental Projects

Completed

1. Spectrum of patients presenting as unilateral small kidney
2. Impact of new onset diabetes mellitus after renal transplantation on patients and graft survival
3. Spectrum of kidney disease in pregnancy
4. Oxidative Stress in progressive Renal failure and dialysis therapy

Ongoing

1. Costing of haemodialysis procedure at AIIMS, New Delhi (with Hospital administration)
2. A study of Psychiatric Morbidity and Quality of Life in Patients before and after Renal Transplantation (with Psychiatry)
3. To study the pregnancy outcomes in systemic lupus erythromatoses with special reference to cyclophosphamide therapy
4. Estimation of anti-Oxidant in blood in renal and liver diseases (with Laboratory Medicine)
5. Targeted screening for CKD and its risk factors in first degree relatives of patients of non-diabetic CKD (with Laboratory medicine)
6. Tuberculosis prophylaxis in patients on maintenance haemodialysis
7. Clinicopathological correlation of HBV and HCV infection in patients on renal replacement therapy
8. Efficacy and tolerability of extraneal in CAPD patients (randomized open label study)
9. Renal Osteodystrophy and its post transplant course
10. Sleep and cognitive function in ESRD

11. Oxidative Stress in post renal transplant patients and effect of N acetyl Cysteine on it
12. Study of physiological parameters in living kidney donors – pre- and post-donation
13. Quality of sleep in haemodialysis and renal transplant patients

Collaborative Projects

1. Detection and genotyping of human cytomegalovirus from neonates and renal transplant recipients (with Microbiology)
2. Plasma level monitoring of mycophenolic acid in renal transplant recipients (with Pharmacology and Surgery)
3. Molecular detection and characterization of *Pneumocystic jiroveci* in respiratory samples from the patients both immunocompromised as well immunocompetent with suspected interstitial pneumonia and other chronic lung diseases (with Microbiology)
4. Role of urinary cytology and immunocytochemistry in diagnosis and management of acute renal allograft dysfunction (with Pathology)
5. Quality of life of live related renal donors with (with Surgery)
6. Determination of efficacy of reflexology in treating patients suffering from diabetic nephropathy with hypertension and evaluating possible biomarker (with Biophysics)
7. Study of autologous stem cell therapy in reversing the progression of chronic kidney disease

PUBLICATIONS

Journals

1. Tiwari SC, Bhowmik D. Staging of CKD: Is a new stage needed? *Am J Kidney Dis* 2008;**51**: 346.
2. Khaira A, Rathi OP, Mahajan S, Sharma A, Dinda AK, Tiwari SC. Lupus vulgaris with tubercular lymphadenitis and IgA nephropathy. *Clin Exp Nephrol* 2008;**12**:79–81.
3. Tiwari SC, Bhowmik. The heart is a muscle, the kidney is a vessel. *Inter Med* 2008;**47**:1291.
4. Bhowmik D, Tiwari SC. Renal consequences of metabolic syndrome. *J Assoc Physicians India* 2008;**56**:131–2.
5. Bhowmik D, Dinda AK, Xess I, Sethuraman G, Mahajan S, Gupta S, *et al.* Fungal panniculitis in renal transplant recipients. *Transpl Infect Dis* 2008;**10**:286–9.
6. Bhowmik D, Pandav CS, Tiwari SC. Public health strategies to stem the tide of chronic kidney disease in India. *Indian J Public Health* 2008;**52**:224–9.
7. Khaira A, Gupta V, Gupta A, Mahajan S, Bhowmik D, Tiwari SC. Rare presentation of a common disease of tropics. *J Assoc Physicians India* 2008;**56**:721–3.

8. Agarwal SK, Venkatesh P, Tandon N. Everyday Practice: Diabetes Mellitus: The kidney and the eye in people with diabetes mellitus. *Nat Med J India* 2008;**21**:82–9.
9. Agarwal SK, Gupta Ankur. Aquaporins—the renal water channel. *Indian Journal of Nephrology* 2008;**18**:101–6.
10. Agarwal SK..Haemodialysis and its machine. *Medical Equipments and Automation* 2008;**1**: 32–9.
11. Khaira, Ambar, Rathi, Om, Gupta, Agarwal SK. CAPD in Scleroderma. *Saudi J Kidney Dis Transplant* 2009;**20**:130–1.
12. Khaira A, Gupta A, Tandon N, Agarwal SK. Gatifloxacin induced severe hyperglycaemia and ketoacidosis in a non-diabetic renal transplant recipient. *Clinical and Experimental Nephrology* 2009;**13**:89–91.
13. Agarwal SK, Dash SC, Gupta S, Pandey RM. HCV Infection in haemodialysis: ‘NO isolation’ policy should not be generalized. *Nephron Clinical Practice* 2009;**111**:c133–c140.
14. Khaira A, Upadhya BK, Sharma A, Das P, Mahajan S, Makhariya G, *et al.* Hepatitis B virus associated focal and segmental glomerular sclerosis: report of two cases and review of literature. *Clin Exp Nephrol* 2009 Jan 24.
15. Khaira A, Bagchi S, Sharma A, Mukund A, Mahajan S, Bhowmik D, *et al.* Renal allograft tuberculosis: report of three cases and review of literature. *Clin Exp Nephrol* 2009 Mar 17. [Epub ahead of print]
16. Sabitha PB, Khakha DC, Mahajan S, Gupta S, Agarwal M, Yadav SL. Effect of cryotherapy on Arteriovenous fistula puncture pain in chronic Haemodialysis patients. *Indian J Nephrol* 2008;**4**:155–58.
17. Khaira A, Gupta V, Gupta A, Mahajan S, Bhowmik D, Tiwari SC. Purpura fulminans in a complicated Falciparum malaria. *J Assoc Physicians India* 2008;**56**:467–9.
18. Gupta A, Upadhaya BK, Khaira A, Bhowmik D, Tiwari SC. Chronic diarrhea caused by *Hymenolepis nana* in a renal transplant recipient. *Clin Exp Nephrol* 2009;**13**:185–6.

Chapters in Books

1. Agarwal SK. Kidney: Structure and function. In: Shah SN, *et al.* (eds). 8th ed. API textbook of Medicine. The API publication; 717–21.
2. Agarwal SK. Epidemiology of chronic kidney disease in India. In: Renal disease: Prevention and management. A Physician perspective. New Delhi: Jaypee Publication; 2008:170–3.
3. Khair A, Agarwal SK. Infection in haemodialysis in ‘A primer on dialysis’ 2008;95–114.
4. Agarwal SK. Tuberculosis in chronic renal failure. In: Sharma SK, Mohan A (eds). *Tuberculosis*. 2nd ed. Jaypee Brothers 2009; 479–92.

5. Agarwal SK. Renal transplantation: Current practice. In: Agarwal AK, Jain DG, Yadav Pushpa (eds). *Medicine Update*. Jaypee Brothers; 2009: 785–95.
6. Mahajan S, Khaira A. Modification of drug dosage in patients with renal disease. In: *Renal disease prevention and management: A physician's perspective*. Kalra OP (ed). Delhi: Jaypee Publishers; 2008:258–62.
7. Tiwari SC, Mahajan S. Assessment of renal reserve. In *Renal disease prevention and management: A physician's perspective*. Kalra OP (ed) Delhi: Jaypee Publishers; 2008:12–14.

PATIENT CARE

1	Haemodialysis-related	1. Haemodialysis	5,562
		2. Plasmapheresis/plasma exchange	54
		3. Femoral vein catheterization	780
		4. Jugular and subclavian catheter insertion	144
		5. AV fistula	36
		6. AV shunt	14
2	ICU-related	1. Continuous-renal replacement therapy including SLED	24
3	Peritoneal dialysis-related	1. Intermittent acute peritoneal dialysis	344
		2. Continuous ambulatory peritoneal dialysis	123
4	Indoor-related	1. Kidney biopsy	376
		2. Indoor regular admissions	673
		3. Indoor short admission	468
		4. Nephrology consultations	2,449
5	Day care treatment	1. IV Methylprednisolone therapy	32
		2. IV Iron therapy	380
		3. IV cyclophosphamide therapy	35
6	Renal transplant-related	1. Evaluation for Living RT recipients and donors	135 pairs
		2. Evaluation of cadaver RT recipients	103
		3. Living renal transplant done	123
		4. Cadaver renal transplant done	12
7	Renal Laboratory-related	1. Number of patient blood sampling done	23,153
		2. Biochemistry (Urea, Creatinine, Na and K)	23,153
		3. Urine osmolality	88
		4. 24-hour urine testing	5027
		5. Haemogram for transplant patients	5806
8	OPD-related	1. Renal clinic new patients	5720
		2. Renal clinic old patients	20,819
		3. RT counselling clinic (3 days per week)	2005
		4. Renal transplant clinic old cases	5,596
		5. Renal transplant clinic new cases	128

AWARDS AND HONOURS

Dr S.C. Tiwari was selected Member of selection committee of Medical Officer for the 28th Indian Scientific Expedition to Antarctic, Goa, 31 July 2008; Conducted DM Nephrology examination, SMS Medical College, Jaipur, 2 August 2008; Invited for Workshop on ‘Antarctic Medical Research and Medicine 2008’ Auditorium, National Institute of Polar Research (NIPR), Tokyo, 23 August 2008; Chairman, Medical Board, XXVII Indian Antarctica Expedition—Medical/Psychological examination of the Expedition members, AIIMS, 28 August 2008; elected President of Indian Society of Hemodialysis; Invited as member for National level Expert group Meeting for finalization and approval of curriculum for training of physicians on managing stand-alone hemodialysis centers all over the country; awarded Fellowship International Medical Sciences, Academy, 30 March 2009; invited to be Executive Member, Health Society Bihar; Invited to be member expert for Selection Committee – Faculty selection PGI, Chandigarh, August 2008.

Dr S.K. Agarwal was awarded ‘Fellowship of National Academy of Medical Sciences (FAMS)’, Contribution made on ‘Infections in Renal Replacement Therapy’; awarded ‘JM Patel Oration’, Indian Society of Organ Transplantation on the work on ‘Changing immunosuppression and renal transplant outcome’: AIIMS 25 years experience, 19th Annual Conference of Indian Society of Organ Transplant; Member of Committee of ‘Faculty expert for evaluation of architectural designs for AIIMS like institutions’ Bhubaneswar, Raipur and Patna, 2008; Member of committee for ‘monitoring and preparation of curriculum to train doctors for standalone dialysis units’ under the healthcare delivery system of government of India; Member of curriculum committee ‘to frame and monitor the development of instructional courses material and implementation of training of physician for dialysis’; Member of expert committee to make ‘guidelines for inspection of hospitals for their registration for renal transplantation’ under THOA 2008; Appointed as member of institute Research Committee for three years since 2008; appointed as member of Institute Store Purchase committee 2008; Appointed as Associate Editor Indian Journal of Organ Transplantation; elected Member of Executive Council of Indian Society of Organ Transplantation; elected Member Governing body Indian Society of Nephrology; Conferred Professional Membership of International Renal care Group 2008.

9.20 Nuclear Medicine

Professor & Head

A. Malhotra

Professor

G.P. Bandopadhyaya

C.S. Bal

Associate Professor

Rakesh Kumar

Chetan D Patel

Senior Scientific Officer (S-IV)

Sneh Lata

EDUCATION

The faculty participated in and delivered 22 lectures in CME programme, workshop, symposia and annual conference during the year.

CME

Conference, Seminars, workshops

- ¹⁸F-FDG PET-CT in the detection of recurrent disease in patients of ovarian cancer with rising CA-125', 9th Asia and oceania conference of nuclear medicine and biology, Delhi; 30 October – 4 November 2008.
- 'Role of ¹⁸F-FDG PET-CT scan in detection breast cancer in opposite breast in female with known breast cancer', World Cancer Congress, Geneva, Switzerland; 27–31 August 2008.
- 'Role of ¹⁸F-FDG PET-CT scan in evaluation of early response to neoadjuvant chemotherapy in patients with locally advanced breast cancer', World Cancer Congress, Geneva, Switzerland; 27–31 August 2008.
- 'Role of PET-CT for evaluation of treatment response in patients with Hodgkin's disease', World Cancer Congress, Geneva, Switzerland; 27–31 August 2008.
- 'Role of FDG-PET-CT scan in staging and treatment response evaluation', 4th International Meeting of Hellenic Society of Nuclear Medicine, Thassaloniki, Greece; 7–9 November 2008.
- 'Role of FDG-PET-CT scan in detecting recurrent brain tumour and comparison with MRI' 4th International Meeting of Hellenic Society of Nuclear Medicine, Thassaloniki, Greece; 7–9 November 2008.

Lectures delivered

- 'Emerging role of PET-CT in intestinal disease', Asia Pacific Digestive Week, Delhi; 16 September 2008.

- ‘PET scan in the management of ovarian cancer’, Symposium Ovarian Cancer, AIIMS, Delhi; 27 March 2009.
- ‘Recent advances in Geneto-urinary Imaging’, AIIMS-PGI-MAMC course, PGI Chandigarh; 2 April 2009.

RESEARCH

Funded Projects

1. Detection of silent of ischemia in asymptomatic diabetes using myocardial perfusion imaging. Funded by International Atomic Energy Agency (IAEA), Vienna, Austria (2006–till date).
2. Evaluation of prognostic value of FDG-PET after one cycle of chemotherapy in paediatric high grade lymphomas. Funded by DBT, New Delhi (2007– till date).
3. To evaluate radiolabeling and efficacy of radiolabelled beta-cyclodextrin for infection imaging. Funded by ICMR, New Delhi (2006–till date).

Departmental Projects

Completed

1. Evaluation of patients with neuroendocrine tumours by ^{68}Ga -DOTATOC Positron Emission Tomography (PET/CT).
2. Comparison of ^{18}F -FDG positron emission tomography (PET-CT) with $^{99\text{m}}\text{Tc}$ -GHA single photon emission computed tomography (SPECT) and magnetic resonance imaging of brain in detection of recurrence in patients with glioma.
3. Evaluation of role of FDG-PET/CT in staging and management of ovarian malignancies.
4. Filter Optimization in Bone SPECT.
5. Radiolabeling of oligosaccharides.
6. To evaluate the role of $^{99\text{m}}\text{Tc}$ -DMSA (V) and ^{18}F -Fluoro 2-Deoxy-Glucose (^{18}F] FDG-PET-CT) in the management of patients with Osteosarcoma.
7. Lu177-EDTMP in Hormone Refractory Prostate cancer patients with Bone Metastases: A pre-phase 1 Dosimetry Study.
8. Preparation of ^{68}Ga labelled Somatostatin analog (^{68}Ga -DOTATOC) from $^{68}\text{Ga}/^{68}\text{Ga}$ Generator and the Radiation Exposure to Nuclear Medicine Staff during handling the $^{68}\text{Ga}/^{68}\text{Ga}$ Generator.

Ongoing

1. Role of PET-CT in early response evaluation to chemotherapy in neuroblastoma & abdomiosarcoma.
2. Role of Diffusion MRI and FDG PET-CT in initial staging and chemotherapy response evaluation in patients with non-Hodgkins lymphoma.

PUBLICATIONS

1. Kumar R, Das CJ. Hybrid PET-dynamic CECT in the management of breast cancer. *Eur J Nucl Med Mol Imaging* 2009;**36**:413–5.
2. Kumar R, Lal N. FDG-PET in primary breast cancer: Factor responsible for false negative results. In: Hayat MA (ed). USA: Springer; 2008.
3. Kumar R, Shamim SA, Reddy RM. Current status of nuclear medicine in urinary tract imaging. In: Khandelwal N, Chowdhury V, Gupta AK (eds). New Delhi: Jaypee Brothers 2009;80–103.
4. Kumar M, Bahl A, Sharma DN, Agarwal S, Dhanapathi H, Kumar R, *et al.* Sarcomatoid squamous cell carcinoma of uterine cervix: Pathology, imaging and treatment. *J Cancer Res Ther* 2008;**4**:137–39.
5. Kumar J, Seith A, Kumar A, Sharma R, Bakhshi S, Kumar R, Agarwala S. Whole-body MR imaging with the use of parallel imaging for detection of skeletal metastases in paediatric patients with small-cell neoplasms: comparison with skeletal scintigraphy and FDG PET/CT. *Pediatr Radiol* 2008;**38**:953–62.
6. Das CJ, Kumar R, Balakrishnan VB, Chawla M, Goswami P, Malhotra A. Disseminated tuberculosis masquerading metastatic breast carcinoma in PET-CT scan. *Clin Nucl Med* 2008;**33**:359–61.
7. Gupta R, Kavimandan A, Kumar R. Does PET-CT predict disease activity in Takayasu's arteritis? *Scand J Rheumatol* 2008;**37**:237–9.
8. Mavi A, Dhuriraj T, Cermik TF, Urhan M, Wasik M, Basu S, *et al.* Central photopenic lesions on FDG-PET scan in a patient with peripheral T cell lymphoma. *Ann Nucl Med* 2008;**22**:629–33.
9. Basu S, Kumar R, Rubello D, Fanti S, Alavi A. PET imaging in neuroendocrine tumors: current status and future prospects. *Minerva Endocrinol* 2008;**33**:257–75.
10. Kumar A, Kumar R, Seenu V, Gupta SD, Chawla M, Malhotra A, *et al.* Role of ¹⁸F-FDG PET-CT in evaluation of early response to neoadjuvant chemotherapy in patients with locally advanced breast cancer. *European Radiology* Jan 2009.
11. Babu V, Kumar R, Gupta DK, Ragavan M, Mohapatra T, Dhanapathi H, *et al.* Spontaneous biliary perforation in an infant- an unusual chronic presentation. *Clin Nucl Med* 2008;**33**:273–5.
12. Sood A, Sood V, Sharma DR, Seam RK, **Kumar R**. Thyroid scintigraphy in detecting dual ectopic thyroid: a review. *Eur J Nucl Med Mol Imaging* 2008;**35**:843–6.
13. Sood A, Kumar R. The ectopic thyroid gland and the role of nuclear medicine techniques in its diagnosis and management. *Hell J Nucl Med* 2008;**11**:168–71.
14. Shukla J, Pandey AK, Maulik SK, Varma IK, Kumar R, Bandopadhyaya GP. Radiolabelled pentavalent dimercaptosuccinic acid microspheres for tumour therapy: Cytotoxic assessment and biodistribution studies. *World J Nucl Med* 2008;**7**:158–65.

15. Chawla M, Reddy R, Kumar R, Das CJ, Tiwari AM, Agarwala S, Malhotra A, Kumar R. PET-CT in detection of meningeal metastasis in neuroblastoma. *Ped Surg International* 2009; **25**:211–5.
16. Alavi A, Houseni M, Chamroonat W, Kumar R. Usefulness of non attenuation corrected 18F-FDG-PET images for optimal assessment of disease activity in patients with lymphoma. *Hell J Nucl Med* 2009;**12**:5–9
17. Lata S, Singla S, Bal CS and Malhotra A, Leading Experience of 68Ga-PET First Time in India at AIIMS. *IJNM* 2008;**23**:84.
18. Naswa N, Bal CS, Lata S, Malhotra A, Kumar R. Dual tracer functional characterization of carcinoids tumors using PET/CT. *IJNM* 2008;**23**:198.
19. Lata S, Bal CS, Naswa N, Dwivedi DK, Dhanapathi H, Malhotra A. A radionuclide generator (68Ga-DOTATOC) for PET imaging of neuroendocrine tumors (NETs): One year experience. *JNM* 2008;49 (Suppl. 1); 308.
20. Dwivedi DK, Lata S, Bal CS, Pant GS, Malhotra A. Comparison of labelling of Somatostatin Analogues (DOTATOC and DOTANOC) with Radiogallium (68Ga). *JNM* 2008; 49 (Suppl 1); 433.
21. Naswa N, Bal CS, Lata S. Comparison of 68 Ga-DOTATOC(G-PET) with 18F- FDG (F-PET) and conventional imaging modalities (C1) in the localization of carcinoid tumors. *JNM* 2008;49 (Supple 1): 116.
22. Damle N, Bal CS, Bandopadhyaya GP, Malhotra A, Lata S, Gupta P, *et al.* Role of ¹⁸FFluoride PET/CT bone scan in detection of bone metastases in lung cancer patients. *JNM* 2008; 49 (Suppl 1);56.

Chapters in Books

1. Kumar R, Anand, V, Jana S. Adrenal lesions: Role of computed tomography, magnetic resonance imaging, ¹⁸fluorodeoxyglucose-positron emission tomography, and positron emission tomography/computed tomography. In: Hayat MA (ed). *Cancer imaging: Instrumentation and applications*, Vol. 2. Philadelphia, USA: Elsevier; 2008: 269–79.
2. Kumar R, Lal N. FDG-PET in primary breast cancer: Factor responsible for false negative results. In: Hayat MA (ed). USA: Springer; 2008.
3. Kumar R, Shamim SA, Reddy RM. Current status of nuclear medicine in urinary tract imaging. In: Khandelwal N, Chowdhury V, Gupta AK (eds). New Delhi: Jaypee Brothers 2009;80–103.

PATIENT CARE

Radionuclide investigations	Number
1. Radioactive iodine uptake (RAIU)	1350
2. Perchlorate discharge test	25

3. I-131 whole body scan	7035
4. Dimercaptosuccinic acid scans	650
5. Ca-thyroid I-131 whole body scan	100
6. Thyrotoxicosis	350
7. DTPA/LLECT 99mTc renal dynamic scan	4200
8. Direct radionuclide cystourethorography	400
9. GER	650
10. GFR	1600
11. Bone scan	3563
12. 99mTc HIDA	676
13. Thyroid scan	756
14. Liver scan	32
15. Meckel's study	86
16. GI Bleed	89
17. Lymphoscintigraphy	112
18. MIBG (diagnostic and therapeutic)	530
19. ¹⁵³ Samarium bone palliation	27
20. 99mTc DMSA-V	680
21. Radionuclide ventriculography	1380
22. Thallium scan	1200
23. Tetrofosmin	280
24. Parathyroid	36
25. Brain SPECT	760
26. PET whole body	3142
27. Brain glucopeptonate (GHA)	680
28. F18 DOPA	20
29. 68Ga peptide imaging	115

VISITING SCIENTISTS

Professor D. Richard P. Baum (Germany), Dr Teofilo O.L. San Luis (Philippines), Professor Annare Ellmann (South Africa), Dr S.K. Ozker (Dubai, UAE), Professor Mohmad Eftakari (Iran), Dr Gopinath Gnansegaran (United Kingdom), Dr Thomas N.B. Pascual (Philippines).

9.21 Nuclear Magnetic Resonance

Professor & Head

N.R. Jagannathan

Associate Professor

Rama Jayasundar

Assistant Professor

S. Senthil Kumaran

Scientists

Uma Sharma

Sujeet Kumar Mewar

EDUCATION

Postgraduate

The faculty participated in and delivered lectures for the course entitled ‘Structural Biology and NMR Technology’ and ‘Molecular medicine and biotechnology’ in the MBiotech programme of the Department of Biotechnology,.

Short- and long-term training

Three persons from medical and science disciplines from various institutes and universities underwent training in MRI and MRS techniques.

Continuing Medical Education (CME)

The faculty participated in and delivered several lectures in CME programmes, symposia and conferences.

Lectures delivered

Professor N.R. Jagannathan

- ‘Role of MRI and MR spectroscopy in Biology: Application of analytical techniques for the characterization of biomolecules’, University of Lucknow; 2–3 August 2008.
- ‘Monitoring the therapeutic response of breast cancer patients by MRI and diffusion weighted MR imaging’, XXIII International Conference on ‘Magnetic resonance in biological systems (ICMRBS)’, San Diego, USA; 24–19 August 2008.
- ‘Role of MRSI and DWI in the evaluation of prostate cancer: An Indian experience’, Department of Radiology, University of California, San Francisco, USA; 22 August 2008.
- ‘Integration of various branches of science in understanding Biology’, Workshop on Biology for college teachers, Miranda House; 24 September 2008.

- ‘MRS in Urology’, 9th Asian Congress of Urology, New Delhi; 1–5 October 2008.
- ‘Advances in magnetic resonance imaging (MRI) technology and its application in medicine’. International Conference on Magnetic Materials (MMA 21), NPL Campus, New Delhi; 21–23 October 2008.
- Chairperson of a scientific session on ‘Future directions in NMR’, Indian Institute of Science, Bangalore; 19–22 October 2008.
- Chairperson of a scientific session, 6th Asian Biophysics Association (ABA) Symposium and the 27th Hong Kong Society of Neurosciences Annual Meeting, HKUST, Hong Kong; 11–15 January 2009.
- Chairperson of a scientific session, National Symposium on ‘Cellular and molecular biophysics (NCMB-2009)’, Centre for Cellular and Molecular Biology (CCMB), Hyderabad; 22–24 January 2009.
- ‘Role of NMR in Medicine: Magnetic resonance imaging (MRI) and *in-vivo* MR Spectroscopy’, National Seminar on ‘NMR: Advances and applications’, Department of Chemistry, MS University, Vadodara; 21–22 February 2009.
- ‘Magnetic resonance imaging (MRI) and *in-vivo* MR Spectroscopy (MRS) in Biomedical Research’, National Symposium on ‘Emerging trends in biomedical sciences, Dehradun; 28 February 2009.
- Chairperson of a scientific session, NMRS-2009, Symposium on ‘MR and bimolecular Mimetics and 15th NMR Society Meeting, Indian Institute of Chemical Technology (IICT), Hyderabad; 2–5 February 2009.

Dr Rama Jayasundar

- ‘Magnetic resonance in medicine’, KG Super Specialty Hospital, Coimbatore; 26 April 2008.
- ‘Management of eye diseases in Ayurveda’, KG Eye Hospital, Coimbatore; 26 April 2008.
- ‘Effect of mantras on human brain studied using NMR’, Engineering College, Amrita Vishwa Vidyapeetham, Coimbatore; 26 April 2008.
- ‘Relevance of ayurveda in the current health scenario’, Engineering College, Amrita Vishwa Vidyapeetham, Coimbatore; 27 April 2008.
- ‘Nuclear magnetic resonance and RF Coil Making’, Engineering College, Amrita Vishwa Vidyapeetham, Coimbatore; 27 April 2008.
- ‘Holistic lifestyle based on Ayurveda’, Amrita Vishwa Vidyapeetham, Coimbatore; 27 April 2008.
- ‘Mantra and brain chemistry’, Bharatiya Vidya Bhavan, Coimbatore; 28 April 2008.
- ‘Ayurveda: Its current relevance’, Bharatiya Vidya Bhavan, Coimbatore; 28 April 2008.
- ‘Harnessing technology—A new dimension to Ayurvedic Geriatrics’, Arya Vaidya Pharmacy, Coimbatore; 22 August 2008.

- ‘Contemporary significance of Ayurveda’, Centre for the Study of Social Systems, School of Social Sciences, Jawaharlal Nehru University; 20 November 2008.
- ‘Quantum physics, ayurveda and spirituality (Plenary lecture)’. Science and Spirituality Quest, National Institute of Technology (NIT), Trichy; 27 December 2008.
- ‘Which road to take in one’s health highway–biomedicine or ayurveda?’, DST Unit of Nanosciences, Indian Institute of Technology (IIT), Chennai; 3 January 2009.
- ‘Effect of mantras on human brain using *in vivo* MR spectroscopy’, Department of Tibetan Medicine, Central Institute of Higher Tibetan Studies, Sarnath, Varanasi; 18 February 2009.
- ‘Quantum physics and spirituality’, Department of Tibetan Medicine, Central Institute of Higher Tibetan Studies, Sarnath, Varanasi; 18 February 2009.
- ‘Quantum physics and ayurveda’, Department of Tibetan Medicine, Central Institute of Higher Tibetan Studies, Sarnath, Varanasi; 19 February, 2009.
- ‘Women’s health in ayurveda’. Department of Tibetan Medicine, Central Institute of Higher Tibetan Studies, Sarnath, Varanasi; 20 February 2009.
- ‘Research in ayurveda’, Department of Tibetan Medicine, Central Institute of Higher Tibetan Studies, Sarnath, Varanasi; 21 February 2009.
- ‘Can human biology be studied in two different ways–biomedicine and ayurveda?’, Department of Tibetan Medicine, Central Institute of Higher Tibetan Studies, Sarnath, Varanasi; 21 Feb.2009.
- ‘Quantum logic in ayurveda (Plenary lecture)’, 1st International Congress on ‘Ayurveda: The meaning of life– awareness, environment and health’, Milan, Italy; 21 March 2009.

Dr S. Senthil Kumaran

- Functional MRI in neurological disorders: In Parkinson’s and stroke patients’, Symposium on ‘Magnetic resonance and biomolecular mimetics’ and 15th NMRS Meeting, Indian Institute of Chemical Technology, Hyderabad; 2–5 February 2009.
- ‘Functional MRI in Neurological disorders’, National Science Day Celebrations, Solid State Physics Laboratory, DRDO, Delhi; 27 February 2009.

RESEARCH

Funded Projects

Ongoing

1. Magnetic resonance spectroscopic imaging (MRSI) and diffusion-weighted MRI (DW-MRI) in the non-invasive detection, assessment of treatment response and tumor metabolism in breast cancer. N. R. Jagannathan. Funded by Department of Science and Technology, Government of India. (June 2008 – May 2011). Funds: Rs 20.29 lakh.
2. 700 MHz NMR Spectrometre for Biomedical Research. N. R. Jagannathan. Funded by Department of Science and Technology, Government of India (December 2007 – December 2012). Funds: Rs 842.6 lakh.

3. Up-gradation of the existing Animal MR scanner. N. R. Jagannathan. Funded by Department of Science and Technology, Government of India (October 2004 – October 2009). Funds: Rs 365 lakh.
4. Neurocognitive changes associated with visualization of perception, spatial orientation and Braille reading in visually challenged subjects, using functional magnetic resonance imaging (fMRI). S. Senthil Kumaran. Funded by AIIMS (April 2008 – May 2009). Funds: Rs 1 lakh

Departmental Projects

Ongoing

1. MRI and MRS study of animal model of demyelination
2. Development of pulse sequence for *in vivo* simultaneous suppression of water and fat in breast cancer patients

Collaborative projects

Ongoing

1. MRI/MRS studies to evaluate brain metabolism in sleep apnea patients (with Medicine)
2. *In-vivo* and *in-vitro* MR spectroscopy studies of tissue extracts of prostate cancers (with Urology and Pathology)
3. *In-vitro* MR spectroscopy of colon tissue in patients of IBD (with GI Surgery)
4. *In vivo* MR spectroscopy study of human breast carcinoma (with Surgery, Radiotherapy and Pathology)
5. MRI studies of skin cancers (with Biochemistry)
6. *In-vivo* MRS of brain in NIDDM patients (with Medicine).
7. Functional MRI study in IBD and Achalasia Cardia patients (with Gastroenterology)
8. Neural mapping during stoop task of familiar faces (with Physiology)
9. *In vitro* MR spectroscopy of immune cells from mice (with National Institute of Immunology)
10. ³¹P MRS study of skeletal muscle in normal subjects with vitamin D supplementation (with Endocrinology)
11. MRI/MRS studies to evaluate brain metabolism in patients with diabetes **mellitus** (with Medicine)
12. Analytical evaluation of ayurvedic *bhasmas* (with DST Unit of Nanoscience, Indian Institute of Science, Chennai)

PUBLICATIONS

Reviews

1. Sharma U, Sah RG, Jagannathan NR. Magnetic resonance imaging (MRI) and spectroscopy (MRS) in breast cancer. *Magn Reson Insights* 2008;**2**:93–108.
2. Jagannathan NR, Kumar V, Kumar R, Thulkar S. Role of magnetic resonance methods in the evaluation of prostate cancer: An Indian perspective. *Magn Reson Mat Phys Biol Med (MAGMA)* 2008;**21**:393–407. [Erratum 2008;**21**:409]
3. Sharma U, Jagannathan NR. Biochemical characterization of breast tumors by in-vivo and in-vitro magnetic resonance spectroscopy (MRS). *Biophys Rev* 2009;**1**:21–6.

Chapters in Books

1. Senthil KS. MR Imaging: Basic concepts. In: Basic physics and radiation safety in Nuclear Medicine. In: Pant GS (ed). Mumbai: Himalaya Publishing House; 2008:400–20.
2. Jayasundar R. Quantum physics, ayurveda and spirituality. In: *Science and spirituality quest*. Kolkata: Bhaktivedanta Institute; 2008:11–28.

Journals

1. Kumar R, Kumar V, Jagannathan NR, Thulkar S, Gupta SD, Dwivedi SN, *et al*. The potential of magnetic resonance spectroscopic imaging in predicting absence of prostate cancer in men with serum prostate specific antigen between 4-10 mg/ml: A follow-up study. N.P. *Urology* 2008;**72**:859–63.
2. Kumar V, Jagannathan NR, Kumar R, Thulkar S, Gupta SD, Dwivedi SN, *et al*. Evaluation of the role of magnetization transfer imaging (MTI) in prostate: A preliminary study. *Magn Reson Imaging* 2008;**26**:644–49.
3. Barthwal R, Agrawal P, Tripathi AN, Sharma U, Jagannathan NR, Govil G. Structural elucidation of 4'-epiadriamycin by nuclear magnetic resonance spectroscopy and comparison with adriamycin and daunomycin using quantum mechanical and restrained molecular dynamics approach. *Arch Biochem Biophys* 2008;**474**:4864.
4. Dohare P, Garg P, Sharma U, Jagannathan NR, Ray M. Neuroprotective efficacy and therapeutic window of curcuma oil: in rat embolic stroke model. *BMC Complement Altern Med* 2008;**8**:55106.
5. Rathore P, Dohare P, Varma S, Ray A, Sharma U, Jagannathan NR, *et al*. Curcuma oil: Reduces early accumulation of oxidative product and is anti-apoptogenic in transient focal ischemia in rat brain. *Neurochem Res* 2008;**33**:1672–82.
6. Jaiswal AK, Millo T, Mewar SK, Sharma M, Moon DV, Moharana M. Do's and don'ts for sophisticated analytical instruments, Vol III. *J Foren Med Toxicol* 2008;**25**:14–19.
7. Jayasundar R. Ayurveda: The science of life. *Ayurveda* 2008;**8**:73–9.

8. Jayasundar R. Ayurveda and green medicine. *Ayurveda* 2008;**9**:81–6.
9. Sharma R, Sinha S, Danishad KA, Vikram NK, Gupta A, Ahuja V, *et al.* Investigation of hepatic gluconeogenesis pathway in non-diabetic Asian Indians with non-alcoholic fatty liver disease using in vivo (³¹P) phosphorus magnetic resonance spectroscopy. *Atherosclerosis* 2009; **203**:291–7.
10. Jagannathan NR. Breast MR. *NMR Biomed* 2009;**22**:1–2.
11. Sharma U, Danishad KA, Seenu V, Jagannathan NR. Longitudinal study of the assessment of tumor response of locally advanced breast cancer patients undergoing neo-adjuvant chemotherapy by MR imaging and diffusion weighted imaging. *NMR Biomed* 2009;**22**:104–13.
12. Balasubramanian K, Kumar S, Singh RR, Sharma U, Ahuja V, Makharia GM, *et al.* Metabolism of colonic mucosa in patients with inflammatory bowel diseases (IBD): An proton *in-vitro* MR spectroscopy study. *Magn Reson Imaging* 2009;**27**:79–86.
13. Sinha S, Misra A, Rathi M, Kumar V, Pandey RM, Luthra K, Jagannathan NR. Proton MR spectroscopy (MRS) and biochemical investigation of type 2 diabetes mellitus in Asian Indians: Observation of high muscle lipids and C-reactive protein (CRP) levels. *Magn. Reson Imaging* 2009;**27**:94–100.
14. Sinha S, Kumar V, Jagannathan NR, Pandey RM. Proton magnetic resonance spectroscopy of brain to study the cerebral abnormalities in COPD patients: A case control study in North India. *Ind J Chest Dis Allied Sci* 2009;**51**:15–20.
15. Sharma M, Gupta AK, Mewar SK, Beldar AS, Suryanarayana MVS, Raza SK. Direct detection of alkylphosphonic acids in environmental matrices by proton coupled phosphorus NMR. *J Magn Reson Chem* (published online 12 Mar 2009)

Abstracts

1. Krithika B, Kumar S, Singh RR, Sharma U, Ahuja V, Makharia GK, *et al.* Metabolism of colonic mucosa in patients with ulcerative colitis (UC) and Crohn's disease (CD): An NMR Study. *Proc Int Soc Magn Reson Med* 2008;**16**:3220.
2. Jagannathan NR, Sharma U, Danishad KA, Seenu V. Assessment of early therapeutic response in locally advanced breast cancer using ADC, volume and diameter. *Proc Int Soc Magn Reson Med* 2008;**16**:3579.
3. Sharma U, Banerjee B, Balasubramanian K, Kalra V, Jagannathan NR. Effect of oral creatine on muscle metabolism of Duchenne muscular dystrophy (DMD) by Phosphorus MRS. *Proc Int Soc Magn Reson Med* 2008;**16**:2578.
4. Sachin S, Kumaran SS, Singh S, Goyal V, Shukla G, Behari M. Neurocognitive Mapping in Parkinson's Disease and Supranuclear Palsy for Sustained Phonation and Phoneme Tasks. *Proc Int Soc Magn Reson Med* 2008;**16**:2278.
5. Sinha AM, Kumaran SS, Saxena R. Plasticity in congenitally blind during object recognition [PDF]. *Proc Int Soc Magn Reson Med* 2008;**16**:3521.

6. Sinha AM, Kumaran SS, Saxena R, Sharma U. Visual cortex reorganization among early and late blind for tactile object recognition. *Proc Int Soc Magn Reson Med* 2008;**16**:1976.
7. Jayasundar R. Harnessing technology—a new dimension to Ayurvedic Geriatrics. International Centennial Convention of Ayurveda and Arogya, Coimbatore; 19–24 August 2008.
8. Jayasundar R. Quantum physics, ayurveda and spirituality. International Conference on ‘Science and spirituality quest’, National Institute of Technology (NIT), Trichy; 27–29 December 2008.
9. Ramdurg S, Suri A, Mewar S, Sharma U, Jagannathan NR, Sharma BS. Evaluation of subarachnoid hemorrhage in rats and the effects of intracisternal injection of vasodilators on vasospasm. Neurological Society of India, Pune; December 2008.
10. Krithika B, Sharma U, Kumaran SS, Muthuraju S, Prasad DN, Jagannathan NR. Pathophysiology of experimental model of multiple sclerosis by sequential diffusion MRI. National Symposium on Cellular and Molecular Biophysics (NCMB-2009), Center for Cellular and Molecular Biology (CCMB), Hyderabad; 22–24 January 2009.
11. Sah RG, Sharma U, Prashad R, Jagannathan NR. Determination of absolute quantification of choline by *in-vivo* proton MRS in breast cancer patients. Symposium on MR and Biomolecular Mimetics and 15th NMR Society Meeting. Indian Institute of Chemical Technology (IICT), Hyderabad; 2–5 February 2009.
12. Jagannathan NR. Role of various *in vivo* MR methodologies in the evaluation of prostate cancer. 16th Biophysics Congress of the International Union of Pure and Applied Biophysics (IUPAB), Long Beach, USA; 2–6 February 2009.
13. Saxena M, Senthil KS, Singh S, Behari M. Effect of dopaminergic drugs on motor task in PD: An fMRI study. Proceedings of Symposium on Magnetic Resonance and Biomolecular Mimetics and 15th NMRS Meeting, Indian Institute of Chemical Technology, Hyderabad; 2–5 February, 2009.
14. Saxena M, Senthil KS, Singh S, Behari M. Cognitive deficits in working memory in Parkinson’s disease. Proceedings of Symposium on Magnetic Resonance and Biomolecular Mimetics and 15th NMRS Meeting, Indian Institute of Chemical Technology, Hyderabad; 2–5 February 2009.
15. Saxena M, Senthil KS, Singh S, Narang V, Behari M. Role of stop consonants in articulatory speech dysfunction in Parkinson’s disease using fMRI. Proceedings of Symposium on Magnetic Resonance and Biomolecular Mimetics and 15th NMRS Meeting, Indian Institute of Chemical Technology, Hyderabad; 2–5 February 2009.
16. Functional imaging in stroke: A pilot study in Indian patients. Bhasin A., Kumaran SS, Padma MV, Bhatia R. and Mohanty S. Proceedings of Symposium on Magnetic Resonance and Biomolecular Mimetics and 15th NMRS Meeting, Indian Institute of Chemical Technology, Hyderabad; 2–5 February 2009.
17. Quantum Logic in Ayurveda. Jayasundar R. 1st International Congress on Ayurveda, Milan, Italy; 21–22 March 2009.

PATIENT CARE

The department has two 1.5 Tesla whole body MR scanners for patient care and research. The department provides 12 hours per day of MRI scanning for patient. The details of the number of patients scanned during the year are:

Clinical Diagnostic MRI Scan	:	4758 patients
Research MRS/fMRI	:	392 patients
High-resolution NMR	:	147 samples

AWARDS AND HONOURS

Professor N.R. Jagannathan is a member of the editorial board of “*MAGMA*” (*Magnetic Resonance Materials in Physics, Biology and Medicine*), (Springer); member of the editorial board of ‘*Magnetic Resonance Insights*’ (Libertas Academica, USA); Deputy Editor of ‘*Neuroscience Imaging*’; Member, editorial board ‘*NMR Biomedicine* (John Wiley and Sons); Member, editorial board, “*Magnetic Resonance Imaging*” (Elsevier); Member, editorial board ‘*Spectroscopy–Biomedical Applications*’ (IOC Press, Netherlands); Member, editorial board, ‘*Biophysical Reviews*’ (Springer); Editor (special issue) on ‘*Breast MR*’ in ‘*NMR Biomed*’ (John Wiley and Sons), volume 22(1), 2009; President of the Indian Biophysical Society (IBS); elected member of the executive council, International Union of Pure and Applied Biophysics (IUPAB) (2008-2011); Member, Annual Meeting Programme Committee (AMPC), International Society for Magnetic Resonance in Medicine (ISMRM); Member, Education Committee, International Society for Magnetic Resonance in Medicine (ISMRM); Member, steering committee, Asian Biophysics Association (ABA); Moderator, Joint Meeting of the International Society for Magnetic Resonance in Medicine (ISMRM), Toronto, Canada May 2008; Chairperson, scientific session, 6th Asian Biophysics Association (ABA) meeting, Hong Kong, January 2009; Member of the Programme Advisory Committee (PAC), Section for Biochemistry, Biophysics and Molecular Biology, Department of Science and Technology (DST), Government of India; Member of the Steering Committee of the Sophisticated Instruments facilities (SAIFs), Department of Science and Technology (DST), Government of India; council member of the International Conference on Magnetic Resonance in Biological Systems (ICMRBS); coordinator of the expert panel on ‘Biomedical Devices and Bioengineering’, Life Sciences Research Board (LSRB), DRDO; Member, INSA committee for International Union of Pure and Applied Biophysics (IUPAB); Member, Programme Advisory Committee (PAC), National Facility for High Field NMR, Tata Institute of Fundamental Research (TIFR), Bombay; Member, Management Advisory Committee (MAC), Regional Sophisticated Instruments Facility (RSIC), Indian Institute of Technology (IIT), Chennai.

Dr Rama Jayasundar completed 5½ years Bachelor of Ayurvedic Medicine and Surgery (BAMS) degree; awarded the Best Outstanding Outgoing Student by the SJS Ayurveda College, Chennai; one of the two scientists (the other being an Australian Neuroscientist) to be interviewed and featured for the ‘Biotechcellence 2008’, Centre for Biotechnology, Anna University.

9.22 Obstetrics And Gynaecology

Professor & Head

Suneeta Mittal

Professor

Alka Kriplani

Sunesh Kumar

Deepika Deka

Additional Professor

Neerja Bhatla

K.K. Roy

Associate Professor

Neena Malhotra

Vatsla Dadhwal

Nutan Agarwal

Assistant Professor

J.B. Sharma

Neeta Singh (on transfer from
Reproductive Biology)

Pradeep Garg (ad hoc)

Scientist Gr.I

Rohini Sehgal

Avnish Chandra Tiwari

EDUCATION

Undergraduate, Postgraduate, paramedical

The Delhi Postgraduate Medical Education Forum is organized by the department as monthly meetings for postgraduate training since 2001. These are held to supplement training of postgraduates in clinical and surgical skills, a problem-oriented approach to Obstetrics and Gynaecology, protocols and guidelines, case presentations and discussions. Invited faculty from various academic and teaching institutions of Delhi as well as international faculty contribute towards the training of postgraduates.

Short-term and long-term training

The department offers short- and long-term training in various subspecialty subjects such as Gynaecological Endoscopic Surgery, High-risk Pregnancy, Gynaecological Oncology, and Gynaecological and Obstetrics Ultrasonography and Infertility. 10 long-term fellows and 20 short-term trainees underwent training in different subspecialty subjects.

Continuing Medical Education

The department organizes a national CME in Obstetrics and Gynaecology in collaboration with the National Board of Examinations, National Academy of Medical Sciences and World Health Organization every six months. It is a unique, innovative modular teaching programme in which the MD syllabus is covered in six modules over 3 years. Series 2, Module V and Series 2, Module VI were held on 26–27 April 2008 and 2–3 November 2008, respectively. The CME modules are attended by more than 200 students as well as senior gynecologists and are accredited by Delhi Medical Council.

CME, workshops and seminars

- National CME in Obstetrics and Gynaecology (Series 2, Module V), AIIMS; 26–27 April 2008.
- Consortium on Strategies and Guidelines for Safe Second Trimester Abortion in India, AIIMS; 29–30 June 2008.
- Practical Training Workshop on Essentials of Research Methods in Reproductive Health, AIIMS; 1–4 July 2008.
- CME on Managing Congenital Intrauterine Infections, AIIMS; 31 August 2008.
- Women’s Health Initiative Training Course in Minimally Invasive Gynaecology, AIIMS; 1–11 September 2008.
- CME on Practical Application and Current Concepts in Gynaecological Oncology, AIIMS; 27 September 2008.
- Women’s Health Initiative Training Course in Minimally Invasive Gynaecology, AIIMS; 13–23 October 2008.
- National CME in Obstetrics and Gynaecology (Series 2, Module VI), AIIMS; 1–2 November 2008.
- NARCHI Symposium on Reproductive Health, AIIMS; 2 November 2008.
- Practical Workshop on Research Methodology, COHORT study design, AIIMS; 12–14 January 2009.
- Workshop on Monitoring foetal well being, 25th Annual Conference of Indian Society of Perinatology and Reproductive Biology, ISOPARB 2009, AIIMS; 20 March 2009.
- Workshop on Lactation Management, 25th Annual Conference of Indian Society of Perinatology and Reproductive Biology, ISOPARB 2009, AIIMS; 20 March 2009.
- Workshop on Cesarean Section Skills and Neonatal Resuscitation, 25th Annual Conference of Indian Society of Perinatology and Reproductive Biology, ISOPARB 2009, AIIMS; 20 March 2009.
- 25th Annual Conference of Indian Society of Perinatology and Reproductive Biology, ISOPARB 2009, India Habitat Centre, New Delhi; 21–22 March 2009.

Lectures delivered

Dr Suneeta Mittal

- ‘Introduction to 12 x 12 Initiative’, CME programme of the Gurgaon Obstetricians and Gynaecologists Society, Gurgaon; 11 January 2008.
- ‘Prevention and Treatment of Ovarian Hyperstimulation Syndrome’, CME, Ghaziabad Obstetricians and Gynaecological Society, Ghaziabad; 19 August 2008.

- ‘Adolescent DUB’, 8th Annual CME, Noida Obstetricians and Gynaecologists Society, Noida; 24 August 2008.
- ‘Prenatal Treatment of toxoplasmosis’, CME, Managing Congenital Intrauterine Infections, AIIMS; 31 August 2008.
- ‘Current status of endoscopic surgery in Gynaecology Practical’, Women’s Health Initiative Training Course in Minimally Invasive Gynaecology, AIIMS; 1–11 September 2008.
- ‘Laparoscopic surgeries complications and Management’, Women’s Health Initiative Training Course in Minimally Invasive Gynaecology, AIIMS; 1–11 September 2008.
- ‘Current status of endoscopic surgery in Gynaecology Practical’, Women’s Health Initiative Training Course in Minimally Invasive Gynaecology, AIIMS; 13–23 October 2008.
- ‘Laparoscopic surgeries complications and Management’, Women’s Health Initiative Training Course in Minimally Invasive Gynaecology, AIIMS; 13–23 October 2008.
- ‘Current status of endoscopic surgery in Gynaecological Practice’, Women’s Health Initiative Training Course in Minimally Invasive Gynaecology, AIIMS; 2–12 February 2009.
- ‘Laparoscopic surgeries complications and Management’, Women’s Health Initiative Training Course in Minimally Invasive Gynaecology, AIIMS; 2–12 February 2009.

Dr Alka Kriplani

- ‘Abnormal Uterine Bleeding’, National CME in Obstetrics and Gynaecology (Module 5, Series 2), AIIMS; 26 April 2008.
- ‘Laparoscopy in infertility’, CME Nidus 2008, Dehradun Obstetrics and Gynaecology Society and USV Pharma, Mussoorie; 17 May 2008.
- ‘Infertility in Endoscopy’, CME Nidus 2008, Udaipur Obstetrics and Gynaecology Society and USV Pharma, Udaipur; 19 July 2008.
- ‘Newer Advances in Hormonal Contraception’, CME, Association of Obstetricians and Gynaecologists of Orissa, Cuttack; 26 July 2008.
- ‘Managing abnormal uterine bleeding’, 11th practical course and CME, Department of Obstetrics and Gynaecology, MAMC, Delhi; 10 August 2008.
- ‘Hormonal Contraception’, CME, Rohtak Obstetrics and Gynaecology Society, Rohtak; 21 August 2008.
- ‘Congenital malformations of the urogenital tract and pregnancy outcome’, 8th Annual CME, Noida Obstetrics and Gynaecology Society, Noida; 24 August 2008.
- ‘Endoscopy and infertility’, CME, Thrissur Obstetrics and Gynaecology Society, Thrissur; 29 August 2008.
- ‘Rubella’, CME on Managing Congenital Intrauterine infections, Department of Obstetrics and Gynaecology, AIIMS and Genetic and Fetal Medicine Committees, FOGSI, Delhi; 31 August 2008.

- ‘Endoscopy in infertility’, 9th WHI Training course in MAS, Department of Obstetrics and Gynaecology, AIIMS, UNU and Karl Storz Germany, Delhi; 3 September 2008.
- ‘Endoscopy and Hysterectomy’, 9th WHI Training course in MAS, Department of Obstetrics and Gynaecology, AIIMS, UNU and Karl Storz Germany, Delhi; 10 September 2008.
- ‘Overview on Medical Criteria for Contraception (WHO guidelines)’, CME on Practical Application and Current Concepts in Gynaecological Oncology, AIIMS; 27 September 2008.
- ‘Laparoscopy in Gynaecological Malignancy’, CME on practical applications and current concepts in Gynaecological Oncology, Department of Obstetrics and Gynaecology, AIIMS, Oncology Committee, AOGD and AOGIN, New Delhi; 27 September 2008.
- ‘Endoscopy in infertility’, 10th WHI Training course in MAS, Department of Obstetrics and Gynaecology, AIIMS, UNU and Karl Storz Germany, Delhi; 15 October 2008.
- ‘Endoscopy and Hysterectomy’, 10th WHI Training course in MAS, Department of Obstetrics and Gynaecology, AIIMS, UNU and Karl Storz Germany, Delhi; 22 October 2008.
- ‘Infertility and endoscopy’, CME, Bhilai Obstetrics and Gynaecology Society, Bhilai; 13 November 2008.
- ‘Hysteroscopy in infertility’, CME and workshop on hysteroscopy, Gwalior Obstetrics and Gynaecology Society, Gwalior; 24 January 2009.
- ‘Endoscopy in infertility’, 11th WHI Training course in MAS, Department of Obstetrics and Gynaecology, AIIMS, UNU and Karl Storz Germany, Delhi; 4 February 2009.
- ‘Endoscopy and Hysterectomy’, 11th WHI Training course in MAS, Department of Obstetrics and Gynaecology, AIIMS, UNU and Karl Storz Germany, Delhi; 11 February 2009.
- ‘Endoscopy in infertility’, CME, VOGS (Varanasi Obstetrics and Gynaecology Society), Varanasi; 21 February 2009.

Dr D. Deka

- ‘Introduction – Maternal foetal problems’, Case discussions on Foetal Infections, CME, Managing Congenital Intrauterine Infections, Department of Obstetrics and Gynaecology, AIIMS and Genetic and Foetal Medicine Committee, FOGSI, AIIMS; 31 August 2008.
- ‘Endoscopy in pregnancy and foetal endoscopy’, Women’s Health Initiative Training Course in Minimally Invasive Gynaecology, AIIMS; 11 September 2008.

Dr Neerja Bhatla

- Procedure of Myomectomy, National CME, Obstetrics and Gynaecology, (Series 2, Module 5), New Delhi; 26 April 2008.
- HPV vaccine in cancer cervix, CME ,HPV, cervical cancer and its vaccines, Dharamshila Hospital and Research Centre, Delhi; 26 April 2008.
- HPV vaccination and its future, CME, Gynaecological Oncology, Sir Ganga Ram Hospital, New Delhi; 12 July 2008.

- Prevention of cervical cancer – New developments in screening and vaccination, CME on Gynaecological Oncology, AIIMS; 27 September 2008.
- ‘Laparoscopy in Gynaecological Oncology’, Women’s Health Initiative Training Course in Minimally Invasive Gynaecology, AIIMS; 7 February 2009.

Dr Neena Malhotra

- ‘Antepartum haemorrhage’, National CME, Obstetrics and Gynaecology (Series 2, Module 5), AIIMS; 27 April 2008.
- ‘Endoscopic tubal sterilization’, training course in Minimally Methods in Reproductive Health, AIIMS, New Delhi.
- ‘Chicken pox, Measles, mumps in Pregnancy’, CME, Managing Intrauterine infections, AIIMS; 31 August 2008.
- ‘Ovulation Induction’, CME, Amritsar Obstetrical Gynaecology Society, Amritsar; 18 October 2008.
- ‘Letrozole-newer ovulation inducing agent’, CME, Ludhiana Obstetrics and Gynaecology Society, Ludhiana; 19 October 2008.
- ‘Assisted reproduction techniques—Current trends’, CME, Kanpur Obstetrics and Gynaecology Society, Kanpur; 20 January 2009.

Dr Vatsla Dadhwal

- ‘Rh negative pregnancy, Rh isoimmunisation’, National CME in Obstetrics and Gynaecology (Series 2, Module 5), AIIMS; 27 April 2008.
- ‘Herpes Simplex’, CME, Managing congenital intrauterine infections, Department of Obstetrics and Gynaecology, AIIMS; 31 August 2008.
- ‘Diagnostic/office hysteroscopy’, training course in Minimally Invasive Gynaecology, AIIMS; 1–11 September 2008.
- ‘Diagnostic / office hysteroscopy’, training course in Minimally Invasive Gynaecology, AIIMS; 13–23 October 2008.
- ‘HIV in pregnancy’, National CME, Obstetrics and Gynaecology (Series 2, Module 5), AIIMS; 1 November 2008.
- ‘Newer concepts in prenatal diagnosis and preconception counselling’, CME, Challenges in Obstetrics and Gynaecology, Mata Chanan Devi Hospital, Delhi; 21 December 2008.
- ‘Diagnostic/hysteroscopy, training course in Minimally Invasive Gynaecology, AIIMS; 2–12 February 2009.

Dr Nutan Agarwal

- ‘Multiple pregnancy’, National CME in Obstetrics and Gynaecology (Module 5) AIIMS, New Delhi; 27 April 2008.

- ‘Complications of hysteroscopy and their management’, Women’s Health Initiative Training Course in Minimally Invasive Gynaecology, AIIMS; 1–11 September 2008.
- ‘Management of Hysteroscopy Complication’, Women’s Health Initiative Training Course in Minimally Invasive Gynaecology, AIIMS; 1–11 September 2008.
- ‘Valvectomy – tailoring to individual’, CME, practical applications and current concepts in gynaecology oncology, AIIMS, in collaboration with AOGD and AOGIN, India; 27 September 2008.
- ‘Complications of hysteroscopy and their management’, Women’s Health Initiative Training Course in Minimally Invasive Gynaecology, AIIMS; 13–23 October 2008.
- ‘Management of Hysteroscopy Complication’, Women’s Health Initiative Training Course in Minimally Invasive Gynaecology, AIIMS; 13–23 October 2008.
- ‘Thyroid disorders during pregnancy’, National CME on Obstetrics and Gynaecology (Module 6, series 2), AIIMS; 1 November 2008.
- ‘Complications of hysteroscopy and their management’, Women’s Health Initiative Training Course in Minimally Invasive Gynaecology, AIIMS; 2–12 February 2009.
- ‘Management of Hysteroscopy Complication’, Women’s Health Initiative Training Course in Minimally Invasive Gynaecology, AIIMS; 2–12 February 2009.

Dr J.B. Sharma

- ‘High risk pregnancy’, CME programme, 30th Annual Conference of AOGD, New Delhi; 9 November 2008.
- ‘Tuberculosis in pregnancy’, CME, 52nd All India Congress in Obstetrics and Gynaecology, AICOG 2009, Jaipur, Rajasthan; 5 January 2009.
- ‘Role of endoscopy and laparoscopy in urogynaecology’, Women’s Health Initiative Training Course in Minimally Invasive Gynaecology, AIIMS; 1–11 September 2008.
- ‘Role of endoscopy and laparoscopy in urogynaecology’, Women’s Health Initiative Training Course in Minimally Invasive Gynaecology, AIIMS; 13–23 October 2008.
- ‘Role of endoscopy and laparoscopy in urogynaecology’, Women’s Health Initiative Training Course in Minimally Invasive Gynaecology, AIIMS; 2–12 February 2009.

National and International Conferences

Lectures delivered

Dr Suneeta Mittal

- ‘Superspecialisation – need of hour’, 51st All India congress of Obstetrics and Gynaecology, Delhi; 1–5 February 2008.
- ‘Critical appraisal’, Postgraduate course, Amity University, Noida; 8 February 2008.
- ‘Laparoscopic surgeries, complications and management’, training course in Minimally Invasive Gynaecology, AIIMS, New Delhi; 18–28 February 2008.
- ‘Current status of endoscopic surgery in Gynaecological practice’, Training course in Minimally Invasive Gynaecology’, AIIMS, New Delhi; 18–28 February 2008.
- ‘Endometriosis–recent trends in reproductive medicine’, 18th Annual Meet Symposium on recent trends in reproductive health research, Hyderabad; 20–22 February 2008.
- ‘PCOD’, Annual RCOG Conference, Indore; 29 February–2 March 2008.
- ‘Adolescent PCOS – Dilemma for gynaecologist session’, 24th National Congress of ISOPARB 2008, Ranchi; 15 March 2008.
- ‘Dr G.D. Pande Memorial Oration’, Forest Hospital Trust Medical College, Haldwani; 18 May 2008.
- ‘*Mahilaon mein baanjhpan ki samasya – kaaran va bachaav*’, Akaashwani, New Delhi; 22 May 2008.
- ‘Medical eligibility criteria for contraception’ and ‘Hormonal contraception’, Varanasi; 21 June 2008.
- ‘Ethics in research’, 3rd National Conference on Science of Research, Gurgaon; 27 July 2008.
- ‘Urinary incontinence/VVD’, case discussion, 11th Practical Course in Obstetrics and Gynaecology, MAMC, New Delhi; 8–10 August 2008.
- ‘*Bhrunn-Hatya*’, Seminar on ‘*Stree ke prati ek dristhikonn*’, New Delhi; 28 August 2008.
- ‘Prevention and management of adolescent anaemia’, monthly study circle lecture organized by NFI and Delhi Chapter of NSI, Nutrition Foundation of India, New Delhi; 28 August 2008.
- ‘Evidence-based practice in childbirth: Current government policies – use of partograph, episiotomies’, Workshop on ‘Strengthening midwifery practices for safe motherhood in India’; 26 August 2008.
- ‘RHL, research methodology in high risk pregnancy and fetal medicine’, Workshop on ‘Maternal foetal medicine’, AIIMS, New Delhi; 25–30 August 2008.
- ‘Stem cells – cells of hope’, 9th World Congress and 17th National Conference of reproductive and child health, Jaipur; 12–14 September 2008.

- ‘Updates in MMA research and practice in India’, Conference on ‘Medical abortion in South Asia: What is new? What is next?’, Gynuity Health Projects, Kathmandu, Nepal; 23–24 October 2008.
- ‘Medical eligibility criteria’, NARCHI Symposium on reproductive health, AIIMS, New Delhi; 2 November 2008.
- ‘Judicious use of progestrogens in obstetrics’, 30th Annual Conference of AOGD, New Delhi; 8–9 November 2008.
- AOGD Oration on ‘Role of IVF in infertility management in developing countries’, 30th Annual Conference of Association of Obstetricians and Gynaecologists of Delhi (AOGD), New Delhi; 8–9 November 2008.
- ‘Recent trends in endometriosis’, National Symposium on recent advances in female reproductive health services, Central Drug Research Institute, Lucknow; 12 December 2008.
- ‘Stem cell therapy–Current perspective’, 52nd All India Congress of Obstetrics and Gynaecology (AICOG 2009), Jaipur; 4–8 January 2009.
- ‘The Why and How of Research’, Practical Workshop on research methodology, COHORT study design, AIIMS, New Delhi; 12–14 January 2009.
- ‘Emergency contraception’, Rockland Hospital, New Delhi; 29 January 2009.
- ‘Introduction and need for clinical research’, Pre-congress workshop data management and research, AIIMS, New Delhi; 28 February 2009.
- ‘Ovarian tissue and oocyte cryopreservation’, Symposium on ovarian cancer, AIIMS, New Delhi; 28 March 2009.

Dr Alka Kriplani

- ‘Fertility enhancing endoscopic surgery’, International Fertility Congress, Indian Fertility Society (IFS), Pune; 5 April 2008.
- ‘Lap repair of vault prolapse’, International Congress, Indian Menopause Society (IMS), New Delhi; 20 April 2008.
- ‘Applied anatomy for the laparoscopic surgeon’, Second Annual Conference of Delhi Gynaecological Endoscopists Society (DGES), New Delhi; 26 April 2008.
- ‘Management of abnormal uterine bleeding – current concepts’, 41st Annual Scientific sessions in association with Asia-Oceania Federation of Obstetrics and Gynaecology (AOFOG) and supported by Indian College of Obstetricians and Gynaecologists (ICOG), Sri Lanka College of Obstetricians and Gynaecologists, Colombo, Sri Lanka; 30 July 2008.
- ‘Adolescent Gynaecology’, Scientific Session, Max Super Specialty Hospital, Saket and AOGD, New Delhi; 2 August 2008.
- ‘Diabetes in pregnancy’, Workshop on Maternal Foetal Medicine, Department of Obstetrics and Gynaecology, AIIMS, and Genetic and Foetal Medicine, Committee of FOGSI, New Delhi; 26 August 2008.

- ‘Contraception update’, FOCUS 2008, PG training programme, Jubilee Mission Medical College, Thrissur and Thrissur Obstetrics and Gynaecology Society, Thrissur; 28 August 2008.
- ‘Endometriosis’, FOCUS 2008, PG training programme, Jubilee Mission Medical College, Thrissur and Thrissur Obstetrics and Gynaecology Society, Thrissur; 29 August 2008.
- ‘Diabetes mellitus in pregnancy’, FOCUS 2008, PG training programme, Jubilee Mission Medical College, Thrissur and Thrissur Obstetrics and Gynaecology Society, Thrissur; 29 August 2008.
- ‘Operative hysterectomy in infertility’, NARCHI, Jaipur; 12–14 September 2008.
- ‘Laparoscopic myomectomy’, 30th AOGD 2008, Delhi; 8 November 2008.
- ‘Diabetes in pregnancy’, DNB teaching programme, Steel Authority of India, Bhilai; 14 November 2008.
- ‘Current concepts – Management of AUB’, DNB teaching programme, Steel Authority of India, Bhilai; 14 November 2008.
- ‘Contraception today’, DNB teaching programme, Steel Authority of India, Bhilai; 14 November 2008.
- ‘Congenital malformations of genital tract and their management in young girls’, CME, 52nd AICOG 2009, FOGSI, Jaipur; 1 February 2009.
- ‘Ethical and legal issues in ART’, Dr CL Jhaveri Endowment Symposium on simplifying ART, 52nd AICOG 2009, FOGSI–ICOG, FOGSI, Jaipur; 6 January 2009.
- ‘Primary amenorrhoea’, 13th Annual revision course for exam-going postgraduates, Sri Ramachandra Medical College and Research Institute, Sri Ramachandra University, Porur, Chennai; 2 February 2009.
- ‘Abnormal uterine bleeding’, 13th Annual revision course for exam-going postgraduates, Sri Ramachandra Medical College and Research Institute, Sri Ramachandra University, Porur, Chennai; 2 February 2009.
- ‘Thrombophilia in pregnancy’, 25th Annual Conference of Indian Society of Perinatology and Reproductive Biology (ISOPARB-2009), New Delhi; 21–22 March 2009.

Dr Sunesh Kumar

- ‘Laparoscopy – positioning, pneumoperitoneum, port placement, indications, contradictions’, Women’s Health Initiative Training course in Minimally Invasive Gynaecology, AIIMS; 1–11 September 2008
- ‘Laparoscopy – positioning, pneumoperitoneum, port placement, indications, contradictions’, Women’s Health Initiative Training course in Minimally Invasive Gynaecology, AIIMS; 13–23 October 2008
- ‘Laparoscopy – positioning, pneumoperitoneum, port placement, indications, contradictions’, Women’s Health Initiative Training course in Minimally Invasive Gynaecology, AIIMS; 2–12 February 2009

Dr Deepika Deka

- ‘Prenatal intervention: Prenatal diagnostic techniques, amniocentesis, *chorionic villus* sampling, cordocentesis’, 34th Annual Conference of Jamshedpur Obstetrics and Gynaecology Society, Jamshedpur; 19 April 2008.
- ‘Chorionic villus sampling, amniocentesis and cordocentesis – indications and procedure’, FOGSI Workshop, Jalandhar Obstetrics and Gynaecology Society, Jalandhar; 4 May 2008.
- ‘Prenatal diagnostic procedures’ and ‘An introduction to fetal medicine and genetics: The new obstetrics’, Obstetrics and Gynaecology Society, Patna; 11 May 2008.
- ‘Infections in pregnancy’, National Conference on pregnancy and labour – making the journey safe, Mumbai Obstetrics and Gynaecology Society, Mumbai; 8 June 2008.
- ‘Foetal Medicine’, 28th Annual Conference of the Thanjavur Obstetrics and Gynaecology Society, Thanjavur; 21–22 June 2008.
- ‘Prenatal diagnostic procedure’, ‘Introduction to maternal foetal medicine’ and ‘TORCH’, 28th Annual Conference of the Thanjavur Obstetrics and Gynaecology Society, Thanjavur; 21–22 June 2008.
- ‘Introduction to maternal foetal medicine’ and ‘Prenatal diagnosis techniques’, Trichy Obstetrics and Gynaecology Society, Trichy; 28–29 June 2008.
- ‘Introduction to foetal medicine’, AICC RCOG 2008 – West Zone Conference and Foetal Medicine Workshop, Maharashtra Medical Foundation, and Genetic and Foetal Medicine Committee of FOGSI, Pune; 27 July 2008.
- Rh Isoimmunization meeting, Delhi Gynaecologist Forum (Westown), Delhi; 1 August 2008.
- ‘An introduction to foetal medicine and genetics: The new obstetrics’, Noida Obstetrics and Gynaecology Society, Noida; 24 August 2008.
- ‘Introduction to maternal foetal medicine’, Maternal Foetal Medicine Workshop, Department of Obstetrics and Gynaecology AIIMS, Genetic and Foetal Medicine Committee, and Federation of Obstetric and Gynaecological Societies of India, AIIMS, New Delhi; 25–30 August 2008

Dr Neerja Bhatla

- ‘Cervical cancer prevention: Screening and vaccines’, III Annual conference of Maharashtra Chapter of IAPSM, Mumbai, 16–17 April 2008.
- ‘Magnitude of the problem of cervical cancer, role of primary and secondary prevention’, ICMR–PATH Cervical Cancer Vaccine Project Advisory Committee Meeting, New Delhi; 7 May 2008.
- ‘Management of CIN’, MRCOG Course, New Delhi; 22 June 2008.
- ‘Overview of study designs’, Practical training workshop on ‘Essentials of research methods in reproductive health’, WHO-CCR in Human Reproduction, Department of Obstetrics and Gynaecology, AIIMS, New Delhi; 1–4 July 2008.

- ‘Formulation of research question’, 1st Annual clinical epidemiology research methods and leadership training workshop for UG and PG medical students, K.L. Wig CMET, AIIMS; 11–13 Jul 2008.
- ‘Changing scenario in treatment of gynaecological disease – The effect of research in carcinoma cervix’, 3rd National Conference of Science of Research, Gurgaon; 25–27 July 2008.
- ‘Laparoscopy in gynaecological oncology’, Women’s health initiative training course in minimally invasive gynaecology, AIIMS; 10 September 2008.
- ‘*Mahilaon mein stan cancer, jaanch or uska upchar*’, All India Radio, 15 September 2008.
- ‘Prevention of gynaecological malignancy’, 2nd Indo-Scandinavian gynaecological oncology Conference 2008, VMMC and Safdarjang Hospital, New Delhi; 18–19 October 2008.
- ‘Experience with HPV vaccine in India and future prospects’, International satellite symposium and operative workshop on gynaecological oncology (ISGO 2008), Bengaluru; 21–22 October 2008.
- ‘Experience with HPV vaccination in India and future expectations’, International symposium on human papillomavirus associated cancers: Translating research into cancer prevention and medicine, Thiruvananthapuram; 1–3 November 2008.
- ‘HPV vaccine’, AOGD, New Delhi; 8–9 November 2008.
- ‘HPV and cervical cancer’, AOGD Conference, New Delhi; 8–9 November 2008.
- ‘HPV vaccination the Indian perspective’, International Gynae Cancer Congress 2008, Dharamshila Hospital and Research Centre, New Delhi; 22–23 November 2008.
- ‘HPV vaccination – the Indian perspective’, 17th AGOICON 2008, Hyderabad; 29–31 November 2008.
- ‘HPV vaccine – from evidence to practice’, AGOICON 2008, Hyderabad; 29–31 November 2008.
- ‘Cervical cancer: The landscape’, Path Forward: Women advocates initiatives against HPV, PATH, New Delhi; 4 December 2008.
- ‘Prevent the preventable: Vaccination for cervical cancer prevention’, 52nd All India Congress of Obstetrics and Gynaecology, AICOG 2009, Jaipur; 4–8 January 2009.
- ‘Possible role of HPV vaccines in the control of cervical cancer in developing countries and India – Current status and future’, Annual Day on Institute of Cytology and Preventive Oncology, Noida; 15 January 2009.
- ‘Pregnancy induced hypertension’, NAMS-PGI National symposium on ‘current concepts and controversies in hypertension’, PGIMER, Chandigarh; 22 February 2009.
- ‘HPV vaccination’, 28th Annual conference of the Indian Association of Cancer Research, Bengaluru; 23–24 February 2009.

- ‘Screening after vaccination’, 24th AICC RCOG Conference, New Delhi; 28 February–2 March 2009.
- ‘Cervical cancer’, CNN-IBN TV Channel; 8 March 2009.
- ‘Optimum debulking: An achievable goal’, Symposium on ovarian cancer, IRCH, AIIMS; 27–28 March 2009.

Dr Neena Malhotra

- ‘Polycystic ovarian syndrome’, National conference and workshop on ovulation induction, IUI and ART, Jalandhar; 11 May 2008.
- ‘Infertility - practical management’, IMA refresher course programme, Kanpur; 20 January 2009.
- ‘Hormone therapy for endometriosis’, XV Annual symposium on hormonal receptors and women’s health ranbaxy science foundation, New Delhi; 19 March 2009.

Dr Vatsla Dadhwal

- ‘Management of menopause’, 28th Annual conference of the society of Thajavur; 21–22 June 2008.
- ‘Ultrasound for congenital malformations in first trimester’, Maternal foetal medicine workshop, AIIMS; 25–30 August 2008.
- ‘Prevention of mother to child transmission and management of pregnancy- ladies with HIV infection’, Training programme for prevention, control and management of HIV/AIDS, Department of medicine and DSACS; 18–19 October 2008.
- ‘Prenatal diagnostic procedures’, Workshop on foetal medicine, Madurai Obstetrics and Gynaecology Society; 21 February 2009.
- ‘Identifying foetal anaemia before hydrops develops’, Workshop on management of Rh negative mothers and Rh-isoimmunization–current concepts, SAFE, DESPAT, Genetics and foetal medicine committee, FOGSI, AIIMS; 28 February 2009.
- ‘Prevention of mother to child transmission of HIV’, ART sensitization training at LRS Institute of Tuberculosis, New Delhi; 25–27 February 2009.
- ‘Identifying foetal anaemia before hydrops’, 25th Annual conference of Indian Society of Perinatology and Reproductive Biology, New Delhi; 21–22 March 2009.

Dr Nutan Agarwal

- ‘APAS and ectopic gestation’, Scientific Session, Dehradun Society, Mussorie; 17 May 2008.
- ‘Medical management of ectopic pregnancy’, 41st Scientific Session in collaboration with AOFOG, Sri Lanka; 29 June 2008.
- ‘Recurrent abortion’, Udaipur Gynaecological Society, Niduss, Udaipur; 19 July 2008.

- ‘Ultrasound guided and amniocentesis as a foetal medicine procedure’, workshop on maternal and foetal medicine, AIIMS, 25–30 August 2008.
- ‘Live demonstration of procedures of foetal medicine like CVS amniocentesis, cordocentesis’, workshop on maternal and foetal medicine, AIIMS; 25–30 August 2008.
- ‘Prevention and management of hysteroscopic complications’, 9th World Congress and 17th National Conference of reproductive and child health; 12–14 September 2008.
- ‘Management of menopause’, Annual meeting of carnal Obstetrics and Gynaecological Society, Karnal; 23 October 2008.
- ‘Cholestasis during pregnancy’, International Conference IMASICON, IMSA, Dubai, UAE; 12–13 October 2008.
- ‘Investigation protocol of recurrent pregnancy loss’, 1st National conference of SOGOG – evidence-based obstetrics and gynaecology, Ahmedabad Obstetrics and Gynaecological Society, Ahmedabad; 12–13 December 2008.
- ‘Tailored approach to valvectolmy’, 53rd ACOG, Jaipur; 4–8 January 2008.
- ‘Live demonstration of hysteroscopy procedure’, workshop on hysteroscopy surgery, Gwalior Obstetrics and Gynaecological Society, Gwalior; 24 January 2009.
- ‘Prevention and management of hysteroscopic complications’, Gwalior Obstetrics and Gynaecological Society, Gwalior; 24 January 2009.
- ‘Intrauterine infection’, 24th Annual AICC-RCOG conference, Delhi; 28 February–2 March 2009.
- ‘Live demonstration of hysteroscopy procedure’, workshop on hysteroscopy surgery, Rohtak Obstetrics and Gynaecological Society, Rohtak; 21 March 2009.
- ‘Prevention and management of hysteroscopic complications’, Rohtak Obstetrics and Gynaecological Society, Rohtak; 21 March 2009.

Dr J.B. Sharma

- ‘Bowel and vascular complication in endoscopic Surgery’, 2nd Annual Conference of the Delhi Gynaecological Endoscopists Society, Moolchand Hospital, New Delhi; 25–27 April 2008.
- ‘Management of Rh negative pregnancy and management of PPH’, Muzaffarnagar Obstetrics and Gynaecological Society, 19 September 2008.
- ‘Anaemia in pregnancy’, Meerut Obstetrics and Gynaecological Society; 7 November 2008.
- ‘Anaemia in pregnancy – changing in concepts’, 30th Annual conference of AOGD, New Delhi; 9 November 2008.
- ‘Management of pregnant patients under DOTS plus in national DOTS plus committee for MDR/XDR management’, LRS Institute of TB and Respiratory Diseases, New Delhi; 20 December 2009.

- ‘Urogynae disorders in day to day gynaecology practice’, Challenges in obstetrics and gynaecology, Mata Chanan Devi Hospital, New Delhi; 21 December 2008.
- ‘Surgical repair of SUI conventional surgeries vs newer technique’, 2nd International gynaecology plastic surgery and live operative workshop, Amritsar; 21–22 February 2009.
- ‘TVT obtage operation’, Video-demonstration in AICC-RCOG conference; 28 February–2 March 2008.
- ‘Hormone replacement therapy’, AICC-RCOG conference; 28 February–2 March 2008.

Dr Pradeep Kumar Garg

- ‘Laparoscopic radical hysterectomy for carcinoma cervix’, SAGE Annual conference, Guwahati; April 2008.
- ‘Laprosopic myomectomy’, SELSICON 2008, Agra; October 2008.
- ‘Laparoscopic sacrocolpopexy’, SELSICON 2008, Agra; October 2008.
- ‘Laparoscopic hysterectomy for carcinoma endometrium’, International Gynaecology Congress 2008, Dharamshila Cancer Hospital, New Delhi; November 2008.
- ‘Laparoscopic myomectomy’, Fertivision 2008, Chandigarh; December 2008.
- ‘Laparoscopic myomctomy’, UAASICON 2008, Bareilly.

RESEARCH

Funded Projects

Completed

1. A phase III, double-blind, randomized, controlled study to evaluate the immunogenicity and safety of GlaxoSmithKline Biologicals’ HPV-16/18 VLP/AS04 vaccine administered intramuscularly according to a 0, 1, 6 months schedule in healthy Indian female subjects aged 18–35 years. Neerja Bhatla. Funded by GSK for 2 years (2006–2008). Funds: Rs 6.88lakh.
2. Parallel performance trial of fast HPV versus HC2 for cervical cancer screening. Neerja Bhatla. Funded by Digene for one year (2007–2008). Funds: Rs 13.50lakh.

Ongoing

1. Comparison of two doses and two routes of administration of misoprostol after pretreatment with mifepristone for early pregnancy. Suneeta Mittal. Funded by WHO for one year (2007–2008). Funds: Rs 5,97,889.
2. Prevention of parents to child transmission of HIV. Suneeta Mittal. Funded by Delhi State AIDS Control Society (ongoing long project). Funds: Rs 0.5 lakh .
3. Phase I clinical trial of once weekly administration of 50 mg mifepristone as oral contraceptive. Suneeta Mittal. Funded by ICMR (ongoing long project). Funds: HRRC.

4. Phase III multicentre clinical trial with subdermal single Rod contraceptive implant–implanon. Suneeta Mittal. Funded by ICMR for two years. Funds: HRRC.
5. Diagnosis of genital tuberculosis in infertile women and the effect of antitubercular therapy. Alka Kriplani. Funded by ICMR for 2 years (2006–2008). Funds: Rs 4,79,465.
6. Role of mifepristone (RU 486) in the management of uterine leiomyoma. Alka Kriplani. Funded by ICMR (2008).
7. An open label, single-arm, non-comparative study to evaluate the efficacy and safety of iron sucrose (OROFER-S) injection in the treatment of iron deficiency anaemia during pregnancy. Alka Kriplani. Funded by Emcure Pharmaceuticals for 2 years (2008–2010).
8. Comparative study of oral single dose of metronidazole, tinidazole, secnidazole and ornidazole in the case of bacterial vaginosis. Alka Kriplani. Funded by DST for 3 years (2008–2011).
9. Evaluation of curcumin in the management of advanced cancer cervix. Sunesh Kumar. Funded by DBT for 3 years (2006–2009). Funds: Rs 51 Lakh (approximately).
10. Seroprevalence of cytomegalovirus (CMV) infection in pregnant women and prenatal diagnosis of Foetal CMV Infection. D. Deka. Funded by ICMR for 2 years (2007–2009). Funds: Rs 2,75,200.
11. Development of HPV candidate vaccine/s: Preparation of clinical trial site/cohort for vaccine testing. Neerja Bhatla. Funded by DBT for 3 years (2005–2008). Funds: Rs 84,98,000.
12. Perifollicular vascularity and follicular fluid vascular endothelial growth factor (VEGF) concentration in *in-vitro* fertilization (IVF) cycles. Neena Malhotra. Funded by AIIMS Research Grant for 2 years (2008–2010). Funds: Rs 2lakh.
13. CORONIS – International study of caesarean section surgical techniques – a randomized factorial trial. J.B. Sharma. Funded by University of Oxford, UK for 4 years (2007–2011). Funds: Rs 72 lakh.
14. Treatment of genital tuberculosis. J.B. Sharma. Funded by Central TB Division, Ministry of Health and Family Welfare, Government of India for 2 years (2009–2011). Funds: Rs 40 lakh.
15. Efficacy of DOTS treatment in genital tuberculosis. Neeta Singh. Funded by Ministry of Health and Family Welfare, Government of India for 2 years (2009–2011). Funds: Rs 40 lakh.

Departmental Projects

Completed

1. Persistence of HPV DNA and its correlation with residual disease in treated cases of CIN.
2. Comparison of Glibenclamide (GYBURIDDE) and insulin for glycemic control obstetrical and perinatal outcome in diabetes mellitus during pregnancy.
3. Role of Pulse Doppler in detecting Uterine and Radial artery flow changes in predicting Pregnancy outcome in Unexplained Infertility.

4. Correlation of HPV DNA testing with residual decrease in treated cases of CIN.
5. Prevalence of thrombophilia in patients with adverse pregnancy outcome.

Ongoing

6. Detection and quantification of foetomaternal hemorrhage (FMH) following deliveries in Rh-ve non-immunized pregnancy by KBT, flow cytometry.
7. Comparison of harmonic scalpel with bipolar cautery in laparoscopic assisted vaginal hysterectomy.
8. A comparative study of VIA, cyto diagnosis, HPV testing and colposcopy as tools for cervical cancer screening.
9. Screening with cytology, visual inspection, acetic acid and Lugol's iodine for early detection of cervical neoplasia and comparative evaluation of single – versus double freeze cryotherapy technique in the treatment of cervical intraepithelial neoplasia.
10. Doppler assessment in various foetal vessels and foetal weight estimation using antenatal soft tissue thickness in intra uterine growth restriction with normal pregnancies.
11. Prevention of uterine atony during cesarean section: Randomized comparison of sublingual misoprostol versus syntocinon.
12. Value of routine antenatal screening ultrasonography at 24–28 weeks of gestation.
13. Effect of intraperitoneal bupivacaine in reducing postoperative pain after laparoscopic gynaecological surgery.
14. Endometrial changes and ovarian function in women with early breast cancer.
15. A randomized study to compare two surgical technique of laparoscopic stripping of ovarian endometrioma.
16. Role of middle cerebral artery – peak systolic velocity in predicting foetal anaemia in Rh Isoimmunisation after previous intrauterine transfusions.
17. Use of letrozole versus clomphene citrate combined with gonadotrophin in superovulation and IUI cycles.
18. Hyperhomocystenemia in unexplained recurrent pregnancy loss and therapeutic response to vitamin B₆, B₁₂ and folic acid.
19. Prophylactic administration of micronized progesterone in prevention of preterm labour in women at increased risk.
20. Prospective randomized comparative study of total laparoscopic hysterectomy, laparoscopically assisted vaginal hysterectomy and non descent vaginal hysterectomy for treatment of benign diseases of the uterus.
21. Correlation of stage and imaging of endometriosis with fertility outcome.

22. Role of messenger RNA PCR in the diagnosis of genital tuberculosis in infertile women.
23. Comparison of uterine and radial artery flow changes detected by pulse doppler in women undergoing stimulated intrauterine insemination for unexplained infertility.
24. To compare three different time regimen of vaginal misoprostol after oral mifepristone for medical abortion.
25. Transvaginal ultrasound markers for ovarian reserve and periovarian adhesions after laparoscopic ovarian drilling in patients with clomiphene citrate resistant polycystic ovarian syndrome.
26. Comparison of the effectiveness of single versus double intrauterine insemination in infertile couples.
27. Role of PET in staging of ovarian malignancies.
28. To compare BPP with Doppler in pregnant patients with IUGR in normal pregnancies.
29. Role of anastrozole for treatment of symptomatic leiomyoma in premenopausal women.
30. Ovarian function and endometrial changes in case of carcinoma breast
31. Comparative study between MRI and ultrasound in prenatal diagnosis using autopsy or postpartum imaging as a standard of reference.
32. Application of PET scan in preoperative evaluation of carcinoma endometrium.
33. Effect of oral contraceptive containing ethinyl estradiol combined with drospirenone vs desogestrel on clinical and biochemical parameters in patients of PCOS.
34. Sentinel lymph node biopsy in cancer cervix.
35. The comparison between laparoscopic assisted vaginal hysterectomy with non-descent vaginal hysterectomy for large uteri – a randomized clinical trial.
36. Role of MRI in evaluation of pelvic organ prolapse and its relationship with POPQ classification.
37. Comparing thermal balloon ablation and levonorgestrel intrauterine system in patients with dysfunctional uterine bleeding.
38. Role of direct foetal intravascular immunoglobulin therapy rhesus isoimmunized pregnancies.
39. Evaluation of anti-mullerian hormone as a marker of ovarian response in IVF cycles.
40. Normogram of foetal nasal bone length at 11–14 weeks of gestation.
41. Sonographic placental investigation in early pregnancy: correlation with foetal and maternal outcome in singleton pregnancy.
42. Clinical, imaging, endoscopic and laboratory evaluation of female genital tuberculosis.
43. Evaluation of the screen-and vaccinate strategy as a model for comprehensive cervical cancer prevention.

44. To evaluate endometrial & sub endometrial blood flows in the prediction of pregnancy during *in-vitro* fertilization treatment.

Collaborative Projects

Ongoing

1. Development of human papillomavirus vaccine prototype/s – molecular epidemiology of HPV types prevalent in India and identification of HPV-16 L1 and E6 variants (with Biochemistry).
2. Apoptosis in placental membranes in pre-eclampsia: An immunohistochemical study (with Anatomy).
3. PEARL study (postmenopausal evaluation and risk reduction with lasofoxifene). Global research and development (with Endocrinology).
4. The Generations trial. Effects of Arzoxifene on vertebral fracture incidence and on invasive breast cancer incidence in postmenopausal women with osteoporosis or with low bone density (with Endocrinology).
5. Chromosome aneuploidy and mosaicism in preimplantation embryo (with Anatomy).
6. Sequence based identification of *Mycobacterium* species isolated from extra-pulmonary tuberculosis cases (with Laboratory Medicine).
7. Establishment and characterization of human foetal liver hematopoietic stem cell line (with Medical Oncology, IRCH).
8. To study the subset of antiphospholipid syndrome defined by anti beta2 glycoprotein 1 antibody (with Laboratory Medicine).
9. Role of centromere in benign breast disease (with Surgery).
10. Epidural analgesia in labour (with Anaesthesiology) .
11. Chromosome aneuploidy and mosaicism in preimplantation embryo (with Reproductive Biology).
12. Prenatal development and maturation of the human inferior colliculus (with Anatomy).
13. Evaluation of ovarian function in female patients with multi-bacillary leprosy (with Dermatology and Venereology).
14. Biostatistical aspects in case control studies on unintended pregnancies (with Biostatistics).
15. A study of molecular basis of endometrial receptivity for blastocyst implantation in primates (with Physiology).
16. Prevention of parent to child transmission of HIV (with Paediatrics and Microbiology).
17. Diabetes mellitus and vulvo vaginal candidiasis: Prevalence and its rational management (with Endocrinology).

18. Prevalence of bacterial vaginosis and other reproductive tract infections among symptomatic women (study in tertiary centre) (with Microbiology).
19. To study the effect of human chorionic gonadotrophin (hCG) on vascular endothelial growth factor (VEGF) expression by human mid-secretory endometrial cells grown on rat-tail collagen matrix (with Physiology).
20. Effect of progesterone on hsp 27 expression in human, mid-secretory stage endometrial cells grown on collagen matrix *in vitro* (with Physiology).
21. Elucidation of endometriosis based on transcript profiling (with Physiology).
22. To study the prevalence of vitamin D deficiency in pregnant women at first and third trimester during the routine care (with Endocrinology).
23. Correlation between first trimester glucose screening and serum insulin levels with development of gestational diabetes mellitus in pregnancy (with Endocrinology).
24. An *in vitro* model study of hyperlipoproteinemia on the degree of LDL receptor expression in placental trophoblast cells: Correlation with oral steroid contraceptive induced hyperlipoproteinemia (with ICMR).
25. Comparative evaluation of neo adjuvant chemotherapy vs primary debulking surgery in the management of advanced epithelial ovarian cancer (with IRCH).
26. p16INK 4a and E-cadherin expression profile in pre-cancerous lesions of cervix and cervical carcinomas (with Pathology).
27. Role of circulating angiogenetic factors in the pathogenesis of pre-eclampsia (with Anatomy).
28. Validation of strategies for rapid prenatal detection of aneuploides (with Genetics).
29. Evaluation of the diagnostic potential of fetal DNA in maternal plasma as a possible tool for non-invasive prenatal diagnosis of common single gene disorders (with Genetics).
30. Non-invasive prenatal diagnosis of beta thalassemia and foetal RhD status (with Paediatrics).
31. Establishment and characterization of human foetal liver hematopoietic stem cell line (with Medical Oncology, IRCH).
32. Endothelial progenitor cells as biomarker of disease activity in multiple myeloma (with Oncology)
33. Use of Hb A estimation by HPLC for prenatal diagnosis of b-thalassemia in foetal blood samples during second trimester pregnancies (with Haematology).
34. Delineation of molecular basis of trophoblast invasion (with National Institute of Immunology).
35. Implantation of human retinal pigment epithelial (RPE) cells in the 6-OH DA lesioned rat model of Parkinson's disease (with Neurology).
36. Diagnosis of genital tuberculosis in infertile women and the effect of antitubercular therapy (with ICMR).

37. Role of mifepristone (RU 486) in the management of Uterine Leiomyoma (ICMR).
38. An open label, single-arm, non-comparative study to evaluate the efficacy and safety of iron sucrose (OROFER-S) injection in the treatment of iron deficiency anaemia during pregnancy (with Emcure Pharmaceuticals)
39. Comparative study of oral single dose of metronidazole, tinidazole, secnidazole and ornidazole in the case of bacterial vaginosis (with DST).

PUBLICATIONS

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Chapters in Books

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PATIENT CARE

Hospital care: Facilities available with the department include special clinic and special laboratory facilities besides the regular Gynaecology OPD which is held everyday. The following special clinics are held.

Clinics		Number of patients attended		
		New:	Old:	
1. General OPD	6/ week	30,650	53,460	
2. High- risk pregnancy clinic	3/week	2,651	1,26,518	
3. Gynaecological endocrine clinic	3/week	217	503	
4. Gynaecological cancer clinic	2/week	311	677	
5. Postnatal clinic	3/week	---	413	
6. Medical termination of pregnancy clinic	6/week	785	385	
7. Family Welfare clinic	6/week	6,535	3,217	

Operations Performed

Gynaecological

Major:

Surgery for benign diseases	-	1,432
Oncology surgery	-	243
Infertility	-	765

Endoscopic surgeries: Laparoscopy	-	2,337
Hysteroscopy	-	153
Plastic surgery	-	62
<i>Minor:</i>		
D&C/EA	-	2338
Colposcopy/cryo/LEEP	-	297
Diagnostic hysteroscopy	-	785
MTP	-	785
Pap smear	-	3409
Cervical biopsies	-	211
<i>Obstetrics</i>		
<i>Major:</i>		
LSCS	-	785
Em. laparotomies	-	52
<i>Minor:</i>		
Operative vaginal deliveries: Forceps	-	151
Vaginal deliveries: Normal	-	1141
<i>Foetal Medicine</i>		
Cordocentesis	-	98
Chorionic villus sampling	-	187
Amniocentesis	-	163
<i>In-vitro utero infusion</i>		
<i>High-risk obstetrics</i>		
—Obstetric ultrasound	-	3800
—NST	-	4228
—BPP	-	3085
Gynaecological ultrasound	-	2935
Ovarian cyst aspirations	-	235
<i>Laboratory Investigations</i>		
Urine pregnancy	-	2925
Haemoglobin	-	3849
Blood groups	-	3207
Urine Albumin/sugar	-	48,823

IVF Facility

1.	IVF	71
	ICSI	29
	Antagonist	68
	Agonist	41
	IUI	75
2.	Cycles cancelled	15
	Reasons for cancellation	
	Failure to respond	5
	Fertilization failure	6
	Severe OHSS	2
	Converted to IUI	2
	EHS	29
3.	Frozen Embryo cycles	18
4.	PESA	6
5.	Total number of Pregnancies	17
	Ongoing	7
	Delivered	5
	Abortions	4
	Ectopic	1
6.	Andrology	
	Semen Analysis	201
	Semen wash for IUI	75
	Semen preparation for IVF	109
7.	Ultrasounds	
	IVF cycles	550
	Follicle monitoring	150
	Day 2 AFC and Day 21 ET	1100
	Total	1800
8.	OPD registrations (Old and New)	2400

POSTPARTUM PROGRAMME

The Postpartum Programme (PPP) is a maternity-centred hospital-based approach to family welfare programme by providing a package of RCH and family welfare services in the vicinity of the hospital as well as in the field practice areas. It is run as an integrated multidisciplinary exercise where the Department of Obstetrics and Gynaecology coordinates with Departments of Paediatrics, Community Medicine, Surgery and Anaesthesiology.

Achievement of different family planning methods, Postpartum Programme (2008-2009)

Method	Achievement
Copper T	541
Oral pills (13 cycles=1 user)	169/patient + 480 pkts
Conventional contraceptives (72 pieces=1 user)	73,000 pieces 2520 patients
Sterilisation	
(a) Tubectomy	1090
(b) Vasectomy	59

Note: Family planning methods are free of target.

Maternal and Child Health (MCH) Performances (2008-2009), Postpartum Programme

Service target	Performance
Pregnant women	
TT (Mothers) (2nd or booster)	
Children (0-1) year	
DPT (3rd dose)	M + F = 648/508
Polio (3rd dose)	M + F = 1078/879
BCG	1137 + 1245
Measles	745 + 556
Children under five years	
DT	369 + 316

COMMUNITY SERVICES/CAMPS

The faculty participated in community awareness programmes through public education talks on radio, phone-in programmes and panel discussions on AIR and allied TV channels.

- Camp at BICODEP, Janakpuri in collaboration with Rotary Club, December 2008.
- Cancer prevention camp for EHS beneficiaries at AIIMS, 26 March 2009.
- Reproductive child health camps organized by the Directorate of Family Welfare at different hospitals of Delhi Government.

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Dr Suneeta Mittal is the Editor, Reproductive Health Library, WHO; Vice-President, North Zone, ISOPARB; Fellow of Royal College of Obstetricians and Gynaecology, London; Vice-President, Indian Society for Study of Reproduction and Fertility; Short-term consultant for technical assistance to WHO on Safe abortion in DPRK; Member, WHO Fertility Regulation Group; Member, WHO Task Force on Post-Ovulatory Methods of Contraception; Member, International Clinical Epidemiology Network (INCLIN); Member, Indian Clinical Epidemiology Network (IndiaCLEN); Member, Global Network for Perinatal and Reproductive Health (GNPRH); Member, Asia Pacific Network for Promotion of Emergency contraception (APNEC); Member, International Consortium for Medical Abortion (ICMA); Member, Core Assessment committee, ICMR, Delhi; Member, Regional Technical Advisory Group (RTAG) on Adolescent Health Development (AHD) of the WHO; Member, Editorial Board, *Asian Journal of Obstetrics and Gynaecology*; *Obstetrics and Gynaecology today*; *Samachar*, MOHFW, Government of India; *Scientific Communications in Obstetrics and Gynaecology*; Appointed as a Consultant in the panel of consultants/experts to extend medical advice to the Vice President of India; Reviewer (National Journals), *Indian Journal of Medical Research*, ICMR, 1997-onwards; *Indian Journal of Pediatrics*, 1998 onwards; *National Medical Journal of India*, 1999 onwards; *Journal of Obstetrics and Gynaecology of India*; *Annals of National Academy of Medical Sciences*, since 2005; *Indian Journal of Community Medicine*; Reviewer (International Journals), *International Journal of Obstetrics and Gynaecology of India*, 2000 onwards; *Archives in Obstetrics and Gynaecology*, since 2006; *Reproductive Health*, since 2001; *Reproductive Health Matters*, 2005 onwards; *British Biomedical Central Journal of Pregnancy and Childbirth*, 2007 onwards.

Dr Alka Kriplani is the Vice-President, Federation of Obstetricians and Gynaecological Societies of India (FOGSI) 2009; Editor, *Asian Journal Obstetrics and Gynaecological Practice*; continuing as Vice-President, North Zone, Indian Society of Minimal Access and Gynaecological Endoscopic Surgery (IMAGES) 2003; Member, Governing Council, ICOG (2009–2011); Member, Executive Committee, NARCHI, Delhi Branch (2006–2008); Member, Managing Committee, Indian Association of Gynaecological Endoscopists (2007–2009); Member, PG Board of Studies in Surgery and Allied subjects, JSS University, Mysore, Karnataka (2008–2009); Editorial board member of 4 journals.

Dr Sunesh Kumar is the Member of the Project Advisory Committee on Screening for common cancers being conducted by ICMR in three districts of Himachal Pradesh.

Dr. Deepika Deka is the Chairman, **Genetics and Foetal Medicine Committee (FOGSI) (2007–2010)**; **Chairman, Perinatal Medicine Committee, Association Obstetrics and Gynaecology of Delhi (AOGD)**; Executive Member, Imaging Sciences Committee, FOGSI; Executive Member, International Exchange Committee, FOGSI; Member for Maternal Morbidity, Technical Advisory Committee, UNFPA; Peer Reviewer, *Journal of Obstetrics and Gynaecology of India*; Member, Editorial Board, *Obstetrics and Gynaecology Today*; Member, Staff Council, AIIMS (2006–2007); Consultant in-charge, Foetal Medicine OT, Department of Obstetrics and Gynaecology, AIIMS; Consultant in charge, Department of Obstetrics and Gynaecology, AIIMS; UG and PG Examiner for Delhi University, Gau. University, MAHE, Calcutta University, PhD, Bharti Vidhyapeeth, Pune, National Board of Examinations, AMU, Faridkot, Utkal University, etc.

Dr Neerja Bhatla was awarded Dr S.K. Ghai Bhandari award for the best conference presentation on ‘Preventive care in Obstetrics and Gynaecology’ at the 24th AICC RCOG Conference at New Delhi, 28 February–2 March 2009; 40th Dr Subodh Mitra Memorial Oration on ‘The HPV DNA test - A new paradigm in cervical cancer screening’, Kolkata, April 12, 2008 organized by the Bengal Obstetric and Gynaecological Society.

Dr Neena Malhotra was awarded Dr C.S. Dawn prize for the best paper on ‘Modern Technology in Women Health’ 52nd All India Congress of Obstetrics and Gynaecology, Jaipur, January 2009.

Dr Vatsla Dadhwal received the Fellowship of Indian College of Obstetricians and Gynaecologists.

Dr J.B. Sharma is the UG and PG Examiner, Delhi University and Dehradun; MRCOG Examination Coordinator for Delhi for last 6 years; In-charge of postpartum programme of AIIMS for last 4 years actively participating in Family Welfare Programmes of Government of India; Editor, *Obstetrics and Gynaecology Today*; Associate Editor, *International Journal of Gynaecology and Obstetrics India*, *Asian Journal of Obstetrics and Gynaecology*, *India Today*; Developed Sharma’s Modified Leopold maneuvers and Sharma’s Right and Left Laternal Maneuvers for abdominal for abdominal palpation during late pregnancy; Reviewer, *International Journal of Gynaecology and Obstetrics*, *International Journal of Gynaecology and Obstetrics India*, *Archives in Obstetrics and Gynaecology*, *BMC*, *Journal of Obstet Gynecol Research*, *Indian Journal of Medical Research*; Awarded Ranjana Sharma’s best Urogynaecology Award for best video presentation on urogynaecology at 24th AICC-RCOG Conference, New Delhi, 28 February–2 March 2009.

SIGNIFICANT EVENTS

1. Established Endoscopy Centre for Training Course on Minimally Invasive Gynaecology under Women’s Health Initiative
2. construction of ART Centre at the Department of Obstetrics and Gynaecology

VISITING SCIENTISTS

1. Surg. Cdr S. Srinivas, Kochi
2. Lt. Col. Davendra Arora, Pune
3. Dr Pak Sun Hu, DPR Korea

4. Dr Jon Kwang Chol , DPR Korea
5. Dr Ashok Agarwal, USA
6. Dr Bradford Lucas, Washington DC, USA
7. Dr Baskar Pandey, Washington DC, USA
8. Dr Barbara Farrell , UK
9. Shan Rich, UK
10. Dr Nisha Lal ,Germany
11. Dr Joharna Houres , Germany
12. Dr P.C. Ho, Bangkok
13. Dr Helena von Hertzen, WHO, Switzerland
14. Dr Allan Templeton, UK
15. Dr Kristina Emzell-Daniesson, Sweden

TRAINEES & FELLOWS

Long-term fellowship

WHO Fellows

1. Dr Anjali Dabral, New Delhi
2. Dr Rita Dhawan, Utrakhan
3. Dr Manikya Mala Yedla, New Delhi
4. Dr Sangeeta Devi Prasad, New Delhi
5. Dr Poonam Agarwal, New Delhi
6. Dr Dolly Chawla, New Delhi
7. Dr Sangita Nangia, New Delhi
8. Dr Alka Goel, New Delhi
9. Dr Bajrang Lal Soni, Rajasthan
10. Dr Hemali Heidi Sinha, Bihar

Short-term training

1. Dr Nicholas Holford
2. Dr Pranab Sinha

3. Mr Andrew Rogers, UK
4. Mr Gorav Wali, UK
5. Mr Julian Allfrey, UK
6. Lt Col. Davendra Arora
7. Dr Alexa Matuschek, Germany
8. Dr Rishabh Singh, UK
9. Mr Dhrushil Patel, UK
10. Ms Zhongbo Chen, UK
11. Ms Helen Jenks, UK
12. Dr Sameena Gul, Srinagar
13. Dr Mansor Bin Md Noor, Malaysia
14. Dr R.M. Udayar Pandian, Malaysia
15. Dr Rajesh Mahendra, Malaysia
16. Dr Deepali Sinhal (Verma)
17. Dr Tania Basu, US
18. Ms Johanna Hauer, UK
19. Ms Leena Herzer, UK
20. Ms Catherine Liu, USA

9.23 Orthopaedics

Professor & Head

Prakash P. Kotwal

Professors

Shishir Rastogi

Arvind Jayaswal

Rajesh Malhotra

Additional Professor

Hira Lal Nag

Associate Professors

Ravi Mittal

Chandrashekhar Yadav

Assistant Professors

Shah Alam Khan

Vijay Kumar

EDUCATION

Undergraduate and Postgraduate

The department had several doctors from various parts of the country and Afro-Asian region for short-term training in various aspects of Orthopaedics.

Teaching to undergraduate and postgraduate in the form of lectures, bedside teaching, assessment, clinicopathology seminars was imparted.

Continuing Medical Education

Lectures Delivered

Dr P.P. Kotwal

1. 'RSD: Presentation and Management', Annual Meeting of the North Zone Chapter of Indian Orthopaedic Association, New Delhi; April 2008.
2. 'Surgical Anatomy of the Hand', Hand CME, Patna Medical College, Patna; June 2008.
3. 'Non-union fracture of the scaphoid', Hand CME, Patna Medical College, Patna; June 2008.
4. 'Wrist Drop', Hand CME, Patna Medical College, Patna; June 2008.
5. 'Carpal Tunnel Syndrome', Hand CME, Patna Medical College, Patna; June 2008.
6. 'Column fixation vs traditional T-plate fixation in fractures of the distal radius', workshop on Distal Radial Fractures, Kerala Orthopaedic Association, Kochi; July 2008.
7. 'Indications and contra-indications of volar/dorsal and combination in fractures of the distal radius', workshop on Distal Radial Fractures, Kerala Orthopaedic Association, Kochi; July 2008.

8. 'Dorsal carpal instabilities', workshop on Distal Radial Fractures, Kerala Orthopaedic Association, Kochi; July 2008.
9. 'Intra-articular fractures of the Hand', First Annual Conference of the Trauma Association of India, TRAUMACON 2008, Mumbai; August 2008.
10. 'Fractures of the distal radius: Manage properly', DOAMIDCON 2008, New Delhi; September 2008.
11. Live Surgery Demonstration on 'Tendon Transfers in Wrist drop', Hand Surgery Workshop, Patna Medical Hospital, Patna; June 2008.
12. Delivered the 'Dr OP Sharma Oration' at the Annual Conference of the MP Chapter of Indian Orthopaedic Association, Indore; October 2008.
13. 'Tuberculosis: An Enigma', Annual Conference of the MP Chapter of Indian Orthopaedic Association, Indore; October 2008.
14. 'Management of Flexor Tendon Injuries', PG Instructional Course, Bhopal; August 2008.
15. 'Management of Paralytic Hand', PG Instructional Course, Bhopal; August 2008.
16. 'Examination of the Wrist in relation to Carpal instabilities', UP Indian Orthopaedic Association PG Instructional Course, Meerut; November 2008.
17. 'Non-union fracture Scaphoid', PG Instructional Course at Manipal University, Manipal; October 2008.
18. 'Management of Flexor Tendon Injuries', PG Instructional Course at Manipal University, Manipal; October 2008.
19. 'Flexor Tendon Injuries', PG Instructional Course at Maulana Azad Medical College, New Delhi; October 2008.
20. Conducted a workshop on Plate fixation of the distal radius, Kerala Orthopaedic Association, Kochi; July 2008.
21. 'MCP Joint Arthroplasty: Current Status', Annual Conference of Indian Arthroscopy Association, New Delhi; November 2008.
22. 'Recent Advances in the treatment of fractures of distal radius', Annual Conference of Punjab Orthopaedic Association, Banur; December 2008.
23. Phonein programme, answering to questions related to Orthopaedic problems, from time to time on All India Radio 2008.
24. 'Role of LCP in fractures of the proximal humerus', Workshop on Locking Compression Plate, Annual Conference of the Delhi Orthopaedic Association; January 2009.
25. 'Role of LCP in fractures of the distal radius', Workshop on Locking Compression Plate, Annual Conference Delhi Orthopaedic Association; January 2009.

26. 'Intra-articular fractures of the Hand', Annual Conference of Delhi Orthopaedic Association; January 2009.
27. 'Role of surgery in Rheumatoid Hand', AIIMS Rheumatology Update; February 2009.
28. 'Evaluation of Hand', Basic Hand Course, Indian Society for Surgery of the Hand, Ludhiana; March 2009.
29. 'Acute Flexor Tendon Injuries', Basic Hand Course, Indian Society for Surgery of the Hand, Ludhiana; March 2009.
30. 'Fractures of the Scaphoid', Basic Hand Course, Indian Society for Surgery of the Hand, Ludhiana; March 2009.
31. 'Management of Nerve Injuries', Basic Hand Course, Indian Society for Surgery of the Hand, Ludhiana; March 2009.
32. 'Partial Thickness Skin Grafting', Basic Hand Course, Indian Society for Surgery of the Hand, Ludhiana; March 2009.
33. 'Instruments in Hand Surgery', Basic Hand Course, Indian Society for Surgery of the Hand, Ludhiana; March 2009.
34. 'Fractures of the middle and proximal phalanx', Basic Hand Course, Indian Society for Surgery of the Hand, Ludhiana; March 2009.

Dr S. Rastogi

1. 'Examination of Hip Joint', DNB-CME teaching programme in Orthopaedics, Central Institute of Orthopaedics, Safdarjang Hospital; 22 February 2008.
2. 'Management of extra-spinal metastasis', IOAICL 2008, Lady Hardinge Medical College.
3. 'Hanging cast', POPCON 2008, Plastercon 2008 conference; 5 October 2008, PGIMR, Chandigarh.
4. 'Practical approach to management of Bone tumours', PG course of UP Orthopaedic Association, Meerut; 7–9 November 2008.

Dr A. Jayaswal

1. 'Management of Severe Rigid Scoliosis – A case for Anterior and Posterior in Correction and Fixation', SRS World Wide Programme on 'Spine Deformities – Current Concept', SRS Delhi, Hotel Intercontinental The Grand, New Delhi; 2–4 October 2008.
2. Upendra B, Shamsheery P, Kandwal P, Chowdhury B, Ahmed A, Jayaswal A. Scoliosis Research Society Worldwide Programme on 'Spinal deformity: Current concepts 2008', Conference on high grade spondylolisthesis outcome study of instrumented reduction with global fusion; 2–4 October 2008.
3. Upendra B, Meena D, Chowdhury B, Ahmed A, Jayaswal A. Scoliosis Research Society Worldwide Programme on 'Spinal deformity: Current concepts 2008', Poster presentation, Outcome based classification for assessment of pedicular screw placement in scoliosis; 2–4 October 2008.

4. Upendra B, Meena D, Chowdhury B, Ahmed A, Jayaswal A. IMAST – 15th International Meeting on Advanced Spine Techniques, Poster presentation, Outcome based classification for assessment of pedicular screw placement in scoliosis, Hong Kong; 8–11 July 2008.
5. Jayaswal A. IMAST – 15th International Meeting on Advanced Spine Techniques, Paper presentation, Rigid Neglected Scoliosis? Management strategies, Hong Kong; 8–11 July 2008.
6. Delivered the Presidential address, XXII Annual Conference of Association of Spine Surgeons of India (ASSICON 2009), Chennai; 23 January 2009.

Dr. R. Malhotra

1. ‘Communication skill training in Orthopaedics’, PG Course, Indian Orthopaedic Association Conference (IOACON) 2008, Bangalore; 3–5 December 2008.
2. ‘Bearing Option Selection: A surgeon’s perspective’, THA Instructional Course Chula Lab, Bangkok, Thailand; 7–8 February 2009.
3. ‘Dislocation and Leg Length Discrepancy: Pre-op and Intra-op management’, THA Instructional Course Chula Lab, Bangkok, Thailand; 7–8 February 2009.
4. ‘Osteoporotic vertebral fractures–role of kyphoplasty’, Symposium on Osteoporosis, Hotel Shangrila, New Delhi; 1 March 2009.
5. ‘Fractures in Women’, Ranbaxy Foundation Symposium, Jawahar Lal Nehru Auditorium, AIIMS, New Delhi; 19 March 2009.

Dr H.L. Nag

1. ‘ACL fixation options on tibia’, 4th Sports Medicine and Arthroscopy Workshop, Sir Ganga Ram Hospital, New Delhi; 2 March 2008.
2. ‘The clinical examination of the knee – a dying art?’, PG Lecture of DOA, quarterly meeting, AIIMS, New Delhi; 11 October 2008.
3. ‘Clinical examination of shoulder – catch the winner’, 5th Sports Medicine and Arthroscopy Workshop, Sir Ganga Ram Hospital, New Delhi; 1 March 2009.
4. ‘Double bundle ACL reconstruction – an overview’, CME for surgeons, Primus, New Delhi; 29 March 2009.
5. ‘Mosaicplasty – when and how?’, CME for surgeons, Primus, New Delhi; 29 March 2009.
6. ‘Microfracture – when and how?’, CME for surgeons, Primus, New Delhi; 29 March 2009.

Dr C.S. Yadav

1. Surface arthroplasty or Headless chicken, NZIOACON; 4–6 April 2008
2. Instability after, TKR – NZIOACON; 4–6 April 2008
3. Instability after THR – NZIOACON; 4–6 April 2008

4. Post-op management and rehabilitation after THR – NZIOACON; 4–6 April 2008
5. Extramedullary fixation (external fixation and bridge plate), AO workshop, NZIOACON; 4–6 April 2008
6. Patient and implant selection in TKR, Knee symposium, Fortis Hospital, Mohali, Punjab; 4 May 2008
7. Soft tissue balancing in TKR, Millennium arthroplasty conference, Mumbai, 2008.
8. Surface arthroplasty or headless chicken, Millennium arthroplasty conference, Mumbai, 2008
9. Knee design consideration and difference between PS vs CR designs, IOACON 2008, Bangalore; 3 December 2008
10. Conventional stem is better than short stem, Cross Fire, IOACON 2008, Bangalore; 6 December 2008
11. Primary THR for complexed proximal femoral fractures, UPCON 2009, Lucknow; 6–8 February 2009
12. LDH – THR, our experience and Indian scenario, NZIOACON 2009, 13–15 February 2009.

National and International Conferences

Dr S. Rastogi

1. Delivered lecture on Cemented vs uncemented total hip replacement in 210A CON, New Delhi 2008.
2. Delivered lecture on ‘Cemented vs cementless total hip’, East Delhi Orthopaedics club, New Delhi; 17 May 2008.
3. ‘Medical Scenario in India – Goal upgradation of Health Education in India’, Scientific Programme, JLN Auditorium, AIIMS, New Delhi; 25 May 2008.
4. Delivered lecture on ‘Lumbar Disc Derangement’, Meerut Orthopaedic Club; 31 May 2008.
5. Paper presentation on ‘Tuberculosis of sternum – what we know and what we don’t?’. Triennial World Congress of SICOT Hongkong 24–28 August, 2008
6. Poster presentation on ‘Evaluation of endoprosthetic replacement in giant cell tumors on bone’. Triennial World Congress of SICOT Hongkong 24–28 August, 2008
7. Paper presentation on ‘immunomodulation in osteoarticular tuberculosis’, XXIV Triennial World Congress of SICOT, Hong Kong; 24–28 August 2008.
8. ‘Primary and subsequent intervention in Giant cell tumors of bone’, Medicon 2008 conference, India Habitat Centre; 7 September 2008.
9. ‘Bone Tumours – what to do and what not to do?’, XVII HIMORTHOCON 2008, Mandi, HP; 1–2 November 2008.

10. 'Giant cell tumors of bone intralesional curettage or Enbloc excision', 53rd Annual Conference of IOACON; 2–7 December 2008.
11. 'Locking plates in the management of bone tumors', PUNCON 2008, Gian Sagar Medical college and hospital, Ramnagar, Banur; 28 December 2008.
12. 'Giant cell tumors of bone', Professor T.P. Srivastava Oration, UPORTHOCON 2009, Lucknow; 6–8 January 2009.
13. 'Current trends in management of giant cell tumors of bone', 28th Annual Conference of North Zone Indian Orthopaedics Association, PGIMS, Rohtak; 13–15 February 2009.

Dr A. Jayaswal

1. 'Why fix the Spine?', Workshop on Spinal Fixation, Annual Conference of North Zone Orthopaedics Association (NZOA 2008), India Habitat Centre, New Delhi; April 2008.
2. 'Spinal Pseudarthrosis in Rounded Kyphosis', Meeting of the Spine and Paediatric Orthopaedics Section of Asia Pacific Orthopaedics (APOA–SP 2008), Jeju, Korea; 5–7 June 2008.
3. 'Minimally invasive vs open surgery for low grade spondylitis', APOA–SP 2008, Jeju, Korea; 5–7 June 2008.
4. 'Minimally invasive disc surgery', Instruction course in spine surgery (ICS 2008), Combined instructional course of European Spine society and Associate of Spine Surgeons of India, Shimla (HP); 7–10 August 2008.
5. 'Surgical Management of tuberculosis of spine', Annual Conference of Orthopaedics Association of South Indian Society, OASISCON 2008, Pondicherry; 22–24 August 2008.
6. 'Vertebroplasty vs kyphoplasty', Kyphoplasty Course, Chennai; 24 August 2008.
7. 'Kyphosis correction', Mid-term Symposium of UP Chapter of Indian Orthopaedics Association, Bareilly; 30–31 August 2008.
8. 'Minimally invasive spine surgery', Mid-term Symposium of UP Chapter of Indian Orthopaedics Association, Bareilly; 30–31 August 2008.
9. 'Tuberculosis spondylitis – Presentation, Sequale and Management Strategies', Symposium of the Global Outreach Programme, 43rd Annual Meeting of Scoliosis Research Society (SRS 2008), Salt Lake City, USA; 10–13 September 2008.
10. 'Emerging techniques in spine surgery – Minimally invasive surgery', Annual Conference of Central Zone Orthopaedics Association, CEZCON 2008, Ranchi; 24–26 October 2008.
11. 'Minimally invasive spine surgery – Emerging trends', Armed Forces Medical College (AFMC), Pune; 17 November 2008.
12. 'Indian and imported implants in spine surgery – our experience', Faculty lecture on 'Orthopaedics implants testing and biomechanics', Indian Spinal Injury Centre, New Delhi; 28–29 November 2008.

13. 'Hooks in spine surgery – when why and how', Basic Spine Workshop, Annual Conference Indian Orthopaedics Association (IOACON 2008), Bangalore; 2–7 December 2008.
14. 'AIS – Instrumentation an overview', Advance Spine Workshop, Annual Conference Indian Orthopaedics Association (IOACON 2008), Bangalore; 2–7 December 2008.
15. 'Technique of post-instrumentation', Advance Spine Workshop, Annual Conference Indian Orthopaedics Association (IOACON 2008), Bangalore; 2–7 December 2008.
16. 'My worst orthopaedics fractions', CME at Annual Conference Indian Orthopaedics Association (IOACON 2008), Bangalore; 2–7 December 2008.
17. 'Failed back surgery', Annual Conference Indian Orthopaedics Association (IOACON 2008), Bangalore; 2–7 December 2008.
18. 'Spinal deformities – Catch them young', CINCON 2009, Ranchi; 9–11 January 2009.
19. 'Osteoporotic vertebral fractures', CINCON 2009, Ranchi; 9–11 January 2009.
20. 'Minimally invasive surgery–Indian experience', Annual Conference of Association of Spine Surgeons of India (ASSICON 2009), Chennai; 23–25 January 2009.
21. 'High grade spondylolisthesis – Reduce and fix', Annual Conference of Association of Spine Surgeons of India (ASSICON 2009), Chennai; 23–25 Jan 2009.
22. 'Lumbar disc herniations', Mid-term Symposium of the Central Zone of Indian Orthopaedics Association on 'Spinal disorders–evaluation and decision making', Raipur (MP); 22 March 2009.
23. 'Minimally invasive surgery in the treatment of tuberculosis of the spine', International Orthopaedics Forum, Chongqing, China; 27–29 March 2009.
24. Upendra BN, Kandwal P, Jayaswal A. 'Preliminary outcome of instrumented non-fusion surgery in treatment of progressive early-onset scoliosis', Annual Conference of Association of Spine Surgeons of India (ASSICON 2009), Chennai; 23–25 January 2009.

Dr R. Malhotra

1. Kumar V, Sharma L, Malhotra R. 'Femoral periprosthetic stress-shielding following cementless total hip replacement', The European Federation of National Associations of Orthopaedics and Traumatology (EFORT) Congress, Nice, France; 31 May 2008.
2. 'Conversion of failed hemiarthroplasty to total hip replacement: A short to mid-term follow-up study', SICOT 2008; 24–28 August 2008.
3. 'Correction of post-traumatic cubitus varus by dome osteotomy: A clinical outcome study', SICOT 2008; 24–28 August 2008.
4. 'Surgical management of intercondylar fractures of the humerus using triceps reflecting anconeus pedicle (Trap) approach', SICOT 2008; 24–28 August 2008.

5. 'Prospective randomized controlled trial of one stage vs two stage THA in an Asian Population', SICOT 2008; 24–28 August 2008.
6. 'A typical presentations of foot and ankle tuberculosis – time to wake-up', Paper presentation, Annual Meeting of AAOS 2009, Las Vegas; 2009.
7. 'The valgus knee', Knee Arthroplasty Workshop, XXVII Annual NZIOACON 2008, India Habitat Centre, New Delhi; 4 April 2008.
8. 'Chair of Session IV: New concepts', Knee Arthroplasty Workshop, XXVII Annual NZIOACON 2008, India Habitat Centre, New Delhi; 4 April 2008.
9. 'Pre-op planning', Hip Arthroplasty Workshop, XXVII Annual NZIOACON 2008, India Habitat Centre, New Delhi; 4 April 2008.
10. 'Hip revision surgery: Principles and technique', XXVII Annual NZIOACON 2008, India Habitat Centre, New Delhi; 4 April 2008.
11. 'Evidence based medicine: Current status of minimally invasive knee replacement', 2nd Annual Conference of Indian Society of Hip and Knee Surgeons, Hotel Taj Koromandal, Chennai; 26–27 April 2008.
12. 'Management of bone deficiency in total knee arthroplasty', National Orthopaedics Update, Military Hospital, Kirkee, Pune; 4 May 2008.
13. 'THR after acetabular fracture', MIDCON 2008, India Habitat Centre, New Delhi; 7 September 2008.
14. 'The role of coating of implants evidence based medicine in the osteointegration of the implants', Academia Orthopaedics 2008, Jamnagar, Gujarat; 26–28 September 2008.
15. 'Osteoporosis and hip fractures: Modern perspectives', Academia Orthopaedics 2008, Jamnagar, Gujarat; 26–28 September 2008.
16. 'Earlier realization of the event can reduce the morbidity and the time in failed fracture healing', Academia Orthopaedics 2008, Jamnagar, Gujarat; 26–28 September 2008.
17. 'Intramedullary versus extramedullary fixation of intertrochanteric fractures–What do the outcome studies say? – Controversies in Orthopaedic Trauma', Academia Orthopaedics 2008, Jamnagar, Gujarat; 26–28 September 2008.
18. 'The pinnacle acetabular cup – keep them moving', International Symposium on 'Hip and knee arthroplasty', PGIMER, Chandigarh; 17 October 2008.
19. 'PFC – RP design rational and clinical results', International Symposium on 'Hip and knee arthroplasty', PGIMER, Chandigarh; 17 October 2008.
20. 'Challenges in treatment of musculoskeletal pain', Pain Symposium in the XIX Annual CME, Association of Physician of India, Delhi State Chapter (API-DSC), India Habitat Centre, Lodhi Road, New Delhi; 18–19 October 2008.

21. 'Revision TKR: When to select wedges, stems and sleeves?', Indian Arthroplasty Association Conference (IAACON), Essex Farms, New Delhi; 8–9 November 2008.
22. 'Why I choose a fully HA coated cementless stem?', Hip Workshop, Annual IAACON 2008, Indian Arthroplasty Association Conference (IAACON), Essex Farms, New Delhi; 8–9 November 2008.
23. 'Management of compound fractures', TRAUMA 2008, International Conference, CME cum Live Workshop and Inaugural Conference of the Indian Society for Trauma and Acute Care (ISTAC), Siri Fort Auditorium Complex, New Delhi; 29 November 2008.
24. 'MIS hip and knee', Indian Orthopaedic Association Conference (IOACON) 2008, Bangalore; 3–5 December 2008.
25. 'Pre-operative planning', Delhi Orthopaedic Association Conference (DOACON), Lady Hardinge Medical College, New Delhi; 10 January 2009.
26. 'Biomechanics of the hip: Joint restoration', THA Instructional Course Chula Lab, Bangkok, Thailand; 7–8 February 2009.
27. 'Management of infected THR', Annual Conference of NZIOACON 2009, PGIMS, Rohtak; 13–15 February 2009.
28. 'Management of bone defect in TKR', Annual Conference of NZIOACON 2009, PGIMS, Rohtak; 13–15 February 2009.
29. 'Management of bone defects in TKA', Basic Arthroplasty Course, UPIOA, Kanpur; 22 March 2009.
30. 'Management of osteoporosis: A joint replacement surgeon's perspective', Basic Arthroplasty Course, UPIOA, Kanpur; 22 March 2009.
31. Malhotra R, Kiran EK, Bhan S, Dua A. 'Primary cementless total hip arthroplasty for bony ankylosis in patients with ankylosing spondylitis', Poster presented, 75th Annual Meeting of the American Academy of Orthopaedic Surgeons in San Francisco, Moscone Convention Centre, California; 5–9 March 2009. Adjudged as one of the Best Posters in the Hip Arthroplasty Category.
32. Malhotra R, Dua A, Kumar V. 'P266 – Femoral revision using long hydroxyapatite –coated interlocking stem', The European Federation of National Associations of Orthopaedics and Traumatology (EFORT) Congress, Nice, France; 29 May–1 June 2008.
33. Kumar V, Malhotra R, Bhan S. 'P248 – Total hip replacement following acetabular fractures', The European Federation of National Associations of Orthopaedics and Traumatology (EFORT) Congress, Nice, France; 29 May–1 June 2008.
34. Malhotra R, Kumar V, Rijal, Laxman. 'Total acetabular allograft', Indian Arthroplasty Association Conference (IAACON), Essex Farms, New Delhi; 8 November 2008.

35. Malhotra R, Kumar V. 'Short metaphyseal cementless stem in young patient', Annual Joint Meeting with Arthroplasty Care Practitioners Association and British Hip Society (BHS), Manchester, UK; 12–13 March 2009.

Dr H.L. Nag

1. 'Indications and surgical techniques of ankle arthroscopy', 3rd International Symposium on new horizons in Arthroscopic Surgery, Spinal Injury Centre, New Delhi; 29 March 2008.
2. 'Arthroscopic management of OA knee', 3rd International Symposium on new horizons in Arthroscopy Surgery, Spinal Injury Centre, New Delhi; 29 March 2008.
3. 'Basic knee arthroscopy, hamstring harvesting and arthroscopic meniscectomy', Indian Arthroscopy Society (IAS) Cadaver Course, New Delhi; 18 May 2008.
4. 'Clinical examination of knee', Indian Arthroscopy Society (IAS) Cadaver Course, New Delhi; 16 November 2008.
5. 'Meniscal repair', Advance knee arthroscopy pre-conference workshop, 53rd Indian Orthopaedics Association (IOA) Conference, Bangalore; 3 December 2008.
6. 'Knee injuries in sports and its managements', Recent trends in sports health – a National Symposium, Jamia Millia University, New Delhi; 7 March 2009.
7. 'Indications and surgical techniques in ankle arthroscopy', 4th International Symposium on new horizons in arthroscopic surgery, Primus, New Delhi; 21 March 2008.
8. 'Arthroscopic management of arthritic knee', 4th International Symposium on new horizons in arthroscopic surgery, Primus, New Delhi; 21 March 2008.

Dr Ravi Mittal

1. 'Double bundle tibial inlay method of PCL reconstruction', NZIOACON 2009, New Delhi; 4–6 April 2008.
2. 'OT set up and instrumentation for knee arthroscopy', UPORTHOCON, Lucknow; 6 February 2009.
3. 'Nonunion of shaft of femur', NZIOACON 2009, PBDSPGIMER, Rohtak; 15 February 2009.
4. 'Shoulder instability', 5th Sports Medicine and Arthroscopy Workshop, Sir Ganga Ram Hospital, New Delhi; 1 March 2009.
5. 'Intelligent interpretation of MRI of knee – Controversies and pitfalls', Delhi Knee Course, Indian Spinal Injuries Centre; 14–15 March 2009.
6. 'The principles and practice of orthopaedic research', UCMS, New Delhi; 24 March 2008.
7. 'Shoulder instability', 5th Sports Medicine and Arthroscopy Workshop, Sir Ganga Ram Hospital, New Delhi; 1 March 2009.

8. 'Controversies and pitfalls in knee MRI', Delhi Knee Course, Indian Spinal Injuries Centre; 14–15 March 2009.

Dr Vijay Kumar

1. 'Total hip replacement after acetabular fracture', 9th EFFORT Congress, Nice, France; 29 May–1 June 2008.
2. 'Femoral revision using Long hydroxyapatite coated interlocking stem', 9th EFFORT Congress, Nice, France; 29 May–1 June 2008.
3. 'Femoral periprosthetic stress shielding following cementless total hip replacement', 9th EFFORT Congress, Nice, France; 29 May–1 June 2008.
4. 'Total acetabular allograft', Delhi Orthopaedic Association Clinical Meet, New Delhi; 11 October 2008.
5. 'Two stage revision THR for infected hips using an antibiotic impregnated cement spacer', Indian Arthroplasty Association Conference (IAACON 2008), New Delhi; 8–9 November 2008.
6. 'Treatment of a type 3b acetabular defect using total acetabular allograft', Indian Arthroplasty Association Conference (IAACON 2008), New Delhi; 8–9 November 2008.
7. 'Prospective comparison of femoral periprosthetic stress-shielding in patients implanted with 4/5th and 1/3rd porous coated cementless femoral stems', British Hip Society (BHS) Annual Meeting, Manchester, UK; 12–13 March 2009.
8. 'Short metaphyseal cementless stem in young patients', British Hip Society (BHS) Annual Meeting, Manchester, UK; 12–13 March 2009.

RESEARCH

Funded Projects

1. Role of free radical scavengers and the effect of antioxidants on their levels in patients with ankylosing spondylitis—to investigate the possible role of antioxidants as therapeutic agents in ankylosing spondylitis. Arvind Jayaswal, Taposh Kumar Das. Funded by ICMR for 4 years (2004–2008).
2. Outcome Study of Anterior and posterior instrumentation in Rigid Scoliosis. Arvind Jayaswal, B.N. Upendra. Funded by Council for scientific and Industrial Research for 3 years (2007–2010).
3. A new hip hemiarthroplasty option based on femoral stem design suitable for the morphology of proximal femur of elderly Indian population. Rajesh Malhotra, Vijay Kumar. Funded by CSIR for 4 years (2005–2009). Funds: Rs 30.33 Lakh.
4. Some medico-technical, (i) Determining mechanical properties of ligaments, and (ii) Development of stereo-cameras for operative / anatomic video-sequences. Rajesh Malhotra, Vijay Kumar, Anoop Chawla, S. Mukherjee. Funded by ICMR for 3 years (2006–2009). Funds: Rs 23.33 Lakh.

5. Evaluation of efficacy of platelet concentrates in the treatment of non-union of fracture of long bones. Rajesh Malhotra, Vijay Kumar. Funded by ICMR for 3 years (2007–2010). Funds: Rs 27.49 Lakh.
6. An observational study to assess back pain in patients with severe osteoporosis treated with teriparatide versus antiresorptives. Rajesh Malhotra, Vijay Kumar. Funded by Eli-Lilly for one year (2008–2009). Funds: Rs 4.20 Lakh.
7. A phase III randomised, parallel-group, double-blind, active controlled study to investigate the efficacy and safety of oral 220 mg dabigatran etexilate (110 mg on the day of surgery followed by 220 mg once daily) compared to subcutaneous 40 mg enoxaparin once daily for 28–35 days in prevention of venous thromboembolism in patients following primary elective total hip arthroplasty (re-novate II). Rajesh Malhotra, Vijay Kumar. Funded by SIRO Clinpharm for one year (2008–2009). Funds: Rs 25.50 Lakh.
8. Proteomics of human body fluids: Structural characterization of proteins and target identification for diagnosis and drug discovery. A. Srinivasan, H.L. Nag. Funded by Department of Biotechnology, India for 3 years (2005–2008). Funds: Rs 34.5 Lakh.
9. Development of dual growth factor delivery systems for tissue engineering application. Dhirendra S. Katti, H.L. Nag. Funded by Department of Biotechnology, India for 3 years (2006–2009). Funds: Rs 39.25 Lakh.

Departmental Projects

Completed

1. PET-SPECT evaluation of femoral head vascularity following Surface hip Replacement.
2. Arthroscopic assessment of the extent of bankart lesion in acute traumatic shoulder dislocation and radiological correlation.
3. Functional outcome after arthroscopic assisted mini open rotator cuff repair Arthroscopic and MRI correlation of meniscal lesions in ACL deficient knee MR evaluation of glenohumeral instability.
4. Comparison of nitroglycerin and diltiazem as adjuncts to lignocaine in intravenous regional anaesthesia.
5. Short and midterm result following total knee arthroplasty with posterior stabilized mobile bearing prosthesis: A retrospective and prospective study.
6. Femoral head vascularity after surface arthroplasty of the Hip.
7. Effects of intra-articular pressure, posterior communication and garden's alignment index on the management of intracapsular femoral neck fractures.
8. Assessment of functional outcome after arthroscopically assisted mini open rotator cuff repair.
9. Comparative study between interlock nailing and MIPPO using locking compression plate in fracture shaft of tibia.

Ongoing

1. Assessment of profile of patients with osteoporotic vertebral compression fracture and comparison of conservative invasive and minimally surgery
2. Evaluation of arthroscopic bankart repair of recent traumatic anterior shoulder dislocation
3. Clinico-radiological evaluation of total knee arthroplasty: A short-term retrospective and prospective study
4. Study of clinical, radiological and functional outcome of management of congenital scoliosis
5. Role of F18 fluoride PET-CT and F18 FDG PET-CT in painful hip prosthesis to rule out septic versus aseptic loosening
6. Assessment of profile of patients with osteoporotic vertebral compression fractures and comparison of outcomes following various treatment modalities
7. Prognostic factors in the management of osteosarcoma: A clinical study
8. Expression of Vegf and Matrix Metalloproteinase-T in Bone Sarcomas
9. Evaluation of the results of proximal humerus locking plate in fracture of the proximal humerus
10. Arthroscopic elbow synovectomy in rheumatoid arthritis its effectiveness and MRI correlation
11. Comparison of post-op pain relief by combined local periarticular wound infiltration and post-operative single short intra-articular injection of bupivacaine with continuous epidural analgesia after total hip arthroplasty
12. Intralesional autologous bone marrow stem cell injection in avascular necrosis of femoral head and evaluation of outcome using MRI, PET Scan and bone scan
13. Outcome of surgical correction in rigid scoliosis – a prospective and retrospective study
14. Evaluation of arthroscopic bankart repair of recurrent traumatic anterior shoulder dislocation
15. Epidemiology of traumatic spine injuries and a randomized study to compare different surgical methods of treatment of thoracolumbar burst fractures
16. Functional outcome in patients with intra-articular fractures of calcaneus undergoing treatment with open reduction and internal fixation vs minimally invasive technique – a randomised controlled trial
17. A clinical study to determine the functional outcome of operatively treated cases of displaced tibial plateau fractures.

PUBLICATIONS

Dr P.P. Kotwal

1. Kotwal PP, Nagraj C, Gupta V. Vascularised joint transfer in the management of recurrent giant cell tumour of the second metacarpal. *The J Hand Surg (Eur)* 2008;33E:3:314–6.

2. Bandopadhyaya GP, Shukla J, Kotwal PP, Kumar R. Molecular targeting of infective bacterial maltose binding protein for infection imaging using TC-99m hydroxyl propylcyclodextrin in patients with knee joint replacement and other prosthesis (abstract). Proceedings of the 4th International meeting of the Hellenic Society of Nuclear Medicine, Greece; 2008:69–70.

Dr A. Jayaswal

1. Upendra B, Meena D, Chowdhury B, Ahmed A, Jayaswal A. Outcome based classification for assessment of thoracic pedicular screw placement. *Spine* 2008;33:384–90.
2. Murugappan K, Khandwal P, Upendra B, Jayaswal A. Comment on the new classification of surgical treatment of spinal tuberculosis. *Int Orthop* 2008.

Dr R. Malhotra

1. Malhotra R, Garg B, Logani V, Bhan S. Management of extensor mechanism deficit as a consequence of patellar tendon loss in total knee arthroplasty: A new surgical technique. *Journal of Arthroplasty* 2008;23:1146–51.
2. Neogi DS, Kumar V, Malhotra R. Femoral allograft in the management of osseous hydatidosis presenting as femoral shaft non-union. *Arch Orthop Trauma Surg* 2008.
3. Bhan S, Malhotra R, Kiran EK. Primary cementless total hip arthroplasty for bony ankylosis in patients with ankylosing spondylitis. *Journal of Arthroplasty* 2008;23:859–66.
4. Chawla A, Mukherjee S, Soni A, Malhotra R. Effect of active muscle forces on knee injury risks for pedestrian standing posture at low speed impacts. Accepted in *Traffic Inj Prev*.
5. Khatri D, Malhotra R, Bhan S. Results of total knee replacements in stiff and ankylosed knees and comparison with knees with good preoperative range of motion. Accepted in *J Knee Surg*.
6. Pankaj A, Malhotra R, Bhan S. Conversion of failed hemiarthroplasty to total hip arthroplasty: A short to mid-term follow-up study. *Indian J Orthopaedics* 2008;42:294–300.
7. Malhotra R, Kumar V. Acetabular revision using total acetabular allograft. Accepted in *Indian J Orthopaedics*.
8. Malhotra R, Agarwal N, Kukreja S. Fix it before it Breaks – Exercise book for osteoporosis. Published by *Indian Society of Bone and Mineral Research* 2008.

Dr H.L. Nag

1. Nag HL, Devdatta SN, Nataraj AR, Kumar AV, Yadav CS, Singh U. Tubercular infection after anterior cruciate ligament reconstruction. *Arthroscopy* 2009;25:131–6.
2. Nag HL, Karthik SM, Chandran PSM, Mohan MR, Das RB. Little leaguers' elbow in an adolescent cricket player – case report. *Europ J Orthop Trauma* 2009;19:97.
3. Sameer N, Ravi M, Nag HL, Raju S. Arthroscopic and magnetic resonance imaging evaluation of meniscus lesions in chronic ACL deficient knee. *Arthroscopy* 2008;24:1045–51.

4. Nag HL, Karthik SM. Comment on the magnetic resonance appearance of the shoulder after subacromial steroid injection (letter to editor). *Arthroscopy* 2008;**24**:1435–6.
5. Devdatta SN, Singh B, Jaiman S, Yadav CS, Nag HL. Comment on Mohammed *et al.* Interamedullary tibial nailing in distal third tibial fractures: Distal locking screws and fracture non union (letter to editor). *Intern Orthop (SICOT)*.

Dr C.S. Yadav

1. Kumar A, Varshney MK, Trikha V, Khan SA, Hasan SA, Yadav CS. A rare actinomycosis of humerus: An unusual location and a diagnostic dilemma – a case report. *Arch Orthop Trauma Surg* 2008;**128**:121–4. Post-traumatic completely embedded ring. *Eur J Orthop Traumatol*, Dec 2002.
2. Khan SA, Tulkar S, Sharma DK, Kumar A, Varshney MK, Yadav CS, *et al.* CT guided radiofrequency ablation of osteoid osteomas – Indian Perspective. *J Orthop Surg*.
3. Khan SA, Kumar A, Varshney MK, Trikha V, Yadav CS. Accidentally falling of instruments during orthopedic surgery – Time to wake up. *Australian and New Zealand Journal of Statistics* 2008:794–5.
4. Varshney MK, Kumar A, Khan SA, Yadav CS. Kimura disease of extremity – an unusual manifestation in bone. *Joint Bone Spine* 2008.
5. Khan SA, Kumar A, Varshney MK, Trikha V, Yadav CS. Dextrose prolotherapy in the management of recalcitrant coccygodynia. *J Orthop Surg* 2008;**16**:27–9.
6. Niyogi DS, Singh S, Yadav CS, Khan SA. Case Report: Bicondylar Hoffa Fracture – A rarely occurring commonly missed injury. *Injury Extra* 2008;**39**:296–8.
7. Nag HL, Niyogi DS, Natraj AR, Kumar A, Yadav CS, Singh UB. Tubercular infection following anterior cruciate ligament reconstruction. *Arthroscopy: Journal of arthroscopy and related surgery*.
8. Niyogi DS, Yadav CS. Correspondence. Risk factors associated with acute hip prosthetic joint infections and outcome of treatment with a rifampin-based regimen. *Acta Orthopaedica* 2008;**79**:454–7.
9. Niyogi DS, Yadav CS, Khan SA, Rastogi S. Correspondence. *In vivo* efficacy of antimicrobial-coated devices. *Bone Joint Surg Journal (Br)* 2008;**90**:1785.
10. Niyogi DS, Yadav CS, Rastogi S. Surgical site infection with methicillin-resistant *Staphylococcus aureus* after primary total hip replacement. *Br J of Bone Joint Surg* 2008;**90**:1536–7.
11. Niyogi DS, Singh B, Jaiman A, Yadav CS, Nag HL. Correspondence. Comment on ‘Intramedullary tibial nailing in distal third tibial fractures: Distal locking screws and fracture non-union’. *International Orthopaedics*.
12. Niyogi DS, Yadav CS. Correspondence. Ensuring appropriate timing of antimicrobial prophylaxis. *Am J of Bone Joint Surg* 2008.

13. Neogi DS, Trikha V, Jain S, Mishra KK, Rohilla N, Yadav CS. Biological plate fixation of comminuted subtrochanteric fractures with the Dynamic Condylar Screw: A clinical study. *Acta Orthop Belg* 2009;**75**.

Abstracts

1. Neogi DS, Yadav CS, Khan SA. Total hip replacement in active tuberculosis – A myth or reality, COT triennial world congress, Hong Kong; August 2008. SICOT/SIROT 2008 Abstract Book, Abstract No 17147, pg 1091.
2. Neogi DS, Singh S, Trikha V, Yadav CS. Comparative study between dynamic condylar screw and dynamic hip screw in the management of sub-trochanteric fractures, SICOT TWC, Hong Kong, August 2008. SICOT/SIROT 2008, Abstract Book, Abstract No 17156, pg 769.
3. Neogi DS, Trikha V, Jaiman A, Yadav CS. Displaced intra-articular fractures of the calcaneum. Operative versus non-operative treatment. SICOT TWC, Hong Kong, August 2008. SICOT/SIROT 2008, Abstract Book, Abstract No18640, pg 640.

Dr Ravi Mittal

1. Rastogi S, Varshney MK, TrikhaV, Khan SA, Mittal R. Desmoplastic fibroma report of three cases at unusual locations. *Joint Bone Spine* 2008;**75**. Epub 2007.
2. Lim YW, van Riet RP, Mittal R, Bain GI. Pattern of osteophyte distribution in primary osteoarthritis of the elbow. *Journal of Shoulder and Elbow Surgery* 2008;**17**:963–6. Epub 2008.
3. Naranje S, Mittal R, Nag HL, Sharma R. Arthroscopic and magnetic resonance imaging evaluation of meniscus lesions in the chronic anterior cruciate ligament- deficient knee. *Arthroscopy* 2008;**24**:1045–51. Epub 2008.
4. Naranje S, Mittal R. Cirroid aneurysm of the synovium of the knee: A very rare pathology. *Arch Orthop Trauma Surg* 2008.

Dr Vijay Kumar

1. Neogi DS, Kumar V, Malhotra R. Femoral allograft in the management of osseous hydatidosis presenting as femoral shaft non-union. *Arch Orthop Trauma Surg* 2008.
2. Khatri D, Malhotra R, Kumar V, Bhan S. Results of total knee replacements in stiff and ankylosed knees and comparison with knees with good preoperative range of motion. Online in '*Journal of Knee Surgery*'.

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Dr P.P. Kotwal chaired Scientific Session, Annual Conference of the North Zone Chapter of Indian Orthopaedic Association, New Delhi, April 2008; Annual Conference of the Trauma Association of India (TRAUMACON 2008), Mumbai, August 2008; Chaired a Panel discussion session, first Annual Conference of the Trauma Association of India (TRAUMACON 2008), Mumbai, August 2008; Scientific session on Hand, Annual Conference of Delhi Orthopaedic Association, January 2009; Chairman, Selection Committee, set up by the National Centre for Antarctic and Ocean Research,

Goa, to select medical officers for the Indian Expedition team to Antarctica, 2008; Chairman, Selection Committee, for Technical Staff (Research), AIIMS, 2002 to 2008; Chairman, Project Review and Monitoring Committee of Ortho, CAD Project under the office of the Principal Scientific Advisor to the Prime Minister of India, New Delhi (2007–2010); Chairman, Vidyalaya Management Committee of Kendriya Vidyalaya, INA Colony, New Delhi (2005–2010); Chairman, Store Purchase Committee (2008–2009); Chairman, Screening Committee for the Selection of Junior Physiotherapists / Occupational Therapy, AIIMS, May 2008; Vice Chairman, Research Committee, AIIMS (2002–2008); Member, committee constituted by the DGHS, Ministry of Health and Family Welfare to consider the case of reimbursement after total shoulder arthroplasty, February 2009.

Dr Kotwal appointed as an Expert Member, Central Selection Board of the NTPC, to select Medical Specialists on Orthopaedics, August 2008; Expert Member, Union Public Service Commission, to assist in the Selection of Professor of Orthopaedics for the Government Medical College, Chandigarh, October 2008; Expert member, Selection Committee of Jamia Hamdard (Deemed University), New Delhi, to select Lecture in Physiotherapy, March 2009; Expert Member, Indian Council of Medical Research, New Delhi in the Assessment Promotion Scheme of the ICMR Scientists, February 2009; Expert Member, Academic Council of the Pt. BD Sharma University of Health Sciences, Rohtak (2008–2010); Expert Member, Ministry of Health and Family Welfare to facilitate the Ministry in finalizing the Users Requirement Specifications (URS) in order to setup 6 AIIMS like Institutions in different parts of the Country, November 2008; Nominated as an Expert by the President, National Board of Examination, for a meeting of the Expert group to discuss important issues related to examinations and curriculum development, December 2008; Member, committee constituted by the DGHS, Ministry of Health and Family Welfare to consider the case of reimbursement after total shoulder arthroplasty, February 2009; Member, Dean's Committee, AIIMS (2002–2008); Member, Staff Council, AIIMS, 1998 till date; Member, Institutional Ethics Committee, AIIMS (2003–2008); Member, Institutional Ethics Committee for Experimental Research, AIIMS (1998–2008); Member, Committee for Computerization, AIIMS, February 2009; Chairman, Kendriya Vidyalaya, INA Colony, New Delhi, 2003 till date; Inspector, Medical Council of India to inspect the M.V.J. Medical College and Hospital at Bangalore, January 2008. President, Orthopaedic Research Society of AIIMS, 2007 till date; Co-guide for PhD, 'Non-specific musculoskeletal pain' in Clinical Psychology at AIIMS, 2008.

Examinership of various Universities

For M.S. (Ortho) Examination:

- PGIMER, Chandigarh, 2008
- Manipal University, Manipal; October 2008.
- Baba Faridkot University of Health Sciences, Faridkot (Punjab), April 2009.

For D. Orth. Examination:

- Manipal University, Manipal, October 2008

Dr S. Rastogi chairsession II: debates in THR: Bearing surfaces, Acetabulum – cemented vs/cementless – femur; Chairsession: Oncology; Chairsession: Rehabilitation Medicine; XXVII Annual Nzioacon –

2008, India Habitat Centre, New Delhi 4–6 April 2008; Attended PMRC Ortho-Cad meeting held at Bombay on 13 August 2009; Attended the 7th monitoring review committee meeting at Hyderabad, 18 December 2008. Member, Academic Council of Banaras Hindu University and National Institute of Handicapped, Kolkata.

SIGNIFICANT EVENTS

Dr A. Jayaswal was current President of Association of Spine Surgeons of India (ASSI); President, Spine Society Delhi Chapter; Vice President of the Spinal Cord Society of India; Elected Honorary Secretary, Spine Section of Asia Pacific Orthopaedics Association at the Council meeting, Jeju, Korea, 4 June 2008; President, Organising Committee of Instructional Course in Spine Surgery (ICS 2008), combined course of European Spine Society and Association of Spine Surgeons of India, Shimla, 7–10 August 2008; Chairman, Organising committee, Scoliosis Research Society (SRS), Worldwide Programme on ‘Spinal Deformities – Current Concepts’, New Delhi, 2–4 October 2008; Chief Guest, Inaugural Function of Annual Conference of Central Zone Orthopaedics Association CEZCON 2008, Ranchi, 24–26 October 2008; Visiting Professor, Armed Force Medical College (AFMC), Pune, 16–17 November 2008; Editorial Article Reviewer, *Indian Journal of Orthopaedics* (IJO); Invited Panelist at 4 Conferences; Chairperson/Moderator of 5 national and 2 international conferences; Invited Faculty to two International Spine Conferences, held in Jeju, Korea and Memphis, US; Invited Guest Speaker, International Orthopaedics Forum, Chongqing, China, 27–29 March 2009.

Dr R. Malhotra

Faculty, MIDCON 2008, India Habitat Centre, New Delhi, 7 September 2008; Chairman, ‘Skeletal Relay 2008’, Group workshop introduced by AO India, New Delhi, 18–19 October 2008; Faculty, Pain Symposium, XIX Annual CME of Association of Physician of India, Delhi State Chapter (API-DSC), India Habitat Centre, New Delhi, 18–19 October 2008; Faculty, Hip Resurfacing Arthroplasty 2008, Annual CME, Dr Hedgewar Arogya Sansthan, New Delhi, 2 November 2008; Faculty, Trauma 2008, International Conference, CME cum Live Workshop and Inaugural Conference of the Indian Society for Trauma and Acute Care (ISTAC), Siri Fort Auditorium Complex, New Delhi, 29 November 2008; Faculty, Indian Orthopaedic Association Conference (IOACON) 2008, Bangalore, 3–5 December 2008.

Chairman, Scientific Session, ‘Arthroplasty Session’, Delhi Orthopaedic Association Conference (DOACON), Lady Hardinge Medical College, New Delhi, 11 January 2009; Cadaveric Hip Arthroplasty Course, Chulalong Korn University, Bangkok, Thailand, 7–8 February 2009; North Zone IOACON, Rohtak, 13–15 February 2009; Conference on ‘No More Joint Pains’ by Joseph Abboud and Soo Kim Abboud (Byword Books, India) published in National Medical Journal of India; Adjunct Faculty, CMET, AIIMS; Organizing Secretary, Conference on ‘Current Concepts in Arthroplasty’, AIIMS, New Delhi, 23–24 August 2008; Chairman, International Trauma Symposium, Mumbai, 12–13 March 2009.

Editor, *Orthopaedics Today* (An orthopaedic journal with nationwide circulation); Review referee, *Indian Journal of Orthopedics*, *Indian Journal of Pediatrics*, *National Medical Journal of India*, *Clinical Anatomy* (2007, 2008, 2009); Member, Editorial Board, *Neurology India*; Member, International Advisory Board, *Skeletal* brought out by Skeletal Education.

Radio programme

- ‘*Vradhavastha mei kamar ka jhukna, bachav aur uska upchar*’ in ‘Uttarkatha’ broadcast on Indraprastha Delhi A 366.3, Tuesday, 16 September 2008 8:00 AM.
- ‘*Uthiye Acche Swasthya Ke Saath- Osteoporosis – Bachav aur Upchaar*’ broadcast on Indraprastha Delhi A 366.3, Wednesday, 10th December, 2008 from 7.05 to 7.55am.

Contributions to Orthohyperguide (a web based orthopaedics education portal tutorials)

- Member, Regional Advisory Board, Orthohyperguide, A web based global Orthopaedics learning portal
- Garg B, Sharma V, Malhotra R. ‘Skeletal Fluorosis’, accepted in 2008.

Case of the week

- Garg B, Malhotra R. ‘Case of the week – Sacral Chordoma’, accepted in 2008.
- Garg B, Malhotra R. ‘Case of the week – Synovial Chondromatosis’, accepted in 2008.

TV programmes

- Expert in live TV Interactive Show on ‘Bone health among women’ in VAMA telecast on Sahara Uttar Pradesh on 14 May 2008.
- Live programme on Osteoporosis in ‘Delhi–Dial’, telecast on NDTV India Metro-nation on Osteoporosis on 13 November 2008.

Assignments for ICMR

- Member, working group, ICMR-WHO Workshop on ‘Development of a feasibility Modules on Road Traffic Injury Surveillance’, New Delhi.
- Member, Advisory Group for Research in Accidents and Injuries (AGRAI) of ICMR, New Delhi.
- Expert for the Golden Triangle Partnership (GTP), a scheme between the department of AYUSH-CCRAS, ICMR and CSIR. Advisor for the Project on Osteoporosis under the scheme.
- Member, advisory group, Determination of Musculoskeletal Burden in Indian Population.
- Member, advisory group, Determination of Normative Laboratory Parameters in Indian Population.
- Member, expert group, ICMR Task Force on Cancer Management Guidelines
- Member, expert group, ICMR Task Force on Osteoporosis
- Expert/Chairman, Project Review Committee, ICMR for funding of projects in the field of NCD, BMS and Biomedical Engineering since 1994.

Assignments for University Grants Commission

- Expert for the committee constituted by UGC towards the evaluation assessment of the research papers submitted by College teachers concerning travel grant assistance to attend International Conferences abroad in UGC, 17 March 2009.
- Expert for the committee constituted by UGC towards the evaluation assessment of the research papers submitted by College Teachers concerning travel grant assistance to attend International Conferences abroad in UGC, 16 April 2008.
- Expert for UGC School of Energy and Environmental Studies for Devi Ahilya University, Indore, 24–26 September 2008.
- Expert for UGC team for evaluation of Devi Ahilya University for approval of utilization of funds granted in 5 year plan and further sanction of funds, Indore, 24–26 September 2008.

Additional Assignments

- Committee Member, Tele Medicine, AIIMS, for 3 years (2006—2009).
- Member, Hospital Infection Control Committee, for 4 years (2005—2009).
- Member, Staff Council, for 2008–2009.
- Member, Advisory Committee, Central Workshop (orthopedic implants and devices), AIIMS, for 2 years (2007–2009).
- Member, Department Store Purchase Committee.
- Nominated Member, OT Users Committee 2008, AIIMS, New Delhi
- Vice President, Delhi Orthopaedics Association (DOA) for 2009–2010.
- Nominated as International Body Member, Committee on Prevention of osteoporosis and osteoporotic fractures in Asia, Strong Bone Asia.
- Invited as an Expert for the Expert Group meeting for development of skill lab for clinical and surgical skills for DNB candidates, AIIMS, 30 August 2008.
- Expert for selection of Professor (Orthopaedics) at Union Public Services Commission (UPSC), New Delhi, 8 October 2008.

Papers read at conferences

- Cases Discussion for ‘Non-union upper 1/3 tibia with severe OA knee’, MIDCON 2008, India Habitat Centre, New Delhi, 7 September 2008.
- ‘Osseous Hydatidosis–A nine headed dragon’, presented in Combined Clinical Round (CCR), AIIMS, 2 September 2008.
- Acetabular revision using ‘Total Acetabular Allograft’, presented in Delhi Orthopaedics Association (DOA) monthly meeting, AIIMS, 11 October 2008.

Dr H.L. Nag was Honorary Consultant, Sports Authority of India (SAI), Jawahar Lal Nehru Stadium, New Delhi; Member, Orthopaedic Sports Medicine Committee (2005–2009), International Society of Arthroscopy, Knee Surgery and Orthopaedic Sports Medicine (ISAKOS); Member, Therapeutic Use Exemption (TUE) Committee (2009–2010), under National Anti Doping Agency (NADA), in compliant with World Anti Doping Agency (WADA) and attended its first meeting on 2 February 2009, presided by Shri MS Gill, Honorary minister for Sports and Youth Affairs; Secretary General, India Federation of Sports Medicine (IFSM) for 2007–2010; Member, Expert Committee of UGC, for inspection of UGC–XI five year plan of Rashtrasant Tukadoji Maharaj, Nagpur University, Maharashtra, 7–9 July 2008; Appraiser by National Board of Examination for DNB Candidates and Sant Parmanand Hospital, Delhi (18 June 2008) and Rockland Hospital, Delhi (29 July 2008); Member, Panel of Reviewer, Journal *Injury*, for Arthroscopy and Sports Medicine section (6 August 2008); Honorary Member, *International Journal of Medical Sciences and Technology* (IJMST) and *International Journal of Life Sciences and Technology* (IJLST); Editorial Board Member, *IJMST* and Advisory board member, *IJLST*; Editorial Referee, *Indian Journal of Orthopaedics*; Board Member, Elsevier Clinical Advisory Boards for Orthopaedics for clinical update series for South Asian practitioners – by Reed Elsevier India; As Expert on DD News TV live National telecast, ‘Total Health TV Programme’, on ‘Sports Injuries’ (27 April 2008) and Health Show Programme on ‘arthritis’ (29 March 2009); As Expert on All India Radio (AIR) talk in Hindi on ‘*Bridhawastha me haddi ka khokhlapan aur iski dekhbhal*’, New Delhi, 21 January 2009;

Dr Nag was elected as Committee Member, Medical Care arrangement of the Common Wealth Games 2010 (attended its meeting on 16 May 2008); Member for English and Professional Coaching class for SC/ST students, AIIMS, 15 May 2008; Faculty–Incharge, AIIMS MB,BS Entrance Examination at Ahmedabad centre (1 June 2008) and AIIMS’ PG Examination (MD/MS) at Kolkata (11 January 2009); Penalist in arthroscopy section at MEDCON 2008, midterm symposium of DOA, New Delhi, 7 September 2008; Faculty and penalist, 3rd International Symposium on new horizons in arthroscopic surgery, New Delhi, 29–30 March 2009; Faculty at TRAUMA 2008, International Conference, CME cum live Workshop and Inaugural Conference of the Indian Society for Trauma and Acute Care (ISTAC), New Delhi, 28–30 November 2008; Faculty, National Symposium on ‘Knee Injuries and its managements– recent trends in Sports Health’, Jamia Millia Islamia University, New Delhi, 7 March 2009; Executive Member, Indian Orthopaedics Association (IOA), elected unopposed representative of Delhi (2009–2011); External Examiner for MS (Orthopaedics) Examination, RNT Medical College, Udaipur, Rajasthan (18 December 2008) and Internal Examiner for MS (Orthopaedics) Examination at AIIMS (11 December 2008); Faculty, IAS Cadaver workshop, New Delhi, 16 November 2008 and Advanced Knee Arthroscopy Workshop, 53rd IOA Annual Conference Bangalore, 3 December 2008; Member, EHS Advisory Committee, AIIMS, 8 July 2008; Member, Anti Ragging squad, AIIMS, 7 and 15 August 2008; Secretary, Orthopaedics Research Society, AIIMS, 2008; Member, Senior Resident Selection Interview Board, AIIMS, 2 June 2008; Faculty–Incharge, AB1 Ward, Member, Store purchase committee.

Dr C.S. Yadav appointed as examiner and paper setter for MS Orthopaedics Baba Faridkot University, Punjab; Member-observer, for senior resident selection committee of AIIMS; Examiner and paper setter for MS Orthopaedics, L.N. Mithila University, Dharbhanga, Bihar; Panelist invited by the institute of chartered accountant of India, hotel Ashok, with Baba Ramdev, 29 June 2008; Faculty,

DNB CME, LHMC, 27 July 2008; Appraiser for DNB centres, Maharaja Agarsen hospital; Chaired a session, challenges in THR, in Millennium arthroplasty conference; Organized lecture of Dr Nagamine from Japan, 4 September 2008; Faculty, THR workshop, IAACON 2008, Delhi, 8–9 November 2008; Chaired session, IOACON 2008, Bangalore, 5 December 2008; Chaired session, TRAUMACON 2008, Delhi, 28–30 December 2008; Chaired session, NZIOACON 2009, 13–15 February 2009; Panelist, THR workshop, NZIOACON 2009, 13–15 February 2009; Appointed member of inspection committee for GGSJ University, Delhi; Acted as expert in selection of lectures in UP Medical colleges, Public Service Commission, Allahabad, 3–4 November 2008; Appearing on health programmers as orthopaedic expert, on various TV channels routinely.

Dr Ravi Mittal was awarded the membership to the Royal College of Surgeons, Glasgow, November 2008; Listed in Marquis, Who's Who in the World 2009; Reviewer, *Indian Journal of Orthopaedics*, 2008; Member, Executive Committee, Indian Federation of Sports Medicine (2007–2008); Member, MB,BS curriculum, 2008; Adjunct faculty at CMET, AIIMS, 2008; Chairing of session, Trauma 2008 International Conference, CME cum Live Workshop and Inaugural Conference, Indian Society for Trauma and Acute Care (ISTAC), Delhi, 29 November 2008; Examiner, D. Orth examination, Patiala Medical College, May 2008; Examiner, D. Orth examination, PGIMS, Rohtak, June 2008.

Dr Vijay Kumar was awarded Membership of Royal College of Surgeons, Glasgow; Co-Organizing Secretary, Current Concepts in Arthroplasty 2008, New Delhi, 23–24 August 2008; Member, Expert group meeting, for development of skill lab for clinical and surgical skills, for DNB candidates, AIIMS, New Delhi, 30 August 2008; Member, Organizing Committee of Scoliosis Research Society Worldwide Programme on 'Deformity Correction', New Delhi, 2–5 October 2008; Participated in Television programme on Arthritis '*Sangini*' on Sahara Samay Channel.

9.24 Otorhinolaryngology (ENT)

Professor and Head

Ramesh C. Deka

Professor

Suresh C. Sharma
(On deputation leave*)

Associate Professors

Alok Thakar

Kumud K. Handa

Assistant Professors

Rakesh Kumar

Venkata Karthikeyan C

**On assignment as clinical specialist (ENT) at the Medical Services Department, Ministry of health, Darussalam, Brunei. w.e.f 15 October 2007)*

EDUCATION

The department has actively participated in the academic activities of undergraduate, postgraduate and paramedical teaching.

Continuing Medical Education

Organized by the department

- Surgical workshop on Phonosurgery and Sialology, AIIMS, New Delhi; 19–20 April 2008.
- AOI monthly clinical meet, AIIMS, New Delhi; 25 July 2008.
- Live Surgical and Temporal bone dissection workshop and CME in Otology, AIIMS, New Delhi, 17–19 August 2008.
- Head-Neck Study day, associated with the visit of Professor P J Bradley, Hunterian Professor, Royal College of Surgeons of England; 19 Jan 2009.

Lectures delivered

Professor R.C. Deka

1. 'Role of healthcare executives in quality care in hospitals', Second Healthcare Executive Management Development Programme, Goa; 13–18 April 2008.
2. 'Scientific session on Balloon Sinuplasty', Rhinocon 2008, 21st Annual conference of All India Rhinology Society, PGIMER, Chandigarh; 20–21 September 2008.
3. 'ENDOSURG 2009', 3rd AIIMS surgical week, AIIMS, New Delhi; 12 March 2009.
4. 'Ranbaxy Science Foundation symposium', AIIMS, New Delhi; 19 March 2009.

5. 'CME on Laws Applicable to Hospitals', Department of Hospital Administration, AIIMS, New Delhi; 21 March 2009.
6. 'Symposium on Ovarian Cancer', Department of Medical Oncology, AIIMS, New Delhi; 27–28 March 2009.

Dr Alok Thakar

1. 'Near Total Laryngectomy, in Workshop on Phonosurgery', AIIMS, New Delhi; April 2008.
2. 'Guidelines in the management of laryngeal cancers', Current Concepts in Head and Neck Oncology, AHEAD, Kochi; February 2009.
3. 'Occult primary tumours-evaluation and management', Current Concepts in Head and Neck Oncology, AHEAD, Kochi; February 2009.
4. 'Approach to the Diagnosis and Treatment of Vertigo', Course on Neuro-Otology and Audiology, Kolkatta; February 2009.
5. 'Perilymphatic Fistula', Course on Neuro-Otology and Audiology, Kolkata; February 2009.
6. 'Migraine related Vertigo', Course on Neuro-Otology and Audiology, Kolkata; February 2009.
7. 'Intratympanic Gentamycin in Vertigo – when and how?', Course on Neuro-Otology and Audiology, Kolkata; February 2009.
8. 'Stapedotomy – Tips and Tricks', Microsurgery of the Ear, Workshop, Sir Ganga Ram hospital, New Delhi; March 2009.

Dr K.K. Handa

1. 'Type 2 Thyroplasty for Spasmodic Dysphonia', CCR, AIIMS, New Delhi; August 2008.
2. 'Controversies in facial nerve', Otology Workshop, AIIMS, New Delhi; 17–19 August 2008.
3. 'Spasmodic Dysphonia', Surgical workshop on Phonosurgery and Sialology, AIIMS, New Delhi; 18–20 April 2008.
4. 'Care of Professional voice', Surgical workshop on Phonosurgery and Sialology, AIIMS, New Delhi; 18–20 April 2008.
5. 'Laryngotracheal Stenosis', Surgical workshop on Phonosurgery and Sialology, AIIMS, New Delhi; 18–20 April 2008.
6. 'Laryngotracheal Stenosis', Workshop on Phonosurgery, AOI North Eastern branch, Guwahati; 15 March 2008.
7. 'Spasmodic Dysphonia', Workshop on Phonosurgery, AOI North Eastern branch, Guwahati; 15 March 2008.
8. 'Care of Professional voice', Workshop on Phonosurgery, AOI North Eastern branch, Guwahati; 15 March 2008.

Dr Rakesh Kumar

1. 'Surgical steps of Canal wall down mastoidectomy', Otolology update – Live surgical workshop and temporal bone dissection; 17–19 August 2008.
2. 'Endoscopic surgery of maxillary sinus, How I do it?', AOI Delhi Branch, Annual conference, New Delhi; May 2008.
3. 'An unusual site of metastasis in follicular carcinoma of thyroid', AOI Delhi Branch Meeting, AIIMS, New Delhi; July 2008.

Dr Venkata Karthikeyan C

1. 'Surgical steps of cochlear implantation', Otolology update – Live surgical workshop and temporal bone dissection; 17–19 August 2008.
2. 'Cochlear Implantation in patients with chronic otitis media', AOI Delhi Branch Meeting, AIIMS, New Delhi; July 2008.

National and International Conferences

Lectures delivered

Professor R.C. Deka

'People centred health Care', WHO sponsored bi-regional forum of medical training institutions on people centred health care meeting, Manila, Philippines; 1–2 July 2008.

Dr Alok Thakar

1. Professor C. Das Oration on 'Laryngeal cancer treatment – Surgical function preservation versus chemorad organ preservation', 21st NEBAOICON (North Eastern Branch of AOI conference), North Lakhimpur; November 2008.
2. 'Speech rehabilitation and conservation in advanced laryngeal cancers', ISHNO (Indian Society of Head-Neck Oncology) meeting, Patna; 5–6 April 2008.
3. 'The preauricular sub temporal infratemporal approach to the central skull base', 31st Annual Conference of AOI Delhi, New Delhi; May 2008.
4. 'Efficacy of flutamide in nasopharyngeal angiofibroma', Annual meeting of the American Academy of Otolaryngology–Head and Neck Surgery, Chicago; September 2008.
5. 'Effect of myopia on the caloric test', Poster presentation, Annual meeting of the American Academy of Otolaryngology–Head and Neck Surgery, Chicago; September 2008.
6. 'Should chemo radiation be the standard of care for advanced cancers of the larynx?', XXXII North-West Zone Association of Otolaryngologists of India Conference, Rohtak; October 2008.
7. 'Surgical principles of excision of nasopharyngeal angiofibroma', 21st NEBAOICON (North Eastern Branch of AOI conference), North Lakhimpur; November 2008.

8. 'The preauricular temporal-sub temporal approach to the central skull base', 21st NEBAOICON (North Eastern Branch of AOI conference), North Lakhimpur; November 2008,
9. 'The case against chemoradiation', Symposium on 'Treatment of Advanced Laryngeal Cancers', 8th National Conference of the Foundation of Head-Neck Oncology (FHNO), Bhubneshwar; December 2008.
10. 'JNA with intracranial extension', 61st Annual Conference of the Association of Otolaryngologists of India, Jaipur; January 2009.
11. 'Tracheotomy-When and How?', APICON 2009, Annual Conference of the Association of Physicians of India, Noida; January 2009.

Dr K.K. Handa

1. 'Consensus on voice assessment', Annual conference of phonosurgeons of India; 13–15 March 2009.
2. 'Vocal cord paralysis; Neurolaryngology', Annual conference of phonosurgeons of India; 13–15 March 2009.

Dr Rakesh Kumar

1. 'Clinical profile of patients with external nasal deformity', 13th ARSR Annual Conference, Bangkok, Thailand; 20–21 November 2008.
2. 'Surgery for large juvenile nasopharyngeal angiofibroma', AIIMS experience, 13th ARSR Annual Conference, Bangkok, Thailand; 20–21 November 2008.

Dr Venkata Karthikeyan C

1. 'Ultrastructural findings in Laryngomalacia – A morphological marker', Poster presentation, International conference on extra esophageal diseases and 8th International symposium on Human pepsin Milwaukee, USA; 17–20 September 2008.

Residents and Research associates

1. Anurag R, Deka RC, Kumar R, Venkata Karthikeyan C. 'Role of long-term low dose macrolide therapy in chronic rhinosinusitis', 13th ARSR Annual Conference, Bangkok, Thailand; 20–21 November 2008.
2. Anurag R, Deka RC, Kumar R, Venkata Karthikeyan C. 'Cochlear implantation in patients with chronic otitis media', AOI Delhi branch meeting, AIIMS, New Delhi; July 2008.
3. Gupta G, Thakar A, Seith A, Jain V, Sharma SC, Deka RC, Bahadur S, Sharma R. 'Efficacy of flutamide as a tumor volume reducing agent in nasopharyngeal angiofibroma', Delhi AOI conference; May 2008.
4. Preetam C, Kumar R, Venkata Karthikeyan C., Deka RC. 'Evaluation of efficacy of proton pump inhibitors in cases of laryngo pharyngeal reflux', Delhi AOI conference; May 2008.

5. Gupta V, Thakar A. 'Orbital decompression for proptosis secondary to graves' Ophthalmopathy', Delhi AOI conference; May 2008.
6. Kumar SS, Thakar A. 'Near total laryngectomy', Delhi AOI conference; May 2008.
7. Chirom A, Thakar A. 'Sphenopalatine artery ligation for recalcitrant epistaxis', Delhi AOI conference; May 2008.
8. Sikka K, Thakar A. 'Posterior cricoid split and rib grafting in the treatment of glottis and high subglottic stenosis', Delhi AOI conference; May 2008.
9. Pradhan T, Thakar A. 'The role of the vidian canal in recurrence of JNA', 8th National conference of the foundation of Head-Neck Oncology (FHNO), Bhubneshwar; December 2008.
10. Nongrum HB, Thakar A, Suri A. 'The preauricular subtemporal approach to the central skull base-evaluation of adequacy and limitations', 8th National Conference of the Foundation of Head-Neck Oncology (FHNO), Bhubneshwar; December 2008.
11. Rajeev, Shivani, Gupta S. 'Preoperative assessment of cochlear implantees', Live surgical workshop and temporal bone dissection; 17–19 August 2008.
12. Shivani. 'Post-operative habilitation and rehabilitation of cochlear implantees', Live surgical workshop and temporal bone dissection; 17–19 August 2008.
13. Anurag R, Deka RC, Kumar R, Venkata Karthikeyan C. 'Role of long-term low dose macrolide therapy in chronic rhinosinusitis', Rhinocon 2008, PGIMER, Chandigarh; 20–21 September 2008.

RESEARCH

Funded Projects

Completed

1. Role of intratympanic dexamethasone therapy in patients with tinnitus. RC Deka. Funded by ICMR (2007–2008). Funds: Rs 3.3 lakh.
2. Voice changes in presbylarynges and disorders of central origin. Rajiv, K.K. Handa. Funded by CSIR for 3 years.

Ongoing

1. Role of bacterial and fungal colonization in patients with chronic rhinosinusitis and nasal polyposis with special emphasis on their superantigenicity and biofilm property. Anurag Ramavat, R.C. Deka. Funded by CSIR for 3 years.
2. Effect on hearing function in individuals with diabetes mellitus. Gaurav Chaturvedy, R.C. Deka. Funded by CSIR for 3 years.
3. Assessment of T, C levels and the resultant change in the dynamic range in cochlear implant users: To evaluate possible electrical stimulation induced damage to the neural elements. R.C. Deka. Funded by ICMR for 3 years. Funds: Rs 11.67 lakh.

4. Phase II/III Randomized placebo-controlled clinical trial of curcumin in respectable stage III and IV squamous head and neck cancers. A. Thakar. Funded by DBT for 3 years. Funds: Rs 43 lakh.
5. Prevalence of hypothyroidism following treatment of Head–Neck Cancer and its impact on Quality of Life. A. Thakar. Funded by DST (2007–2009). Funds: Rs 11 lakh.

Collaborative Projects

Ongoing

1. Neuro-developmental disabilities in children: An INCLEN study (with International Epidemiological Clinical Network).
2. Stereological study of the age related morphological and neurochemical changes in the human cochlear nucleus (with Anatomy).
3. Prenatal development and maturation of human inferior colliculus (with Anatomy).

Departmental Projects

Ongoing

1. Clinical profile of patients with laryngotracheal stenosis.
2. Bilateral submandibular duct transposition and bilateral sublingual gland excision for drooling in children.
3. Comparison of various techniques of tonsillectomy in terms of post operative pain and other post operative variables.
4. Oncologic efficacy and functional outcome in early and moderately advanced laryngeal and hypopharyngeal cancer using laser.
5. The effect of dexamethasone injection in the inner ear on hearing and NRT and its outcome results in cochlear implant patients.
6. Role of PET scan in diagnosing unknown primary in head and neck carcinoma with cervical neck node metastasis.
7. To study the effect of cricoid split with costal cartilage rib grafting and lumen augmentation in cases of subglottic stenosis.
8. Study of patient profile with external nasal deformity requiring septorhinoplasty and its outcome.
9. Immunohistochemical characterization of JNA and radiological and histological evaluation of vidian canal involvement in JNA.

Completed

1. Otolaryngologic and head and neck manifestations in HIV/AIDS patients
2. To determine the efficacy of flutamide as a tumour volume reducing agent in nasopharyngeal angiofibroma (NPA).
3. Role of proton pump inhibitors in laryngopharyngeal reflux.

PUBLICATIONS

1. Deka RC, Venkata Karthikeyan C., Kumar R. Surgery for large juvenile nasopharyngeal angiofibroma, AIIMS experience. Proceedings of 13th ARSR Annual Conference, Bangkok, Thailand, 2008:A1–101.
2. Kumar R, Ramavat A, Deka RC, Venkata Karthikeyan C. Clinical profile of patients with external nasal deformity. Proceedings of 13th ARSR Annual Conference, Bangkok, Thailand, 2008: A1–101.
3. Venkata Karthikeyan C., Wadhwa S, Kumar R, Ramavat A, Deka RC. Ultrastructural finding in Laryngomalacia: A morphological marker. Proceedings of International conference on extra esophageal diseases and 8th International symposium on Human pepsin at Milwaukee USA, 2008:130.
4. Anurag R, Deka RC, Kumar R, Karthikeyan CV. Role of long-term low dose macrolide therapy in chronic rhinosinusitis. Proceedings of 13th ARSR Annual Conference, Bangkok, Thailand, 2008:A1–101.
5. Thakar A, Bahadur S, Toran KC, Mohanti BK, Julka PK. Analysis of oncologic and functional failures in near total laryngectomy. *J Laryngol Otol* 2009;**123**:327–32.
6. Ralhan R, DeSouza LV, Matta A, Tripathi SC, Ghanny S, DattaGupta S, *et al.* TRAQ-multidimensional liquid chromatography and tandem mass spectrometry-based identification of potential biomarkers of oral epithelial dysplasia and novel networks between inflammation and premalignancy. *J Proteome Res* 2009;**8**:300–9.
7. Thakar A, Deepak KK, Kumar SS. Auricular Syncope. *J Laryngol Otol* 2008;**122**:1115–17.
8. Thakar A. Book Review ‘Pearls and Pitfalls in Head and Neck Surgery’. *Natl Med J India* 2008;**21**:260.
9. Sinha P, Thakar A. Successful treatment of parotid fistula with tympanic neurectomy. *Indian J Otolaryngol Head Neck Surg* 2008;**60**:227–30.
10. Shunyu NB, Thakar A, Gupta V. Complete resolution of stage IIIB juvenile nasopharyngeal angiofibroma with radiation therapy. *Indian J Otolaryngol Head Neck Surg* 2008;**60**:238–41.
11. Gadodia A, Seith A, Sharma R, Thakar A. Congenital salivary fistula of accessory parotid gland: Imaging findings. *J Laryngol Otol* 2008;**122**:e11.
12. Gadodia A, Seith A, Neyaz Z, Sharma R, Thakar A. Magnetic resonance identification of an accessory submandibular duct and gland: An unusual variant. *J Laryngol Otol* 2007; **121**:e18. Epub 2007 May 22. Review.
13. Pradhan T, Sikka K, Thakar A. Posterior cricoid split with costal cartilage augmentation for high subglottic stenosis. *Indian J Otolaryngol Head Neck Surg* 2008;**60**:147–51.
14. Trivedi N, Thakar A. Management of salivary gland tumors: Current concepts in Head and Neck Oncology. Published by Head and Neck Institute, Amrita Institute of Medical Sciences, and Foundation for Head and Neck Oncology, 2009:63–66.

15. Trivedi N, Thakar A. Treatment protocols in Laryngeal Cancer: Current concepts in Head and Neck Oncology. Published by Head and Neck Institute, Amrita Institute of Medical Sciences, and Foundation for Head and Neck Oncology, 2009:195–200.
16. Thakar A, Gupta G, Seith A. Efficacy of flutamide in nasopharyngeal angiofibroma. *Otolaryngol Head Neck Surg* (Special Issue, Annual Meeting of American Academy of Otolaryngology – Head and Neck Surgery 2008) 2008;**2**:S1, 36.
17. Thakar A. Effect of myopia on the Caloric Test. *Otolaryngol Head Neck Surg* (Special Issue, Annual Meeting of American Academy of Otolaryngology – Head and Neck Surgery 2008) 2008;**2**:S1, 150.
18. Handa KK, Shunyu NB. Psuedoaneurysm of the lingual artery. Indian journal of Otorhinolaryngology. *Indian J Otolaryngol Head Neck Surg* 2008;**60**:356–9.
19. Surender RA, Chandrashish C, Handa KK, Rajeshwari S. Operating laryngoscope in a failed intubation scenario. *Paediatr Anaesth* 2009;**19**:274–5.
20. Reddy EV, Kadiravan T, Mishra HK, Sreenivas V, Handa KK, Sinha S, *et al*. Prevalence and risk factors of obstructive sleep apnea among middle-aged urban Indians: A community-based study. *Sleep Med* 2009 Mar 21. Epub ahead of print.

PATIENT CARE

Facilities available in the department

The department provides state-of-art ENT services and is equipped with the entire range of diagnostic and therapeutic equipment including a cochlear implant laboratory, audiological facilities, electronystagmographic facilities, electrodiagnostic audiometry, hearing aid analyzer, ear mould laboratory, speech therapy, stroboscopy and computer aided speech analysis. It has a well staffed rehabilitation unit of Audiology and Speech Therapy function. This function with the clinical department to provide supportive, diagnostic and rehabilitative services for hearing impairment, speech problems and post-laryngectomy speech disabled..

The cochlear implantation (CI) programme was started in 1996 under the chairmanship of Professor R.C. Deka and the first adult patient was successfully operated upon in February 1997. Soon, the department started the Children Programme in 1998. Since then, 257 patients have been subjected to Cochlear implantation at AIIMS till March 2009. Professor R.C. Deka has also done the country's first bilateral Cochlear implant successfully in an adult patient. The department has provided support in starting cochlear implant surgery programme in R.R. Hospital, Central Railway Hospital and also PGIMER, Chandigarh. The department is an established centre for cochlear implantation and in the year under review, a total of 56 cases have had successful cochlear implantation. All such cases further continue to be on follow-up and are receiving post implantation speech therapy and training to maximize the benefit of cochlear implantation.

The Head and Neck cancer clinic of our department in the B.R. Ambedkar Institute Rotary Cancer Hospital, with the collaborative support of radiotherapists and medical oncologists, caters to large number of patients suffering from head and neck malignancies. The department provides surgical

expertise for the effective management of head and neck cancers.. The department also runs specialty clinics (Vertigo, Audiology, Skull Base, Rhinology, Voice Clinics) and provides services to a large number of patients. The department has developed an undergraduate (MB,BS) teaching manual and a postgraduate log book. It provided short- and long-term training to national and international doctors and audiologists.

OPD and Specialty clinics

ENT OPD

New cases	33,605
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Old cases	36,450
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Specialty clinics

RUAS–speech	3,498
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RUAS–hearing	3,146
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Head and Neck

NEW	999
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OLD	3,881
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Voice	2,156
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Vertigo	178
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Audiology and Skull Base	204
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Rhinology	175
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Inpatients

Long admission	1,048
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Short admission	196
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Surgical Procedures

Major	2,044
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Minor	1,643
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Minor OT	22,820
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Community Services/Camps

The department provides comprehensive ENT services at Primary Health Centre at Ballabgarh, Haryana. In addition, Dr C.V. Karthikeyan runs once-a-week OPD services at the Deaf Centre, Gurgaon, under the Government of Haryana.

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Professor Ramesh Chandra Deka is the Director of AIIMS with effect from 10th march 2009.

Professor R.C. Deka is the founder chairman of Indian Academy of Otolaryngology–Head Neck Surgery; Inspector, Medical council of India (MCI) and National board of examinations (NBE); Chairman, Technical advisory group for the speech and hearing handicapped, Ministry of Social Welfare; Chairman, Sectional committee of ENT surgical instruments (MHR04) of Bureau of Indian standards; International Editorial Board Member of *Acta–Otolaryngologica* (Stockholm), *Otolaryngology–Head and Neck Surgery* (USA), *Otology–Neurotology* (USA), *Pakistan Journal of Otology*; Editorial Chief of *Indian Journal of Otology*, *Vertigo Viewpoint*; Distinguished Guest of honour in the Second Healthcare Executive Management Development Programme, Goa (13–18 April); Invited distinguished international guest faculty in the WHO sponsored Bi-regional Forum of Medical training Institutions on people centred health Care meeting, Manila, Philippines (1–2 July 2008); Invited distinguished guest faculty, Rhinocon 2008, 21st Annual conference of All India Rhinology Society, PGIMER, Chandigarh (20–21 September 2008); Organizing Chairman, Otology Update – Live surgical and temporal bone dissection workshop, AIIMS, New Delhi (17–19 August 2008) and in the Live surgical session, he demonstrated cochlear implant surgery for the benefit of the national delegates.

Dr Alok Thakar was awarded the Professor C Das Oration by the North East Branch of the Association of Otolaryngologists of India; Invited faculty, Meeting of the International Federation of Head and Neck Societies (IFHNOS), Mumbai (October 2008), Conference of the India Society of Head-Neck Oncology, Patna (April 2008), LARYNXCON, Regional Cancer Centre, Trivandrum (August 2008), Biennial conference of the North West Branch of the Association of Otolaryngologists of India (October 2008), Annual Conference of the North East Branch of the Association of Otolaryngologists of India and the Annual Conference of the Association of Otolaryngologists of India (January 2009); Editorial Board Member, *Otology India* (Journal of the Indian Society of Otology), *Indian Journal of Otology*; Moderator, discussion on Hearing Aids in Otology practice, Otology Course, AIIMS (August 2008); Panelist in discussion, Treatment options in Cancer Larynx, LARYNXCON, Regional Cancer Centre, Trivandrum (August 2008); Panelist in discussion, Salivary Gland and Parapharyngeal tumors, International Federation of Head and Neck Oncological Societies, Global CME, Mumbai (October 2008); Panelist in discussion, Para Nasal Sinus Tumors, 8th National Conference of the Foundation of Head-Neck Oncology (FHNO), Bhubneshwar (December 2008); Moderator for Panel discussion, Laryngo-Tracheal Stenosis, 61st Annual Conference of the Association of Otolaryngologists of India, Jaipur (January 2009); Panelist in discussion, Troubleshooting with the TE Prosthesis in LARYNXCON, Regional Cancer Centre, Trivandrum (August 2008).

Dr K.K. Handa was the Convener, surgical workshop on Phonosurgery and Sialology, AIIMS (18–20 April 2008) and conducted live surgeries; Moderator for discussion on Laryngotracheal Stenosis, Surgical workshop on Phonosurgery and Sialology, AIIMS (18–20 April 2008); Quiz Master for the participants, Annual conference of Phonosurgeons of India (13–15 March 2009); Panelist in the

panel discussion on hearing aids in Otology Workshop, AIIMS (17–19 August 2008); Chairperson for operative session ‘Stapedectomy’, Otology Workshop in AIIMS (17–19 August 2008); Moderator for panel discussion on Phonosurgery, Le Meridian, New Delhi; Appraiser for DNB Course in St Stephan’s Hospital, New Delhi; Conducted surgical workshop on Tympanoplasty, Bihar branch of AOI, PMCH, Patna (29 April 2008); Moderator, Panel discussion on benign salivary gland tumours, surgical workshops on Phonosurgery and Sialology, AIIMS (18–20 April 2008); Moderator, Panel discussion on Management of paralyzed cord, surgical workshop on Phonosurgery and Sialology, AIIMS (18–20 April 2008); Vice President, Association of Phonosurgeons of India; Treasurer, NES India; Reviewer, *Indian Journal of pediatrics* and *Indian Journal of Otorhinolaryngology*.

Dr RKumar is a co–member of Sectional committee of ENT surgical instruments (MHR04) of Bureau of Indian standards; Organizing Secretary, Live surgical workshop and temporal bone dissection (17–19 August 2008).

Dr Venkata Karthikeyan C. is Assistant editor, *Indian Journal of Otology*; Reviewer, *Indian Journal of Pediatrics*; Panelist, Panel discussion on Laryngeal cancers, AOI Delhi Branch New Delhi (May 2008); Panelist, Panel Discussion on Cochlear implant in the Live surgical workshop and temporal bone dissection, AIIMS (17–19 August 2008); Organizing Secretary, Otology update, Live surgical workshop and temporal bone dissection (17–19 August 2008).

9.25 Paediatrics

Professor and Head

Dr Vinod K. Paul

Professors

Dr Maharaj K. Bhan
(On deputation)

Dr Ashok K. Deorari

Dr Arvind Bagga
Dr Sushil K. Kabra

Additional Professor

Dr Madhulika Kabra

Associate Professors

Dr Pankaj Hari

Dr Sheffali Gulati

Assistant Professors

Dr Rakesh Lodha

Dr Rachna Seth
Dr Ramesh Agarwal

Dr Vandana Jain

Scientists

Dr Shinjini Bhatnagar
Dr Manju Ghosh

Dr Pratima Ray
Dr Madhumita
Dr Manju Saksena

Dr Suman Vashisht
Roy Choudhary

Other Staff

Ms Savita Sapra
(Clinical Psychologist)

Ms Anuja Agarwala
(Dietician)

Ms Sumita Gupta
(Physiotherapist)

Mr D Yadav
(Medical Social Service Officer)

EDUCATION

The department organized programmes in MB,BS, BSc (Nursing), MD Paediatrics, MSc (Paediatric Nursing), MSc (Biotechnology), DM (Neonatology and Paediatric Neurology) and PhD.

MD Paediatrics ongoing programme

- Implementation of log book for postgraduates in the department of Paediatrics
- Formulation of guidelines for thesis protocol and thesis submission postgraduate residents in the department of Paediatrics
- Introduced child development guide and kit for the residents
- A structured internal assessment scheme formulated within the department for periodic assessment of PG students in the domains of clinical skills, theory and thesis writing.

PhD Programme: Total PhD students: 15 (Paediatric Gastroenterology 5, Genetics 9 Paediatric Pulmonology 1).

The department conducted Paediatric Quiz for undergraduate and MD students organized under the aegis of the Indian Academy of Paediatrics, and Neonatology Quiz for MD students under the aegis of the National Neonatology Forum.

Short-term training

A total of 46 short-term trainees were trained in different superspecialities from India and other countries. Neonatology: 16; Genetics: 14; Nephrology: 6; Neurology: 1; Nutrition and Dietetics: 7; Pulmonology and Intensive care: 2.

Continuing Medical Education

Conferences, Seminars, Workshops

A total of 19 seminars/workshops or training courses were organised.

- Workshop on management of Rh Isoimmunization – Current concepts (February 2009)
- Paediatric Endocrinology Course for residents ;September 2009
- Update on childhood tuberculosis and thalassaemia with Platinum Jubilee Celebration of Indian Journal of Pediatrics ;October 2009
- Two Thesis Writing and Research Methodology Workshop for young faculty members from Medical Colleges; August and November 2008
- Three onsite workshops on Neonatal Ventilation; Bangalore (May 2008, Ahmedabad- October 2008, Hyderabad- February 2009).
- Three onsite workshops on essential Newborn Care for Nurses in Maulana, Vadodara and Delhi.
- Eight workshops on Kangaroo Mother Care at AIIMS and seven other hospitals during the Newborn Week in collaboration with the Nursing College.

In addition, the division of Neonatology also initiated national movement for education of science, evidence and art of non-invasive ventilation in the country by launching CPAP workshops in 2009. The Division also conducted two pilot testing workshops on Essential Newborn Care Package with support of WHO/SEARO (www.newbornwhocc.org).

Faculty members delivered a total of 110 lectures in various national and international CME programmes and workshops.

RESEARCH

Funded projects

Completed

Gastroenterology, Hepatology and Nutrition

- Cloning and expression of NSP4 enterotoxin of rotavirus in E.coli and evaluation of NSP4 specific immune responses during natural rotavirus infection in children. Pratima Ray. Funded by DST (2004–2007). Funds: Rs 19.90lakh.

- The Indo-US collaboration to develop rotavirus vaccine. M.K. Bhan/Pratima Ray. Funded by NIH (2003–2008). Funds: Rs 213.43lakh
- Safety and Immunogenicity of 116E rotavirus vaccine candidate. M.K. Bhan/Pratima Ray. Funded by DBT (2000–2008). Funds: Rs 27,54,000.

Genetics

- Survey of prenatal diagnostic practices in India as a part of multi country survey – developing methods to facilitate informed choice taking into account concordance between the principles that govern the undergoing of prenatal tests and practice across Europe and beyond economic modelling study, non-invasive (NI) RhD testing in Europe and Asia.

Nephrology

- Dose-ranging study to evaluate the safety and efficacy of olmesartan medoxomil in children and adolescents with hypertension. Arvind Bagga. Funded by Sankyo Pharma (2006–2008). Funds: Rs 7,60,734.

Pulmonology and Intensive Care

- Development of CME on use of antiretroviral in HIV/AIDS. Collaborative project with UCLA. Funded by NIH (NI 776). Funds US\$ 37000.

Ongoing

Oncology

- Evaluation of anthracycline induced myocardial cardiotoxicity in children with cancer: A comparative study with echocardiography and MUGA. Rachna Seth. Funded by AIIMS, 2008. Funds: Rs 40,000.

Endocrinology

- Growth, puberty and carbohydrate metabolism in children with cystic fibrosis. Vandana Jain. Funded by AIIMS (2007–08). Funds: Rs 1 lakh.
- KIGS multinational growth survey. Vandana Jain. Funded by Pfizer Research Division (2006). Funds: Rs 90,000 per year.

Gastroenterology, Hepatology and Nutrition

- Zinc as an immunomodulator in the treatment of possible serious bacterial infections in infants more than 7 days and up to 2 months of age. Shinjini Bhatnagar, S.K. Kabra. Funded by DBT (2005–2008). Funds: Rs.87.64lakh
- Specific targeted research or innovation project. Shinjini Bhatnagar, S.K. Kabra. Funded by University of Bergen, Norway, European Union (2005–2008). Funds: Rs 72.15 lakh
- Efficacy of zinc in the treatment of severe and very severe pneumonia in hospitalized children 2–24 months of age. Shinjini Bhatnagar. Funded by Johns Hopkins Bloomberg, School of Public Health, USA (2006–2009). Funds: Rs 53.84 lakh

- Efficacy of zinc in the treatment of severe and very severe pneumonia in hospitalized children 2–24 months of age. Shinjini Bhatnagar, S.K. Kabra. Funded by WHO (2006–2009). Funds: Rs.75.53 lakh
- Effects of administering 10 mg of zinc orally to young infants aged 7 days and up to 4 months with possible serious bacterial infection on survival and function of peripheral blood mononuclear cells. Shinjini Bhatnagar, H.K. Prasad. Funded by DBT (2007–2009). Funds: Rs40.34 lakh
- Efficacy of stem cell in improvement of left ventricular function in patients with acute myocardial infarction. Shinjini Bhatnagar. Funded by DBT (2006–2009). Funds: Rs 0.10. lakh
- Data management for intravenous autologous bone marrow-derived stem cell therapy of patients with acute ischaemic stroke: A multi-institutional project. Shinjini Bhatnagar. Funded by DBT (2008–2010). Funds: Rs 9,79,600.
- Etiology and characteristics of influenza and other pathogens in acute lower respiratory infection. Shinjini Bhatnagar. Funded by Johns Hopkins Bloomberg, School of Public Health, USA (2008–2009). Funds: Rs 35,32,680.
- Hib meningitis sentinel surveillance in North India. Shinjini Bhatnagar. Funded by Johns Hopkins Bloomberg School of Public Health, USA (2008–2009). Funds: Rs 64,35,464.
- Evaluation of chikungunya infection in children and adults. Pratima Ray. Funded by DBT (2008–2011). Funds: Rs 1,24,60,000.
- Molecular characterization of rotavirus strains infecting neonates born in the hospital and diarrheal children admitted at AIIMS, Delhi (2007–09). Pratima Ray. Funded by ICMR (2009–12). Funds: Rs 33,79,400.
- Characterization of rotavirus strains from a multicentric Rotavirus study at AIIMS. Pratima Ray. Funded by DBT (2005–2008). Funds: Rs 31,97,000.
- Effects of administering 10 mg of zinc orally to young infants aged 7 days and up to 4 months with possible serious bacterial infection on survival and function of peripheral blood mononuclear cells. Shinjini Bhatnagar. Funded by DBT (2008–2010). Funds: Rs 42,37,105.

Genetics

- COE Programme Support Project. Madhulika Kabra, Madhumita Roy Chowdhury. Funded by DBT (2007–2012). Funds: Rs 3.53 crore.
- Evaluation of MLPA and Array CGH for the detection of cryptic subtelomeric rearrangements in idiopathic mental retardation. Madhulika Kabra, D. Ghosh, Neerja Gupta. Funded by DBT (2007–2010). Funds: Rs 26.94 lakh.
- Molecular genetic studies in steroid resistant nephrotic syndrome. Arvind Bagga, Madhulika Kabra, Pankaj Hari. Funded by DBT (2007–2010). Funds: Rs 4.70 lakh.
- Validation of strategies for rapid prenatal detection of aneuploidies. Madhulika Kabra, Deepika Dekka, Rashmi Shukla. Funded by DBT (2007–2010). Funds: Rs 17.79 lakh.

- Evaluation of the diagnostic potential of foetal DNA in maternal plasma as a possible tool for non-invasive prenatal diagnosis of common single gene disorders. Madhulika Kabra, N. Raghuram, Madhumita Roy Chowdhury, Deepika Deka. Funded by DBT (2007–2010). Funds: Rs 14.92 lakh.
- Identification of novel genes for non-syndromic hearing loss in the Indian population. Madhulika Kabra, Manju Ghosh. Funded by DBT (2007–2012). Funds: Rs 54.28 lakh.
- Newborn screening for congenital hypothyroidism and congenital adrenal hyperplasia: A multicentric study. V.K. Paul, A.K. Deorari, Madhulika Kabra, Sheffali Gulati, Ramesh Aggarwal, Vandana Jain, Suman Vashisht. Funded by ICMR (2007–2010). Funds: Rs 15 lakh.
- A multicentre, Randomized, double-blind, parallel-group study of gene-activated human glucocerebrosidase (GA-GCB) enzyme replacement therapy compared with imiglucerase in patients with type I gaucher disease. Madhulika Kabra, Suman Vashisht. Funded by Shire Human genetic Therapies USA (2007–2009). Funds: Rs 12 lakh.
- To understand the deviation in cell signalling pathway of autism through neurotrophic factors (Insulin like Growth Factor) and undertake a randomized blinded trial with olanzepine to evaluate its effect on insulin like growth factor-1 (GF-1), clinical symptoms of autism rating scales. Rachna Seth, Savita Sapra, Suman Vashisht. Funded by DST (2006–2009). Funds: Rs 4.08lakh.
- Evaluating the psychosocial and cognitive outcomes in acute leukaemia. Rachna Seth, Savita Sapra. Funded by AIIMS (2007–2008). Funds: Rs 0.67 lakh.

Neonatology

- WHO multisite study: Feasibility, requirements and effects of implementation of ‘Guidelines for optimal feeding of the low birth weight infant’ in health facilities. V K Paul, A.K. Deorari, R. Agarwal. Funded by WHO Geneva. Funds: US\$ 29319.
- Development of learning package on essential newborn care for nurses. A.K. Deorari. Funded by WHO-SEARO. Funds: US \$ 25,000.
- WHO South East Asia Region – Neonatal Perinatal Database (SEAR-NPD). V.K. Paul, A.K. Deorari, R. Agarwal. Funded by WHO-SEARO. Funds: Rs 5,21,180.
- Developing and testing low cost diaper for low birth weight babies. V.K. Paul, A.K. Deorari, R. Agarwal. Funded by DBT. Funds: Rs 2.87 lakh

Neprology

- Antibiotic prophylaxis in the management of vesicoureteric reflux: A randomized double-blind placebo-controlled trial. Pankaj Hari. Funded by ICMR (2006–2009). Funds: Rs 11,41,815.
- Daily corticosteroids to prevent infection associated relapses in patients with frequently relapsing nephrotic syndrome. Arvind Bagga. Funded by ICMR (2006–2009). Funds: Rs 9,22,020.
- A multicentre double-blind, randomized, parallel-group evaluation of 12 weeks of valsartan compared to enalapril in children 6–17 years of age with hypertension. Arvind Bagga. Funded by

PPD Pharmaceutical Development India (2007–2009). Funds: Rs 3,30,270.

- A randomized double-blind multicentre study to evaluate the dose response of valsartan in children 1–5 years old with hypertension. Arvind Bagga. Funded by PPD Pharmaceutical Development India (2007–2009). Funds: Rs 7,60,734.
- Levamisole treatment for children with steroid sensitive nephrotic syndrome: Multicentric double-blind placebo-controlled randomized trial. Arvind Bagga. Funded by ACE pharmaceuticals, Netherlands. Funds: Rs 21 lakh.

Neurology

- A programme to improve injection practices in the country: An India CLEN study. Sheffali Gulati. Funded by USAID.
- Neuro developmental disabilities among children in India: An INCLEN study. Sheffali Gulati. Funded by NIH, AUTISM SPEAKS, National Trust, Ministry of Social Justice and Empowerment (2006–2010).
- Randomized placebo-controlled trial of valproate in children with spinal muscular atrophy. Sheffali Gulati. Funded by Institute Research Grant (2008–2010). Funds: Rs 1 lakh per year.

Oncology

- To understand the deviation in cell signaling pathway of autism through neurotrophic factors (Insulin like growth factor-1) and undertake a randomized blinded trial with olanzapine to evaluate its effect on Insulin like Growth factor-1 (IGF-1), clinical symptoms of autism and autism rating scales. Rachna Seth. Funded by DST for three years. Funds: Rs 4,08,000.

Pulmonology and Intensive Care

- Strengthening of CF services at AIIMS. Funded by Cystic Fibrosis Worldwide (CFW) (2006–2010). Funds: Rs 4lakh.
- Zinc supplementation in childhood tuberculosis patients in Delhi, India. Funded by Norwegian Programme for Development, Research and Education (NUFU), Pb 7800, N-5020 Bergen, Norway (2007–2009). Funds: Rs 15,60,00,000.

Departmental Projects

Completed

Endocrinology

1. Comparison of serum and dietary erythrocyte magnesium in obese and non-obese children and its relation to insulin resistance. funded by ICMR thesis grant. Funds: Rs 25,000.
2. Sensitivity and specificity of the Biocard Celiac Disease kit in identifying patients of celiac disease.

Genetics

3. Celiac disease in Down Syndrome. Madhulika Kabra, Shinjini Bhatnagar. MD thesis, Dr Sami.

4. Genetic polymorphisms and expression of MTHFR and RFC-1 genes in NTD and CAD. Suman Vashisht, Afaq Alam. Funded by CSIR fellowship.
5. Molecular genetic studies in cystic fibrosis. Madhulika Kabra, Shivram S. Shastri. SRF fellowship of Mr Afaq Alam.

Nephrology

6. Glomerular filtration rate estimation in children using prediction equation from plasma creatinine and height.

Neurology

7. Evaluation of ketogenic diet as add-on therapy in infants and young children with refractory epilepsy
8. Blood ammonia levels in epileptic children on two dose ranges of valproic acid monotherapy
9. Immunodiagnosis of childhood tubercular meningitis by detection of antigens in cerebrospinal fluid using ELISA
10. Non-invasive screening for early preclinical atherosclerosis in children on phenytoin or carbamazepine monotherapy for more than 18 months.

Pulmonology and Intensive Care

11. Effect of addition of oral montelukast to standard treatment in acute moderate to severe asthma in children between 5–15 years of age: A randomized, double-blind, placebo- controlled trial
12. Oral mucosal decontamination with chlorhexidine for prevention of ventilator associated pneumonia in children: A randomized-controlled trial
13. Changes in CD4 count with antitubercular therapy in HIV infected children with tuberculosis
14. Optimal maintenance intravenous fluids in hospitalized children
15. Quality of life in HIV infected children.

Ongoing

Endocrinology

1. Impaired glucose tolerance in children and adolescents with cystic fibrosis.
2. Basal and stimulated cortisol levels in preterm and very low birth weight infants with and without shock: A case-control study.

Genetics

3. A study of chronic pancreatitis and other risk factors for the development of cancer of the pancreas. Pramod Garg (Gastroenterology) Madhulika Kabra, Ms Shalu (PhD student). (with Gastrology), PhD thesis.

4. Molecular genetic studies in Rett syndrome. Madhulika Kabra, Ms Rajni Khajuria (PhD student). Funded by ICMR, ICMR fellowship.
5. Molecular genetic studies in Leukodystrophy. Madhulika Kabra, Ms Pallavi Shukla (PhD student). Funded by UGC. Fellowship UGC, Ms Pallavi.

Neurology

6. Intranasal versus intravenous lorazepam for control of acute seizure in children: prospective open-labeled randomized equivalence trial.
7. Effect of low dose folic acid supplementation on phenytoin induced gingival overgrowth: A randomized double-blind controlled trial.
8. Efficacy of modified constraint induced movement therapy on upper extremity function in cerebral palsy children with asymmetrical motor impairment.
9. Evaluation of the efficacy of the modified atkins diet in children with refractory epilepsy: A randomized controlled trial.
10. Behaviour problem in children and adolescents with epilepsy—Prevalence and risk factors: A hospital based cross sectional study.
11. Evaluation of cardiac dysfunction in children with duchenne muscular dystrophy.
12. To study the clinical and neurodevelopmental profile in children with tuberous sclerosis.
13. Comparison of daily versus intermittent (10 days a month) prednisolone therapy in ambulatory children with duchhene muscular dystrophy: An open label randomized controlled trial.
14. Comparison of the full outline of unresponsiveness (FOUR) score coma scale and the glasgow coma scale (GCS) in children aged 5–18 years with non traumatic coma in predicting outcome (in-hospital mortality and functional outcome at discharge).
15. A randomized, double-blind, placebo-controlled study of donepezil on cognitive function and behaviour in children with fragile X syndrome.
16. The evaluation of thyroid functions and thyroid antibodies in children with epilepsy on valproate monotherapy
17. Randomized open label comparative study of efficacy and tolerability of classical 4:1 versus 2.5:1 ketogenic diet in intractable epilepsy in children between 6 Months and 5 years.
18. Comparative cross sectional study of heart rate variability in well controlled vs refractory childhood epilepsy.

Oncology

19. Clinical profile of autistic children in India.
20. Evaluation of paediatric cancer survivors for long/late effects of cancer therapy

21. Arsenic versus ATRA in acute promyelocytic leukaemia

Pulmonology and Intensive Care

22. Formoterol and salbutamol in acute asthma.

23. Glucose homeostasis in critically ill children

Neonatology

24. Comparison of LED vs CFL phototherapy in treatment of Jaundice – randomized control trial.

25. Predictors of CPAP failure in respiratory distress in newborn.

26. Evaluation of phototherapy units used for treatment of neonatal jaundice.

27. Hypoxemia in young infants a predictor of severity of illness.

Collaborative Projects

Endocrinology

1. Body fat and its relationship with metabolic syndrome indicators in overweight pre-adolescents and adolescents (ongoing) (with Clinical Pharmacology, Medicine).
2. Efficacy of flutamide in reducing tumour size and vascularity in nasopharyngeal carcinoma (with ENT).
3. ICMR young diabetics registry (with Endocrinology and Metabolism).

Genetics

4. An integrated approach for mutation analysis and identification of new gene(s) for X-linked mental retardation (with B.K. Thelma, Delhi University, South Campus). Funded by DBT for 3 years. Funds: Rs 14 lakh. Completed in February 2009 after extension.
5. CFTR mutations in congenital absence of vas deference (with Urology).

Neurology

6. Effect of ACTH treatment on serum levels of TNF-a, IL-6, and IL-2 in patients of infantile spasms Y.K. Gupta; (with DM Clinical pharmacology).
7. A comparative evaluation of changes in ultrasound dimensions of masseter muscle with EMG activity prior and subsequent to twin block therapy O.P. Kharbanda, (with Dentistry).
8. Evaluation of adaptive changes in masseter muscle dimensions and EMG activity following twin block and a phase of fixed appliance therapy - Ritu Duggal, (with Dentistry).
9. Surgery for drooling in children: Submandibular duct transposition and bilateral sublingual gland excision K.K. Handa, (with ENT).

Oncology

10. Detection of minimal residual disease (MRD) in B cell lineage acute lymphoblastic leukemia(ALL) at the end of induction by flowcytometry.(Laboratory Oncology, IRCH) (MD thesis received the ICMR grant)
11. Evaluation of expression of P-glycoprotein (P-gp) in retinoblastoma (RPC) (with MD thesis)
12. Evaluation of myocardial function in paediatric cancers and paediatric cancer survivors(Cardiology) : an ongoing evaluation for evaluation of long/late effects of cancer therapy
13. Evaluation of anthracycline toxicity in childhood cancers ; A comparative study with echocardiography and MUGA (with Cardiology & Nuclear medicine)
14. Assessment of cardiac function by MUGA and conventional echocardiography and tissue doppler echocardiography in children with ALL receiving nthracycline chemotherapy has been undertaken and submitted as DM dissertation

Pulmonology and Intensive Care

15. Antigenic and molecular characterization of influenza virus strains from acute respiratory infection (with Microbiology) .
16. A prospective study on nosocomial infections in a paediatric high risk unit with special reference to device associated infections.
17. Development of taqman based real timer quantitative polymerase chain reaction assay for detection of pneumocystis carinii/jerovacci pneumonia
18. Nosocomial infections in paediatric ICU
19. To detect sensitization to various allergens in moderate to severe persistent asthmatics and its relation with the outcome of their treatment, funded by CSIR, New Delhi (with VP Chest Institute, Dr Jasmeet Kaur, Senior Research Associate).

Neonatology

20. Screening for CMV infection by PCR (with Microbiology)

PUBLICATIONS

Journals

1. Agarwala A. Nutritional management of celiac disease – Challenges in India. Indian J Pediatr 2008;75:S129–132.
2. Awasthi S, Agarwal G, Kabra SK, Singhi S, Kulkarni M, More V, et al. Does 3-day course of oral amoxycillin benefit children of non-severe pneumonia with wheeze: A multicentric randomized controlled trial. PLoS ONE 2008;3:e1991.
3. Awasthi S, Agarwal G, Singh JV, Kabra SK, Pillai RM, Singhi S, et al. ICMR-IndiaCLEN pneumonia project group. Effectiveness of 3-day amoxycillin vs 5-day co-trimoxazole in the treatment of

non-severe pneumonia in children aged 2–59 months of age: A multicentric open labeled trial. *J Trop Pediatr* 2008;54:382–9.

4. Bahl R, Martines J, Ali N, Bhan MK, Carlo W, Chan KY, et al. Research priorities to reduce global mortality from newborn infections by 2015. *Pediatr Infect Dis J* 2009;28: S43–8.
5. Bagga A, Ali U, Banerjee S, Kanitkar M, Phadke KD, Senguttuvan P, et al. Indian pediatric nephrology group, Indian Academy of Paediatrics, Management of steroid sensitive nephrotic syndrome: Revised guidelines. *Indian Pediatr* 2008;45:203–14.
6. Bagga A. Symposium on steroid therapy. *Indian J Pediatr* 2008;75:1037.
7. Bajpai A, Kabra M, Menon PS. Central diabetes insipidus: Clinical profile and factors indicating organic etiology in children. *Indian Pediatr* 2008;45:463–8.
8. Behera B, Mirdha BR, Makharia GK, Bhatnagar S, Dattagupta S. Parasites in patients with malabsorption syndrome: A clinical study in children and adults. *Dig Dis Sci* 2008;53:672–9.
9. Bharaj P, Chahar HS, Pandey A, Diddi K, Dar L, Guleria R, et al. Concurrent infections by all four dengue virus serotypes during an outbreak of dengue in 2006 in Delhi, India. *Virol J* 2008;5:1.
10. Bhatnagar S, Bhatia V, Wadhwa N, Kumar H. Low osmolarity ORS and Zinc supplementation in the management of acute watery diarrhea in children. *Indian J Pediatr* 2008;75 (SS1): S53–6.
11. Bhatnagar S, Wadhwa N, Bhatia V, Aggarwala A. Practical issues in dietary management of persistent diarrhoea in developing countries. *Indian J Pediatr* 2008;75 (SS1):S123–8.
12. Cerdá J, Bagga A, Kher V, Chakravarthi RM. The contrasting characteristics of acute kidney injury in developed and developing countries. *Nat Clin Pract Nephrol* 2008;4:138–53.
13. Cerdá J, Lameire N, Eggers P, Pannu N, Uchino S, Wang H, et al. Epidemiology of acute kidney injury. *Clin J Am Soc Nephrol* 2008;3:881–6.
14. Chawla D, Thukral A, Agarwal R, Deorari AK, Paul VK. Parenteral nutrition. *Indian J Pediatr* 2008;75:377–83.
15. Chowdhury UK, Mishra AK, Balakrishnan P, Sharma S, Kabra M, Ray R, et al. Role of fibrillin-1 genetic mutations and polymorphism in aortic dilatation in patients undergoing intracardiac repair of tetralogy of fallot. *J Thorac Cardiovasc Surg* 2008;136:757–66.
16. Dahiya S, Kapil A, Kabra SK, Mathur P, Sood S, Lodha R, et al. Pertussis in India. *J Med Microbiol* 2009;58:688–9
17. Dar L, Pati SK, Patro AR, Deorari AK, Rai S, Kant S, et al. Congenital cytomegalovirus infection in a highly seropositive semi-urban population in India. *Pediatr Infect Dis J* 2008;27:841–3.
18. Das A, Arora J, Rana T, Porwal C, Kaushik A, Gaur G, et al. Congenital tuberculosis: The value of laboratory investigations in diagnosis. *Ann Trop Paediatr* 2008;28:137–41.

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20. Mishra D, Kalra V, Seth R. Failure of prophylactic zinc in wilson disease. *Indian Pediatr* 2008;45:151–3.
21. Fasano A, Araya M, Bhatnagar S, Cameron D, Catassi C, Dirks M, et al. Federation of International Societies of Pediatric Gastroenterology, Hepatology, and Nutrition Consensus Report on Celiac Disease. Celiac Disease Working Group. *J Pediatr Gastroenterol Nutr* 2008;47:214–9.
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23. Fontaine O, Kosek M, Bhatnagar S, Boschi-Pinto C, Chan KY, Duggan C, et al. Setting research priorities to reduce global mortality from childhood diarrhoea by 2015. *PLoS* 2009;6:1–6.
24. Guglani L, Lodha R. Attitudes towards end-of-life issues amongst pediatricians in a tertiary hospital in a developing country. *J Trop Pediatr* 2008;54:261–4.
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34. Gulati A, Bagga A, Gulati S, Mehta KP, Vijayakumar M. Indian society of pediatric nephrology. Management of steroid resistant nephrotic syndrome. *Indian Pediatr* 2009;46:35–47.

35. Hill J, Beriwal S, Chopra I, Paul VK, Kapil A, Singh T, et al. Loop-mediated isothermal amplification assay for detection of common strains of *Escherichia coli*. *J Clin Microbiol* 2008;46:2800–4.
36. Paul VK. ICMR Young Infant Study Group. Age profile of neonatal deaths. *Indian Pediatr* 2008;45:991–4.
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PATIENT CARE

Outpatient Services

Department of Paediatrics provides general OPD services daily from 9 a.m. in Paediatrics OPD. There are 15 superspeciality services provided by department, which are as follows:

Name of Service	New cases	Old cases	Total attendance
General OPD	30,202	37,106	67,308
Paediatric Neurology	1,526	3,089	4615
Myopathy clinic	318	499	817
Paediatric Gastroenterology Hepatology and Nutrition	4,224	1,285	5,509
Well Baby Clinic	380	1,006	1,386
High Risk Neonatology Clinic	325	1,225	1,540
Paediatric Nephrology	445	698	1,143
Paediatric Chest	487	3,513	4,000
Paediatric Tuberculosis	264	1,954	2,218
Paediatric Rheumatology	148	1,404	1,552

Genetics and birth defects	1,680	929	1,435
Paediatric Oncology	123	2,101	3,224
Paediatric Cancer Survivor clinic	94	481	575
Paediatric Endocrine and Metabolism	1,000	1,400	2,400
Development defect clinic	742	740	1,482
Grand total	46,500	57,430	99,204

In addition Cystic fibrosis and Paediatric HIV services were provided in Paediatric Chest clinic.

Physiotherapy Services were provided to the patients in Neurology clinic, Myopathy clinic, Genetics clinic, Development clinic, Paediatric Chest Clinic, Rheumatology clinic and OPD services.

Dietetics services were provided to patients attending Paediatric Gastroenterology, Hepatology and Nutrition clinic, Paediatric Endocrinology clinic, Paediatric Renal clinic, Genetics, Paediatric Chest clinic and General OPD services.

Indoor Services

Indoor services include admission facilities in general wards, day care facility, oral rehydration unit and paediatric intensive care facility.

Children requiring short procedures or interventions are admitted for a day in day care facility situated in C5 ward.

Children suffering from acute diarrhoeal diseases are admitted and provided with oral rehydration therapy in Oral rehydration unit (ORU) situated in C5 ward.

Children requiring intensive care are admitted in Paediatric Intensive care unit which is well equipped to provide care to critically ill children.

Revised nutrition monitoring charts, Nutritive value, 24 hour recall charts.

Patients admitted in ORU 1000

Regular admissions (Long admission) 1710

Admissions in day care facility (Short admission) 3023

Patients admitted in Paediatric Intensive Care Unit (PICU) 230

Procedures and laboratory investigations

Endocrinology

Water deprivation test 10

Vasopressin challenge test 10

ACTH stimulation test 20

HCG stimulation test	40
GnRH stimulation test	20
Dexamethasone suppression test	10
GH stimulation test	10
Gastroenterology Hepatology and Nutrition	
Dietetics counselling services	2735
EST	400
Diagnostic	462
Duodenal biopsy	115
Stricture dilation	30
Colonoscopy	35
Foreign Body	5
Liver Biopsy	80
D-xylose	20
24 hours faecal fat estimation	35
Immunofluorescence assay (IFA) to detect anti-endomysial antibodies (AEA) and tissue transglutaminase ELISA for diagnosis of celiac	615
Nitro-blue tetrazolium test for CGD	75
Serum Zn estimation	2500
Serum Cu estimation	2500
Serum 'Mg' estimation (Research)	400
Genetics	
Developmental/Behavioural evaluation and intervention	1435
Cytogenetics laboratory	
Peripheral blood cultures	344
Cord cultures for karyotyping	62
Chromosomal breakage studies	78

Biochemical laboratory

Prenatal diagnosis for high risk pregnancies by triple test	1627		
MSAFP	1627		
Âeta-hCG	1627		
Free estriol	1627		
AFP	58		
Âeta-hcG	51		
TLC for disorders of amino acid metabolism			
Urine	255		
Plasma	1		
Disorders of mucopolysaccharidosis (Urine spot test)	87		
Homocystenuria test			
Urine	46		
Plasma	1		
Reducing substances in urine	263		
DNPH	257		
FeCl ₃	255		
Urine Porphyrin	6		
Oligosaccharides	6		
Blood ammonia	22		
Enzyme assays for inborn error of metabolism			
Total no. patients for Enzyme Assays	281		
• No. of patients with single enzyme assay	249		
• No. of patients with multiple enzyme assays	32		
S. No.	Enzyme assay	Disorder	No. of Pts
1.	Arylsulfatase A	Metachromatic- Leukodystrophy	65
2.	â-Glucosidase	Gaucher disease	30

3.	á-Iduronidase	Hurler syndrome (MPS I)	23
4.	Iduronate Sulfatase	Hunter syndrome (MPS II)	19
5.	Galactosose-6-sulphate sulphatase	Morquio (MPS IV A)	10
6.	â-Galactosidase	GM1 Gangliosidosis and Morquio B (MPS IV B)	27
7.	Arylsufatase B	Maroteaux-lamy syndrome (MPS VI)	6
8.	â-Glucuronidase	MPS VII	8
9.	Hexosamionidase A	Tay-sachs (GM 2)	18
10.	Galactose-1-phosphate- uridyl transferase	Galactosaemia	34
11.	Biotinidase (screening test)		40

Molecular laboratory

1.	Thalassaemia mutation studies		340
2.	Thalassaemia prenatal diagnosis		120
3.	Duchenne muscular dystrophy family studies		213
4.	Duchenne muscular dystrophy prenatal diagnosis		19
5.	Cystic fibrosis family studies		35
6.	Cystic fibrosis prenatal diagnosis		3
7.	Spinal muscular atrophy family studies		58
8.	Spinal muscular atrophy prenatal diagnosis		16
9.	Hemophilia A family studies		7
10.	Hemophilia A prenatal diagnosis		4
11.	Hemophilia B family studies		1
12.	Hemophilia B prenatal diagnosis		1
13.	Fragile X screening		107
14.	Fragile X Prenatal diagnosis		1
15.	Xmn polymorphism studies		6
16.	Amniotic fluid Rh genotyping		2
17.	Intersex cases for genotyping		78

18. Skeletal dysplasia mutations	10
19. Skeletal dysplasia prenatal	1
20. MTHFR	30
21. Sequencing for diagnosis and prenatal test	69
Nephrology	
Hemodialysis	710
Acute peritoneal dialysis (including automated peritoneal dialysis)	133
Continuous ambulatory peritoneal dialysis	12
Plasmapheresis sessions	90
Temporary hemodialysis catheter placement: (internal jugular, subclavian, femoral)	128
Renal biopsy	115
Renal transplantation	3
Neurology	
Electroencephalography	1768
Electrophysiological studies (EMG, NCV, BERA, VER)	293
Arterial Lactate	280
CSF Lactate	95
Muscle biopsies	207
Nerve biopsies	7
Skin biopsies	10
Oncology	
Bone marrow examination	
Pulmonology and Intensive Care	
Sweat chloride estimation	560
Fibre-optic bronchoscopy	225
Spirometry	655
Skin prick testing	65
Mechanical ventilation	200
Arterial blood gas analysis	10000

Electrolyte estimation	7000
Rheumatology	
Intra articular steroid injection	30
Tuberculosis	
Induce sputum	50
Ambulatory gastric aspirate	50
Quantiferon gold assay	25
Community Service and camps	

In Paediatric Oncology division the ‘parent support group – doctor meet’ was held in which an interactive meeting between parents of children with various forms of childhood malignancies was held every three to four months in which various issues pertaining to childhood cancers were dealt with. ANGO ‘CANKIDS’ helps with the organization of the event.

Financial support was provided to these patients through the Rashtriya Arogya Nidhi, Prime Ministers relief fund, by providing medications and financial assistance for education to Paediatric Cancer survivors with the help of NGOs like CANKIDS and CPAA.

Accommodation facilities were provided for patients coming from distant places at dharamshalas.

A small film had been created by the treating physicians highlighting the importance of the health, hygiene and nutrition programme, children were shown and explained the importance of these issues on International Childhood Cancer Day, 15 Feb 2009.

Paediatric Endocrine division organized 2 interactive educational meets for children with type 1 diabetes and their parents and one for children with congenital adrenal hyperplasia.

Parent interaction meeting for Rett syndrome, AIIMS, 19 October 2008.

Mukerjee A, Agarwala A. Rise and Shine. In: Chand A (ed). What’s Hot – Times of India. 2008:32.

Kaur P, Agarwala A, et al. Guide to healthy lifestyle for adolescents. A booklet released during the Nutrition Week on the occasion of Healthy Lifestyle Exhibition organized by Dietetics Department, AIIMS; 3 September 2008.

Agarwala A. Enteral and parenteral formulations. Workshop manual of certificate course in clinical nutrition (Level 1) titled ‘effective nutrition support in hospitalized patients’. An ISPEN – PENSA initiative; 2008:16–17.

Agarwala A. ‘Healthy, wealthy ‘n’ wise’. Mail today: Education (special Initiative); 2008:34.

3rd Childhood diabetes-celiac meet, Endo-gastro Units, Department of Paediatrics and Endocrinology, AIIMS, CMET; 11 March 2008.

AWARDS HONOURS

Dr Vinod Paul was elected as a member of the American Paediatric Society (the first Indian neonatologist and second Indian paediatrician to be bestowed this prestigious membership); Delivered the first Annual Oration of the Rajasthan Chapter of National Neonatology Forum.

Dr A.K. Deorari was conferred Fellowship of National Academy of Medical Sciences in Jammu during Annual Convention, 1–2 November 2008.

Dr Arvind Bagga was elected Member, Paediatrics Board, Medical Council of India (2007–09); Member, Expert Group on Classification of Childhood Vasculitides, European League Against Rheumatism (2005–2008); Member, Expert Group, Acute Kidney Injury Network (2005–2008).

Dr Pankaj Hari was elected Secretary, Indian Society of Paediatric Nephrology.

Dr Rachna Seth was elected life member, Child abuse, neglect and child labour, IAP chapter.

Dr Vandana Jain was awarded the Lawson Wilkins Paediatric Endocrine Society International Scholar Award for the year 2008 which enabled a visit to the division of Endocrinology at the Department of Paediatrics, University of Michigan, Ann Arbor, USA for a period of 3 months from May to July 2008.

Dr Pratima Ray was Awarded ICMR International fellowship for senior biomedical scientist 2007; Elected life member of American Society of Virology.

Dr S.K. Kabra was Chaired taskforce meeting of ICMR on Childhood HIV infection on at head quarters; Delivered “H Paramesh oration” on community acquired pneumonia in RESPICON , Davangere ,21 November 2008.

SIGNIFICANT EVENTS

1. Rated as the best Paediatrics Department in India by the magazine The Week for the second consecutive year.
2. WHO Collaboarting Centre for Training and Research in Newborn Care for the South East Asia Region.
3. WHO Collaboarting Centre for Clinical Genetics for the South East Asia Region.
4. The Genetics division continued to be Centre of Excellence recognized by the Department of Biotechnology, Government of India.
5. The Division of Neonatology, in collaboration with the Nursing College, launched the most comprehensive capacity development initiative ever on Kangaroo Mother Care in the Delhi State by conducting eight workshops in different hospitals during the Newborn Week.
6. The Division of Neonatology was nodal centre for National Neonatal Perinatal Database for six countries in SE Asia Region namely Nepal, Bangladesh, Sri Lanka, Thailand and Indonesia.
7. A team of doctors and nurses of the department developed a high quality training tool on Essential Newborn Nursing based on participatory learning methods for nurses working in district hospital

with the assistance of SEARO-WHO office. State of Gujarat has undertaken systematic scaling of this programme with introduction of ENBC in pre-service education.

8. Division of Neonatology has created a website www.newbornwhocc.org. The website highlights the activities and provides free access to learning resource materials, software for data collection etc developed by Neonatology Division. It clocked 100000 cumulative hits this year.
9. Two postgraduate students (Dr Meenakshi Bothra and Dr Suman Sarkar) received the prestigious ICMR fellowships for the thesis work.

Dr V.K. Paul is leading a technical group constituted by the Ministry of Health and Family Welfare to develop the Newborn and Child Health Policy 2009; Member, Indo-US Joint Working Group on Maternal and Child Health Research; Member, Committee on Codex of the Ministry of Women and Child Development; Member, Committee on Food Fortification of the Ministry of Women and Child Development; Member, Advisory Group, National Child Health Resource Centre; Member, Technical Advisory Group, Research NGO SNEHA (Mumbai); Member, Technical Advisory Group, Sure Start project (Gates Foundation / PATH India); Member, International Advisory Panel for the NRHM; Conducted the first evaluation of the multi-skilling course in newborn care for general duty medical officers in Gujarat and conducted a planning workshop to develop newborn care units in J&K; Provided technical oversight for the training module for the ASHA workers under the Norway India Partnership Initiative; Member, Governing Body, National Neonatology Forum; Member, the advisory panel of the credentials committee of the National Academy of Medical Sciences; Member of the scientific/technical advisory committees of the following international organizations: The Global Alliance for the Prevention of Prematurity and Stillbirths (GAPPS), the Saving Newborn Lives initiative of the Save the Children (US), the Advisory Group of the American Academy of Paediatrics on Neonatal Resuscitation and the newly-launched Maternal Health Task Force; Continued to be the Board Member of the Global Partnership for Maternal, Newborn and Child Health (PMNCH); Was a temporary advisor to WHO Geneva for developing WHO guidelines for neonatal resuscitation and to advise on the Healthy Babies Breathe programme of the AAP; Member, Child Health Technical Advisory Committee, WHO South East Asia Region and addressed the WHO South East Asia Regional Meeting on Primary Health Care in Jakarta on the 'Role of Health Sector in Promoting Health Equity'; Core team member, ICMR task Force study on home based Management of young Infants: five site study (Funded by ICMR and Government of India).

Dr A.K. Deorari served as WHO consultant to DPR Korea for promoting Essential Newborn Care, July 2008. He also led two UNICEF missions for training of Paediatricians in Sri Lanka November 2008 and February 2009; Chairperson and Organizer, Neonatal Ventilation Workshops Bangalore (May 2008), Ahmedabad (November 2008) and Hyderabad (February 2009); Chairperson and Co-coordinator, Advanced Ventilation Workshop, Colombo Sri Lanka for Paediatricians, 21–25 November 2008; Organizer and Co-coordinator, Essential Newborn Nursing Courses, Vadodara, Gujarat, 19 March 2008; Ambala College of Nursing Maulana, 4–7 March 2009; Delhi Government Hospitals (March 2009); Organizer of Pilot Testing Course, Essential Newborn Care Package, HO-SEARO and AIIMS WHO-CC, 8–11 September 2008; 19–22 January 2009, AIIMS, New Delhi.

Dr Arvind Bagga was the Associate Editor, Indian Pediatrics; Member, International Advisory Board, Current Pediatrics; Core Group Member, Chronic Kidney Disease Registry, Indian Society of Nephrology; Editor, Bulletin Indian Society of Pediatric Nephrology.

Dr S.K. Kabra was the Editor, Indian Journal of Pediatrics.

Dr Pankaj Hari was elected Member, Disease Outbreak Prevention and Response Cell (DOPRC), and Reviewer for Paediatrics, official Journal of American Academy of Paediatrics and Paediatric Nephrology, Journal of International Pediatric nephrology Association.

Dr Sheffali Gulati was served as Expert, Neurology projects for Indian Council of Medical Research and National Trust; Editorial Consultant of Indian Journal of Pediatrics.

Dr Rachna Seth was an Invited participant to the National consultative on G-CSF and Peg G –CSF, annual conference, PHOCON of IAP; Participant, panel discussion on Myelodysplastic syndrome, Annual Conference, Paediatric Hematology chapter, IAP.

Dr Ramesh Agarwal served as an expert in WHO Task Force Committee on Management of neonatal seizures.

Dr Shinjini Bhatnagar was elected Member, Technical Advisory Board for Diarrhoea, World Health Organization; Member, Working Group of Celiac Disease, Commonwealth Association of Paediatric Gastroenterology, Hepatology and Nutrition.

Dr Pratima Ray was a Reviewer for Infection Genetics and Evolution (Elsevier), Indian Journal of Pediatrics and Pediatric Infectious Diseases journal; Assessed PhD thesis for the Swinburn University of Technology, Victoria, Australia.

Ms Anuja Agarwala was elected Executive member, Indian Society of Enteral and Parenteral Nutrition (ISPEN) 2008; Expert Committee member, Central Board of Secondary Education.

Dr Sushma Nangia

Her paper ‘Topical coconut oil application reduces Tran epidermal water loss in reterm very low birth weight neonates: A randomized clinical trial’ was judged as the best research Paper, SPR meeting at Boston 2008.

Dr Satish Mishra

NNF Gold Medal for the paper ‘Transcutaneous bilirubinometry reduces need for sampling in late preterm and term neonates’ NNF meeting at Calcutta, December 2008.

Dr Shamsher Dalal

NNF Gold Medal for Social Neonatology on ‘Feeding behaviour of LBW neonates’ NNF meeting at Calcutta, December 2008.

VISITING SCIENTISTS

- Dr Leeza O. Warwick University U.K. (February 2009).
- Dr Charles Cantor - Chief Scientific Officer SEQUANOM , USA (January 2009).
- Dr Priya Kishnani University of Duke USA (July 2008).

- Professor PSN Menon, Chairman, Department of Paediatrics, Armed Forces Hospital, Kuwait (September 2008)
- Dr Venkat Shankar, Chief, Section of Critical Care, Department of Paediatrics, Medical Director, Intensive Care Unit, Associate Professor of Paediatrics, Drexel University College of Medicine, Pennsylvania, USA (December 2008).
- Dr Victor Chernick, Editor, Pediatric Pulmonology (February 2009).
- Dr Susan Niermeyer and Dr William Keenan, American Academy of Paediatrics Steering Committee on Neonatal Resuscitation (January 2009).
- Dr Nalini Singhal, University of Calgary, Canada (January 2009).
- Dr Jose Marines (April 2008), Dr Olivier Fontaine (November 2008) and Rajiv Bahl (November 2008), WHO Child and Adolescent Health department, WHO Geneva.
- Dr Ole Soder, Head of Paediatrics, Karolinska University, Stockholm, Sweden (March 2009).

9.26 Paediatrics Surgery

Professor and Head

D.K. Gupta

Professors

V. Bhatnagar

M. Bajpai

Associate Professors

S. Agarwala

M. Srinivas

EDUCATION

Undergraduate, Postgraduate and Paramedical

- Teaching of undergraduate medical and nursing students
- Postgraduate teaching and training of MCh Paediatric Surgery trainees, this included of seminars, journal clubs, case discussions, thesis presentations
- Trainees on rotation—MCh trainee in Neurosurgery, DM trainees in Neonatology, MS trainees in General Surgery
- Training of BSc and MSc Nursing students

Short- and long-term training

Several students from various countries underwent short-term and long-term training.

Continuing Medical Education

Professor D.K. Gupta organized the

- International symposium on ‘Stem cells—Promises and potentials’, Felicitation of Professor P Upadhyaya, the founder of the Department of Paediatric Surgery, on his 80th Birthday celebrations, AIIMS, New Delhi; 15–16 August 2008.

Lectures delivered

Professor D.K. Gupta

- Delivered the guest lectures during the workshop on ‘Anorectal malformations’, Kolkata, 14 June 2008, on;
 - Recent concepts including MRI for anorectal anomalies
 - Management of ARM with krikenbeck
 - Role of laparoscopy in anorectal malformation
 - Re-do Surgery for anorectal anomalies
 - Long-term follow-up on anorctal anomalies

—As panelist during the panel discussion on ARM

—Chaired the scientific session on ‘Congenital Pouch Colon’

- Guest lecture on Paediatric Oncology in India, Symposium on Paediatric Oncology, University of Kyushu, Kukuoka, Japan; 19 May 2008
- Delivered the guest lectures during the Live Operative Workshop on Hypospadias, JIPMER, Pondichery, 22–24 August 2008, on;
 - Difficult Hypsopadias
 - Intersex Disorders – diagnosis without tears
- Delivered the guest lectures during the International Symposium on ‘Stem Cell Applications – Promises and Potentials’, AIIMS, New Delhi, 16–17 August 2008, on
 - Stem cell application in regenerative medicine – introductory lecture
 - Role of stem cell in hepatic fibrosis – a pilot study in biliary atresia

Professor V. Bhatnagar

- ‘Reconstruction of urinary bladder exstrophy without pelvic osteotomy’, CME, VII Annual Paediatric Surgical Conference, Tamil Nadu and Pondicherry Chapter, Indian Association of Paediatric Surgeons, Vellore; 10–12 July 2008.
- ‘Surgical reconstruction in bladder exstrophy’, Symposium on ‘Epispadias-exstrophy’, Karnataka Chapter of IAPS, Bangalore; 28 September 2008.
- ‘Evaluation of results in bladder exstrophy’, Symposium on ‘Epispadias-exstrophy’, Karnataka Chapter of IAPS, Bangalore; 28 September 2008.
- ‘Epispadias-exstrophy’, CME on Paediatric Urology, 9th Asian Congress of Urology, New Delhi; 2 October 2008.
- ‘Biochemical and bone densitometry changes after sigmoid colocolostomy in children’, CME session I, 34th Annual Conference, Indian Association of Paediatric Surgeons, Guwahati, Assam; 4 December 2009.
- Live operative demonstrations at the CME and Live operative workshop, VII Annual Paediatric Surgical Conference, Tamil Nadu and Pondicherry Chapter, Indian Association of Paediatric Surgeons, CMC Vellore, 10–12 July 2008, on,
 - Minilap and operative cholangiogram for neonatal cholestasis
 - Esophageal replacement by reverse gastric tube
 - Posterior sagittal ano-recto-plasty for high anorectal anomalies in a male
 - Abdomino-perineal posterior sagittal ano-recto-vagino-plasty with tubularisation of pouch colon for cloacal malformation in a female.

Professor M Bajpai

- Clinical presentation, pathology, genetics and decision-making in the management of True hermaphrodites, CME on Intersex disorders, B.J. Wadia hospital, Mumbai; 13 April 2008.
- ‘Surgery vs medical treatment of VUR-A debate’, Annual meeting of the Indian Society for Nephrology, Pune; 20 December 2008.

Dr Sandeep Agarwala

- RCN guidelines for treatment of hepatoblastoma, Annual meeting of SIOPEL, Munich; 1–3 March 2009.

National and International Conferences

Lectures delivered

Professor D.K. Gupta

- Felicitation function held to honour Professor C.S. Gopal, the first MCh Student from the department to have taken over as the Vice Chancellor of the KGM University and Professor Narpat Singh, Medical Superintendent on receiving the BC Roy Award, AIIMS, New Delhi; 8 May 2008.
- Felicitation function to honour Professor P. Upadhyaya, the founder of the Department of Paediatric Surgery, on his 80th birthday celebrations, AIIMS, New Delhi; 15–16 August 2008.

Professor D.K. Gupta

- Delivered the Guest Lectures during the workshop on ‘Anorectal malformations’, Kolkata, 14 June 2008, on;
 - Recent concepts including MRI for anorectal anomalies
 - Management of ARM with Krikenbeck
 - Role of laparoscopy in anorectal malformation
 - Re-do surgery for anorectal anomalies
 - Long-term follow-up
 - As the panelist during the panel discussion
 - Chair the scientific session on congenital pouch colon
- Guest lecture on paediatric trauma during the International conference, CME cum Live Workshop, Sirifort auditorium, New Delhi; 28–30 November 2008.
- Guest lecture on Paediatric Oncology in India, University of Kyushu, Kukuoka, Japan; 19 May 2008.
- Live Operative Workshop on Hypospadias, JIPMER, Pondicherry; 22–24 August 2008, on;
 - Difficult Hypsopadias
 - Intersex Disorders – diagnosis without tears

- International Symposium on ‘Stem cell applications – promises and potentials’, AIIMS, New Delhi; 16–17 August 2008, on,
 - Stem cell application in regenerative medicine – introductory lecture
 - Role of stem cell in hepatic fibrosis – a pilot study in biliary atresia

Professor V. Bhatnagar

- ‘Surgical options in anorectal malformations’, Clinical grand round, AIIMS, New Delhi; 14 October 2008.
- Live operative demonstrations at the CME and Live operative workshop, VII Annual Paediatric Surgical Conference, Tamil Nadu and Pondicherry Chapter, Indian Association of Paediatric Surgeons, CMC Vellore; 10–12 July 2008, on,
 - Minilap and operative cholangiogram for neonatal cholestasis
 - Esophageal replacement by reverse gastric tube
 - Posterior sagittal ano-recto-plasty for high anorectal anomalies in a male
 - Abdomino-perineal posterior sagittal ano-recto-vagino-plasty with tubularisation of pouch colon for cloacal malformation in a female.

Dr Sandeep Agarwala

- ‘Patient care, research and training at AIIMS’, Royal Hospital for Sick Children, Yorkhill, Glasgow, UK; 15–30 September 2008.
- ‘Wilms tumour’, Royal Hospital for Sick Children, Yorkhill, Glasgow, UK; 15–30 September 2008.
- ‘Germ cell tumours’, Royal Hospital for Sick Children, Yorkhill, Glasgow, UK; 15–30 September 2008.

RESEARCH

Funded projects

- N-myc gene amplification by polymerase chain reaction in neuroblastoma and tumour surveillance by detecting tyrosine hydroxylase protein using RT PCR’. D.K. Gupta, S. Agarwala, P. Chattopadhyaya (Biochemistry). Funded by DBT (2005–2007).
- A concept model: Role of autologous and human stem cell in an experimental model of biliary atresia in rats (with Department of Stem Cell facility, Pathology, AIIMS). D.K. Gupta. Funded by ICMR (2008).
- Melanocyte cell culture and transplantation in albinos. National Institute of Immunology, joint research Project with AIIMS. D.K. Gupta. Funded by DST.
- A study on clinical and molecular markers of the chronic interstitial nephropathy in congenital unilateral ureteropelvic junction obstruction. M. Bajpai. Funded by DST for 3 years (2008–2011). Funds: Rs 30 Lakh.

- ACE I/D gene polymorphism in ‘Posterior urethral valves’ and its correlation with transforming growth factor-b1, Tumour Necrosis Factor (TNF)-a, soluble TNF receptor-1, interleukin–6 (IL-6), microalbuminurea, angiotensin II, and plasma renin activity in the early diagnosis of renal damage. M. Bajpai. Funded by DST.
- ACE I/D gene polymorphism in ‘Vesico ureteric reflux’ and its correlation with transforming growth factor-b1, Tumour Necrosis Factor (TNF)-a, soluble TNF receptor-1, interleukin–6 (IL-6), microalbuminurea, ngiotensin II and plasma renin activity in the early diagnosis of renal damage. M. Bajpai. Funded by DST.
- Genetic parameters of neuroblastoma: A study on fine needle aspiration cultures. Sandeep Agarwala. Funded by AIIMS Research Grant for one year (2008–09). Funds: Rs one Lakh.

Departmental projects

Completed

- Conservation of circulating blood volume in portal hypertension (Haematology, Nuclear Medicine).
- Comparison of imaging modalities in the evaluation of portal hypertension (Radiodiagnosis).
- Outcome of patients with antenatally diagnosed unilateral pelviureteric junction obstruction managed conservatively and surgically.

Ongoing

- Antibiotic prophylaxis in the management of vesicoureteric reflux: A multicentric randomized double-blind placebo-controlled trial (with Paediatrics).
- Volumetric analysis of the spleen in portal hypertension (with Radiodiagnosis).
- The role of nitric oxide in portal hypertension (with Biochemistry).
- Long-term results of oesophageal replacement by reverse gastric tube (with Radiodiagnosis, Nuclear Medicine).
- Long-term results following Kasai’s procedure for biliary atresia.
- Long-term results following tubularisation of pouch colon for pull through(with Radiodiagnosis)
- To study the role of renin angiotensin system blockade on renal recovery in experimentally induced unilateral ureteric obstruction: A morphometric analysis.
- To study the effect of ipsilateral ureteric obstruction on contra lateral kidney and the role of renin angiotensin system blockade on renal recovery in experimentally induced unilateral ureteric obstruction: A morphometric analysis.
- A clinical and urodynamic study on the effects of oral tolterodine on serial alterations in neurogenic detrusor overactivity vis-à-vis oral oxybutynin in children (with existing oxybutynin users).
- Results of the outcome of treatment of neuroblastoma in children by using moderately intense chemotherapy consisting of cyclophosphamide, doxorubicin, etoposide and cisplatin in combination with surgery and radiotherapy. No funding.

- Results with the use of platinum based regimes in the treatment of pediatric malignant germ cell tumours. No funding.
- Prospective study of treatment of children with Wilms' tumour on treatment with NWTS-5 regimen. No funding.
- Prospective study of treatment of children with rhabdomyosarcoma on treatment with IRS-5 regimen. No funding.
- Prospective study of treatment of children with hepatoblastoma on treatment with PLADO regime. No funding.
- Monotherapy for standard risk hepatoblastoma. No funding
- Prospective study on five drug regimen for the management of clear cell sarcoma of the kidney.
- Musculoskeletal and pulmonary functional abnormalities after thoracic surgeries.

Collaborative Projects

Completed

- Renal function reserve in hydronephrotic children (with Nuclear Medicine).
- Assessment of latent manganese toxicity in follow-up cases of biliary atresia (with Radiology).
- Development of intrapulmonary arteriovenous shunting in follow-up cases of biliary atresia (with Paediatric Cardiology).
- Hepatoblastoma: Role of DNA ploidy, cell proliferation and cytokeratin 19 expression in subtyping and prognosis (with Pathology).
- Wilms' tumour: Relation of apoptotic gene expression with subtype, chemoresponse and prognosis (with Pathology).

Ongoing

- Antibiotic prophylaxis in the management of vesicoureteric reflux: A multicentric randomized double-blind placebo-controlled trial (with Paediatrics).
- Long-term follow-up of patients after augmentation cystoplasty (with Endocrinology and Metabolism).
- Comparison of imaging modalities in the evaluation of neonatal cholestasis (with Radiodiagnosis).
- Comparison of imaging modalities in the evaluation of portal hypertension (with Radiodiagnosis).
- Volumetric analysis of the spleen in portal hypertension (with Radiodiagnosis).
- Conservation of circulating blood volume in portal hypertension (with Haematology, Nuclear Medicine).
- The role of nitric oxide in portal hypertension (with Biochemistry).

- Long-term results of esophageal replacement by reverse gastric tube (with Radiodiagnosis, Nuclear Medicine).
- Long-term results following Kasai's procedure for biliary atresia.
- Evaluation of cardiotoxicity related to adriamycin in children with solid tumours (with Nuclear Medicine).
- Evaluation of hearing deficiencies in children who have received cis-platinum for treatment of solid tumours (with ENT).
- Evaluation of restrictive lung disease in long-term survivors of malignant germ cell tumours who have received Bleomycin as a part of treatment (with Paediatrics).
- Gain of chromosome 17q and its effect on outcome in patients with neuroblastoma (with Anatomy).
- Whole body MR imaging for detection of skeletal metastases in paediatric patients of small cell neoplasms: Comparison with skeletal scintigraphy and FDG-PET CT scan (with Medical Oncology, Radiodiagnosis and Nuclear Medicine).
- Comparison of efficacy and safety of oral antibiotics (amoxicillin-clavulanic acid and ofloxacin) with intravenous combination (ceftriaxone and amikacin) in outpatient setting in paediatric patients of low risk febrile neutropenia (with Medical Oncology).
- Telomerase estimation in patients with Wilms' tumour and hepatoblastoma as a marker for prognosis (with Pathology).
- Evaluation of lymphocytic infiltration in Wilms' tumour and adjoining normal renal parenchyma and its relation to recurrence and outcome (with Pathology).
- Evaluation of role of adjunctive therapy with ¹³¹I MIBG therapy for advanced non-responsive, relapsed and metastatic neuroblastoma (with Nuclear Medicine).
- Posterior urethral valves: Persistent renin angiotensin system activation and role of angiotensin converting enzyme inhibition on renal recovery (with Radiodiagnosis).

PUBLICATIONS

Journals

1. Gupta DK, Sharma S. Esophageal atresia: The total care in a high-risk population. *Seminars in Pediatric Surgery* 2008;**17**:236–43.
2. Gupta DK, Sharma S. Esophageal substitution for esophageal atresia; Experience with neonatal gastric pull up. *Public Health* 2008;2.
3. Sharma S, Gupta DK. Male genitoplasty in intersex disorders. *Advances in Urology* 2008:1–5.
4. Sharma S, Gupta DK. Gender assignment and hormonal treatment for disorders of sexual differentiation. *Pediatr Surg Intern* 2008;**24**:1131–35.

5. Vijay BB, Kumar R, Gupta DK, Ragavan M, Mohapatra T, Dhanpathi H, *et al.* Spontaneous biliary perforation in an infant: An unusual chronic presentation. *Clin Nucl Med* 2008;**33**:273–5.
6. Praveen EP, Desai AK, Khurana, Philip J, Eunice M, Khadgawat R, *et al.* Gender identity of children and young ADULTS WITH 5 ALFA reductase deficiency. *Journal of Pediatric Endocrinology and Metabolism* 2008;**21**:173–9.
7. Agarwal GS, Sharma R, Bhatnagar V. Assessment of latent manganese toxicity as a prognostic factor following surgery for biliary atresia. *Eur J Pediatr Surg* 2008;**18**:22–25.
8. Bhat NA, Grover VP, Bhatnagar V. Pre-operative manometry of the blind rectal pouch to predict postoperative potential for continence in anorectal malformations. *Trop Gastroenterol* 2008;**29**: 51–4.
9. Goel P, Bhatnagar V. Surgical management of portal hypertension in children. *Indian J Pediatr* 2008;**75** (SS1):102–8.
10. Jindal B, Bhatnagar V. Spontaneous perforation of the extrahepatic biliary tract. *Trop Gastroenterol* 2008;**29**:48–50.
11. Subramanian S, Gupta AK, Bhatnagar V. A male infant passing urine per rectum since birth. *Brit J Radiol* 2008;**81**:596–9.
12. Yadav D, Bhatnagar V. Surgical options in pyogenic liver abscess. *Indian J Pediatr* 2008;**75** (SS1):90–2.
13. Goenka A, Jain V, Sharma R, Gupta AK, Bajpai M. MR diagnosis of penile agenesis: Is it just absence of a phallus? *Pediatric Radiol* 2008;**38**:11009–12.
14. Kumar J, Kumar A, Sethi A, Agarwala S, Bakhshi S. Multifocal neuroblastoma with stage IV disease in an 8-year-old boy. *J Pediatr Hematol Oncol* 2008;**30**:408–9.
15. Dwary AD, Agarwala S, Thulkar S, Bakhshi S. Choledochal cyst with obstructive jaundice mimicking resistant abdominal burkitt lymphoma. *Pediatr Blood Cancer* 2008;**50**:1080–1.
16. Gupta R, Mathur SR, Agarwala S, Kaushal S, Srivastav A. Primary soft tissue hydatosis: Aspiration cytology diagnosis in two cases. *Diagn cytopathol* 2008;**36**:884–6.
17. Kumar J, Seith A, Kumar A, Sharma R, Bakhshi R, Kumar R, Agarwala S. Whole-body MR imaging with the use of parallel imaging for detection of skeletal metastases in pediatric patients with small-cell neoplasms: Comparison with skeletal scintigraphy and FDG-PET. *Pediatr Radiol* 2008;**39**:953–62.
18. Jindal B, Agarwala S, Bakhshi S, Jain V, Gupta AK, Kumar R, *et al.* Bilateral renal lymphoma with orbital metastasis in a child. *Pediatr Blood Cancer* 2009;**52**:539–41.
19. Chawla M, Reddy R, Kumar R, Das CJ, Agarwala S, Tiwari AM, *et al.* PET-CT in the detection of meningeal metastasis in neuroblastoma. *Pediatr Surg Int* 2009;**25**:211–5.
20. Gupta R, Mathur SR, Singh P, Agarwala S, Gupta SD. Cellular mesoblastic nephroma in an infant: Report of the cytologic diagnosis of a rare pediatric renal tumor. *Diagn Cytopathol* 2009.

21. Goenka AH, Das CJ, Goel P, Srinivas M, Pangtey GS. Giant primary posterior mediastinal hydatid cyst in a child: Report of a case and review of literature. *Pediatr Surg Int* 2009;**25**:647–9.

Chapters in Books

1. Gupta DK. Pediatric surgery—Overview of the specialty. In: Gupta DK (ed). *Pediatric Surgery – Diagnosis and Management*. New Delhi: Jaypee Brothers; 2008:3–9.
2. Gupta DK, Puri A. Pediatric surgery—Shock in children—Surgeon’s perspective. In: Gupta DK (ed). *Pediatric Surgery – Diagnosis and Management*. New Delhi: Jaypee Brothers; 2008:65–81.
3. Bhat NA, Gupta DK. Fungal infections in pediatric surgical patients. In: Gupta DK (ed). *Pediatric Surgery – Diagnosis and Management*. New Delhi: Jaypee Brothers; 2008:210–14.
4. Gupta DK, Sharma S. Pediatric bronchoscopy. In: Gupta DK (ed). *Pediatric Surgery – Diagnosis and Management*. New Delhi: Jaypee Brothers; 2008:229–37.
5. Gupta DK, Parida L. Soft Tissue Trauma. In: Gupta DK (ed). *Pediatric Surgery – Diagnosis and Management*. New Delhi: Jaypee Brothers; 2008:286–97.
6. Sharma S, Gupta DK. Traumatic hemobilia in children. In: Gupta DK (ed). *Pediatric Surgery – Diagnosis and Management*. New Delhi: Jaypee Brothers; 2008:321–8.
7. Sharma S, Gupta DK. Achalasia cardia. In: Gupta DK (ed). *Pediatric Surgery – Diagnosis and Management*. New Delhi: Jaypee Brothers; 2008:363–8.
8. Gupta DK, Sharma S. Esophageal replacement with colon. In: Gupta DK (ed). *Pediatric Surgery – Diagnosis and Management*. New Delhi: Jaypee Brothers; 2008:382–90.
9. Gupta DK, Sharma S. Gastric Transposition. In: Gupta DK (ed). *Pediatric Surgery – Diagnosis and Management*. New Delhi: Jaypee Brothers; 2008:409–21.
10. Gupta DK, Sharma S. Principles of lung resection. In: Gupta DK (ed). *Pediatric Surgery – Diagnosis and Management*. New Delhi: Jaypee Brothers; 2008:437–47.
11. Sharma S, Gupta DK. Bronchiectasis and lung abscess. In: Gupta DK (ed). *Pediatric Surgery – Diagnosis and Management*. New Delhi: Jaypee Brothers; 2008:471–7.
12. Sharma S, Gupta DK. Pulmonary tuberculosis in children. In: Gupta DK (ed). *Pediatric Surgery – Diagnosis and Management*. New Delhi: Jaypee Brothers; 2008:478–90.
13. Sharma S, Gupta DK. Empyema thoracis. In: Gupta DK (ed). *Pediatric Surgery – Diagnosis and Management*. New Delhi: Jaypee Brothers; 2008:495–509.
14. Gupta DK, Sharma S, Pal K. Rare Pediatric hernias. In: Gupta DK (ed). *Pediatric Surgery – Diagnosis and Management*. New Delhi: Jaypee Brothers; 2008:534–43.
15. Sharma S, Gupta DK. Gastric volvulus. In: Gupta DK (ed). *Pediatric Surgery – Diagnosis and Management*. New Delhi: Jaypee Brothers; 2008:570–74.
16. Gupta DK, Sharma S. Short bowel syndrome. In: Gupta DK (ed). *Pediatric Surgery – Diagnosis and Management*. New Delhi: Jaypee Brothers; 2008:618–32.

17. Sharma S, Gupta DK. Abdominal tuberculosis. In: Gupta DK (ed). *Pediatric Surgery – Diagnosis and Management*. New Delhi: Jaypee Brothers; 2008:646–58.
18. Sharma S, Gupta DK. Bezoars in children. In: Gupta DK (ed). *Pediatric Surgery – Diagnosis and Management*. New Delhi: Jaypee Brothers; 2008:671–77.
19. Gupta DK, Sharma S. Swenson’s pull-through. In: Gupta DK (ed). *Pediatric Surgery – Diagnosis and Management*. New Delhi: Jaypee Brothers; 2008:709–16.
20. Gupta DK, Sharma S, Pathak M. Soave’s (Boley Scot) endorectal pull-through swenson’s pull-through. In: Gupta DK (ed). *Pediatric Surgery – Diagnosis and Management*. New Delhi: Jaypee Brothers; 2008:723–32.
21. Gupta DK, Sharma S. Transanal endorectal pull-through. In: Gupta DK (ed). *Pediatric Surgery – Diagnosis and Management*. New Delhi: Jaypee Brothers; 2008:733–40.
22. Gupta DK, Sharma S. Anomalies associated with anorectal malformations. In: Gupta DK (ed). *Pediatric Surgery – Diagnosis and Management*. New Delhi: Jaypee Brothers; 2008: 825–32.
23. Holschneider A, Gupta DK. Complications following PSARP. In: Gupta DK (ed). *Pediatric Surgery – Diagnosis and Management*. New Delhi: Jaypee Brothers; 2008:833–45.
24. Sharma S, Gupta DK. Congenital pouch colon. In: Gupta DK (ed). *Pediatric Surgery – Diagnosis and Management*. New Delhi: Jaypee Brothers; 2008:846–56.
25. Gupta DK, Sharma S. Holschneider alex persistent cloaca. In: Gupta DK (ed). *Pediatric Surgery – Diagnosis and Management*. New Delhi: Jaypee Brothers; 2008:857–73.
26. Gupta DK, Sharma S. Anorectal malformations: Current perspectives. In: Gupta DK (ed). *Pediatric Surgery – Diagnosis and Management*. New Delhi: Jaypee Brothers; 2008: 874–83.
27. Sharma S, Gupta DK. Rectal ectasia. In: Gupta DK (ed). *Pediatric Surgery – Diagnosis and Management*. New Delhi: Jaypee Brothers; 2008:884–88.
28. Sharma S, Gupta DK, Pena A. Bowel management. In: Gupta DK (ed). *Pediatric Surgery – Diagnosis and Management*. New Delhi: Jaypee Brothers; 2008:899–908.
29. Sinha CK, Gupta DK. Davenport mark biliary atresia. In: Gupta DK (ed). *Pediatric Surgery – Diagnosis and Management*. New Delhi: Jaypee Brothers; 2008:1002–12.
30. Sharma S, Gupta DK. Pancreatic pseudocyst. In: Gupta DK (ed). *Pediatric Surgery – Diagnosis and Management*. New Delhi: Jaypee Brothers; 2008:1026–32.
31. Sharma S, Gupta DK. Persistent hyperinsulinemic hypoglycemia of infancy. In: Gupta DK (ed). *Pediatric Surgery – Diagnosis and Management*. New Delhi: Jaypee Brothers; 2008: 1051–57.
32. Gupta DK, Sharma S. Picibanil (OK-432) in lymphangiomas. In: Gupta DK (ed). *Pediatric Surgery – Diagnosis and Management*. New Delhi: Jaypee Brothers; 2008:1108–16.
33. Gupta DK, Sharma S. Hydrocephalus. In: Gupta DK (ed). *Pediatric Surgery – Diagnosis and Management*. New Delhi: Jaypee Brothers; 2008:1117–47.

34. Gupta DK, Sharma S. Spina bifida. In: Gupta DK (ed). *Pediatric Surgery – Diagnosis and Management*. New Delhi: Jaypee Brothers; 2008:1168–92.
35. Gupta DK, Pathak M, Sharma S. Torticollis. In: Gupta DK (ed). *Pediatric Surgery – Diagnosis and Management*. New Delhi: Jaypee Brothers; 2008:1230–38.
36. Saing H, Gupta DK. Conjoined Twins. In: Gupta DK (ed). *Pediatric Surgery – Diagnosis and Management*. New Delhi: Jaypee Brothers; 2008:1349–63.
37. Gupta DK, Sharma S. Heteropagus twinning. In: Gupta DK (ed). *Pediatric Surgery – Diagnosis and Management*. New Delhi: Jaypee Brothers; 2008:1364–69.
38. Sharma S, Gupta DK. Ovarian Cysts. In: Gupta DK (ed). *Pediatric Surgery – Diagnosis and Management*. New Delhi: Jaypee Brothers; 2008:1381–86.
39. Chauhan A, Sharma S, Gupta DK. Vaginal anomalies and reconstruction. In: Gupta DK (ed). *Pediatric Surgery – Diagnosis and Management*. New Delhi: Jaypee Brothers; 2008: 1387–1403.
40. Gupta DK, Sharma S. Stem cell therapy. In: Gupta DK (ed). *Pediatric Surgery – Diagnosis and Management*. New Delhi: Jaypee Brothers; 2008:1491–1502.
41. Bhatnagar V. Laser applications in pediatric surgery. In: Gupta DK (ed). *Pediatric Surgery – Diagnosis and Management*. New Delhi: Jaypee Brothers; 2008:1512–17.
42. Agarwala S. Duhamel’s procedure. In: Gupta DK (ed). *Pediatric Surgery – Diagnosis and management*. New Delhi: Jaypee Brothers; 2008:717–22.
43. Ravikumar VR, Srinivas M. Antimicrobials and antimicrobial prophylaxis in Pediatric Surgery. In: Gupta DK (ed). *Text book of Pediatric Surgery*. New Delhi: Jaypee Brothers; 2008.
44. Arun C, Srinivas M. Molecular biology for pediatric surgeons. In: Gupta DK (ed). *Text book of Pediatric Surgery*. New Delhi: Jaypee Brothers; 2008.

PATIENT CARE

Attendance in OPD and specialty clinics

	New cases	Old cases	Total
General OPD	5,870	12,741	18,611
Specialty clinics			
Hydrocephalus	43	276	319
Intersex	37	291	328
Craniosynostosis	7	25	32
Paediatric urology	293	2993	3,276
Paediatric solid tumour	168	2,022	2,190
CRHSP Ballabgarh	580	–	–
Minor procedures	3,200	–	–

Admissions

AB-5 ward	2,550
AB5-ICU	153

Surgical procedures

Major	1,300
Minor	352
At CRHS, Ballabgarh	315
Total	1,967

Special investigations:

Urodynamic evaluation	417
Uroflometry	734
Ano-rectal manometry	53
Esophageal manometry	37
24-hour pH monitoring	25

AWARDS AND HONORS

Professor DK Gupta was nominated as Chairman of the curriculum committee of the Medical Council of India for preparing the curriculum in the specialty, during the meeting held on 28 April 2008; Chairman, to select the candidates from SAARC countries for the Lister and Greenwood fellowships of the British Association of Paediatric surgeons, UK; Expert, to conduct the inspection at the Postgraduate Institute of Medical Sciences, Rohtak, to start the MCh course in Paediatric surgery, 9 May 2008; Chair the scientific session, 15th congress of Federation of the Asia-Oceania Perinatal Societies, Nagoya, Japan, 18–20 May 2008; Visiting Professor, Department of Paediatric Surgery, Kyushu University, Fukuoka, Japan, and deliver the guest lecture on Paediatric oncology in India, May 2008; Chair the scientific session during the International Congress on Advances in Neuroblastoma Research, Chiba, Japan, 21–24 May 2008. Honoured with the University Medal and the Certificate of Honour by the Kyushu University, Fukuoka, Japan, 19 May 2008.

Dr DK Gupta was invited to chair the scientific session, during the Annual Congress of South African Association of Paediatric Surgeons, Sun City, 29 May–4 June 2008; Visiting Professor, Red Cross Memorial Hospital, Cape Town, South Africa, University of Cape Town and received the certificate of honour and the Hospital memento, June 2008; Chair the scientific session, 10th International Congress of the European Association of Paediatric surgeons, Istanbul, 18–21 June 2008; Chair the scientific session during the Annual congress of South African Association of Paediatric Surgeons, Sun City, South Africa, 28 May–1 June 2008; Was conferred the Honorary Membership of the South African Association of Paediatric Surgeons during the Annual Congress held in Sun City, South Africa, 31 May 2008; Chair the scientific Session on Congenital Pouch Colon during the

Workshop on Anorectal malformations, Kolkata, 14 June 2008; Council Member representing Asia, World Federation of Associations of Pediatric Surgeons (WOFAPS), Istanbul, 18–21 June 2008; Council Member representing Asia, European Association of Paediatric Surgeons (EUPSA), Istanbul, 18–21 June 2008; Editorial consultant, *Gold Journal of Urology* and *Journal of the Emergency Medicine, Trauma and Surgery*, July 2008; Invited by the National News Media for expert comments on the baby born with major facial anomaly and, also on providing training in paediatric surgery to overseas doctors at AIIMS, July 2008; Chair the scientific Session on hypospadias and moderating the panel discussion on the management of hypospadias, Live Operative Workshop on Hypospadias, JIPMER, Pondichery, 22–24 August 2008; Invited as the President, SAARC Nations and the Guest of Honour to deliver the Presidential Address (from SAARC nations) during the Annual conference of the Pakistan Association of Paediatric Surgeons with the EC meeting of the FAPSS, Bhawalpur, Pakistan, 17–19 October 2008.

Dr DK Gupta was nominated as the Chairman of the Publication committee, AAPS to Journal Paediatric surgery International, 21st Congress of the Asian Association of Paediatric Surgeons (AAPS), Bangkok, 16–19 November 2008; Chair the Suruga Lecture, Board of Directors meeting and the general Assembly of the Asian Association of Paediatric Surgeons, Bangkok, 16–19 November 2008; Invited to chair session, North India Conference on Foetal Medicine – Prenatal diagnosis and Therapy, New Delhi, 15 November 2008; Invited to chair the scientific session, 34th Annual Conference of the Indian Association of Paediatric Surgeons, Guwahati, 4–7 December 2008; Invited as the guest faculty to deliver the lecture on antenatal management of HN during the Live Operative workshop on Paediatric Urology, Gwalior, 13–14 December 2008; Invited as an expert, National Commission for protection of child rights, during the expert group meeting, New Delhi, 6 January 2009; Invited to chair the scientific session and serve as Panelist during the 3rd Workshop on Paediatric Andrology, Liestal, Switzerland, 14–16 January 2009; Invited to assist the selection committee for the faculty in Paediatric Surgery at CSMMU, Lucknow, 2 February 2009; Member, scientific abstract selection committee, Pacific Association of Pediatric Surgeons, Hongkong, 2008–09; Invited to chair the scientific session, Vesico-ureteric reflux and urinary tract infection, Annual Conference of the Indian Academy of Paediatrics, Surat, 28–29 March 2009; Chairman, MCh Examination in Paediatric Surgery, AIIMS, December 2008.

Professor M. Bajpai was member abstract reviewer committee of the American Urology Association for the meeting, Orlando, Florida, USA, 2008; Chairperson, session on endourology, Annual meeting of the *Paediatric Endoscopic Society of India*, Mumbai, 2008; Member, Board of studies in Paediatric Surgery, Banaras Hindu University, Varanasi; Member, Project Advisory Committee, Department of Science and Technology, Government of India; External Examiner for MCh, University of Gujarat, West Bengal University of Health Sciences, PGI Chandigarh, Jammu and Kashmir; Internal Examiner for MCh, All India Institute of Medical Sciences, New Delhi, Expert, Medical Council of India for recognition of MCh training programme in the country.

Dr Sandeep Agarwala was awarded the SIOP 2008 scholarship, CCLG (UK) travel grant for 2008; Awarded the International travel grant sponsored and funded by Asian Children's Care League, Japan; Selected as course instructor for Surgical Oncology course conducted by European Union of Paediatric Surgical Associations (EUPSA) for 2008; Invited as visiting Professor to Royal Hospital for Sick Children, Yorkhill, Glasgow, UK.

SIGNIFICANT EVENTS

Dr DK Gupta published following books:

1. Paediatric surgery – Diagnosis and Management (2 vol set, 1600 pages, 1250 colour photos)
2. Hutchison Paediatrics (Edited by K Goel and DK Gupta)
3. Clinical Problem in Paediatric Surgery, An Atlas with mind maps (multi-authored)
4. An Atlas – multi-author (multi-authored book in polish Language)
5. Memoir Book on Professor P. Upadhyaya, to felicitate him on his 80th Birthday.
6. Felicitation function held to honour Prof CS Gopal, the first MCh Student from the department to have taken over as the Vice Chancellor of the KGM University and Professor Narpat Singh, Medical Superintendent on receiving the BC Roy Award at AIIMS on 8 May 2008.
7. Felicitation function to Honour Professor P Upadhyaya, the Founder of the Department of Pediatric Surgery at AIIMS, on his 80th Birthday.

VISITING SCIENTISTS

Prem Puri, Dublin (Ireland); Bikul Das (Canada); Talal Al-Malki (Saudi Arab); Paul Tam (Hong Kong); Bikramjit Sangha, (Los Angeles, USA); Gabriel Ionescu (Abu Dhabi); Andrew Pinter (Hungary); Iftikar Jan (Pakistan).

9.27 Pathology

Professor and Head

Subrat K. Panda

Professors

Chitra Sarkar
Rajni Safaya

Manoj K. Singh
Ruma Ray

S. Datta Gupta
A.K. Karak
(On deputation)

Additional Professors

A.K. Dinda

Associate Professors

M.C. Sharma

Venkateswaran K. Iyer

Assistant Professors

Sandeep R Mathur

Vaishali Suri

Kabita Chatterjee
(Blood Bank)

EDUCATION

Undergraduate

No change from previous years.

Postgraduate

MD students: 18 Senior Residents: 10

PhD students: 12 Pool Officer: 2

Short-term and long-term training

- Ms Shipra Sharma from Amity University underwent short-term training for 3 months (1/4/2008 – 30/6/2008).
- Dr Kachnar Verma, Allahabad Medical College – short-term training in Neuropathology for three months.
- Dr Isha Muteeja from Amity University underwent summer training for two months (1 June – 31 July, 2008).
- Mr Dhiraj Kumar from Amity University underwent summer training for two months (1 June – 31 July 2008).
- Dr Shivani from Jamia Milia Islamia underwent short term training for 2 months (23/6/2008 – 22/8/2008).
- Dr Punam Paudyal, Dr. Meenu Agarwal and Dr. Mrinalini Singh from BPKIHS underwent training for one month (2 February – 28 February 2009).

CONTINUING MEDICAL EDUCATION

Lectures delivered

Professor S.K. Panda

- ‘HEV Biology’, Indian Association of Pathologists and Microbiologists, HQ CME - 2009 as guest speaker in Cuttack; on 14 February 2009.
- ‘Molecular bio-based diagnostic tests’, Indian Society of Gastroenterology, Suraj Kund; 28th February., 2009.

Professor Chitra Sarkar

- ‘CNS tumors: New entities’, 14th Indo-US CME on Surgical Pathology, Cytology and Haematology, Agra; 4 February 2009.
- ‘Role of molecular genetics in clinical management of Gliomas’, CME, AFMC, Pune; 1 June 2008.
- ‘High grade gliomas: Pathology and prognostic factors’, State-of-the-Art lecture, KGMC Lucknow; March 2009.

Dr Vaishali Suri

- ‘Classification and histopathology of CNS tumours’, Paediatric Haematology oncology conference, Sir Ganga Ram Hospital, New Delhi; 6 November 2008.

Professor R. Safaya

- ‘Bone lesions with emphasis on histopathology of bone tumors’, 1st CME in Pathology, M.V.J. Medical College and Research Hospital, Bangalore; 29 August – 30 August 2008.

Dr A.K. Dinda

- Participated as faculty in second Short-term Course in Nanoscience and Nanotechnology 2008–2009, Sri Venkateswara College, New Delhi; 28 February????.
- ‘Evaluation of biocompatibility and toxic potential of Nanomaterials’, Indo-US Symposium on Cancer Nanotechnology, INSA Auditorium, Delhi; 4–6 February 2009.
- ‘Urinary biomarker: An emerging tool for non-invasive investigation for renal and systemic diseases’, 3rd Annual National CME on Renal Pathology, Pune; 17 December 2008.
- ‘Applications of nanotechnology in biomedical and biotechnology’, Workshop on Introduction to Nanotechnology and its emerging role in industries, IIT Delhi; 24 October 2008.
- ‘Evaluation of immuno-inflammatory response of Biomaterials’. International workshop on Biomaterials for tissue engineering and Biotechnological Applications (BTEB-2008), IIT Kharagpur, India; 22–24 November 2008.
- ‘Recent advances in diagnosis of glomerular diseases’, Quarterly meet of IAPM Delhi chapter, Lady Hardinge Medical College, New Delhi; January 2009.

- ‘Role of animal models in renal research’, II International CME in Renal and transplantation Pathology PGIMER Chandigarh; 20–22 February 2009.

Dr V.K. Iyer

- ‘Fine needle aspiration cytology of medullary thyroid carcinoma and its variants’. CME, 38th Annual Conference, Indian Academy of Cytologists, Ahmedabad; 2008.

Dr Sandeep Mathur

- Participated as faculty in workshop on endoscopic ultrasound guided FNAC in Asia-Pacific Digestive week, AIIMS, New Delhi; 13 September 2008.
- Participated as Pathology discussant in Clinicopathology conference at the XIX annual CME of API-DSC, IHC, New Delhi; 19 October 2008.

National and International Conferences

Lectures delivered

Professor S.K. Panda

- ‘HEV replication and pathogenesis’, participated in the ‘Forthcoming Asia Pacific Digestive Diseases Week (APDW)–2008; 13–16 September 2008.
- Chaired a session and presented two papers in an “International Symposium on Viral Hepatitis and Liver Disease”, Washington DC, USA; 20–24 March 2009.

Professor Chitra Sarkar

- ‘1p&19q deletions in astrocytic and oligodendroglial tumors’, First congress of the Asian Society of Neuropathology, Tokyo, Japan; 22 May 2008.

Dr AK Dinda

- ‘Pathology and pathogenesis of lupus nephritis’, Annual Conference of Indian Society of Nephrology, East Zone, Behrampur Medical College, Orissa; 21 November 2008.
- ‘Application of nanotechnology in laboratory diagnosis’, Annual National Conference of Association of Biochemists of India, Chandigarh; 13–16 November 2008.
- ‘Nanotechnology’, 13th refresher course on Environmental Sciences, Jawaharlal Nehru University, Delhi; 20 April 2008.

Dr VK Iyer

- Participated as a faculty in Workshop on low grade squamous intraepithelial lesions at the 38th Annual Conference, Indian Academy of Cytologists, Ahmedabad; 2008.

Dr Sandeep Mathur

- Attended a Clinicopathology conference, MP-CG state chapter of the Indian Society of Gastroenterology, Raipur, Chhattisgarh; 15th June 2008.

- ‘Role of cytology in ovarian cancer’, symposium on ‘ovarian cancer’, AIIMS, New Delhi; 27 March 2009.
- ‘Cytology of common epithelial tumors of the lung’, 38th annual conference of Indian Academy of Cytology, Ahmedabad, Gujarat; 16 November 2008.

RESEARCH

Funded Projects

Completed

1. Evaluation of 1p and 11p loss of heterozygosity in hepatoblastoma and hepatocellular carcinoma. Venkateswaran K. Iyer. Funded by AIIMS (2006–2009). Funds: Rs 3.25 lakh.

Ongoing

1. Study of viral proteins and other molecular markers in Hepatitis E virus (HEV) infected cells using high throughput molecular techniques. S.K. Panda. Funded by DBT (2007–2010). Rs 65.85 lakh.
2. Investigation related to mechanism of entry of HEV into the host cells. S.K. Panda. Funded by DBT (2008–2011). Funds: Rs 65.91 lakhs.
3. Fund for improvement of S&T infrastructure in Universities and higher Educational Institutions (FIST). Funded by DST (2007–2012). Funds: Rs 2.7 crore.
4. Glial tumors: A correlative clinicopathological study of chromosomes 1p/19q status, epidermal growth factor receptor (EGFR) amplification and p53 expression. Dr Chitra Sarkar. Funded by ICMR (2007–2010). Funds: 16.5 lakh.
5. Study of the role of bone marrow derived mononuclear cells in peripheral nerve repair of adult rats. Vaishali Suri. Funded by ICMR (2006–09). Funds: Rs 18 lakh.
6. Acute thalamic involvement in severe head injury—an autopsy study with histopathological correlation. Chitra Sarkar (Co-PI). Funded by AIIMS (2006–09). Funds: Rs 2.2 lakh
7. Role of Sonic Hedgehog signaling in Human Cerebellum Development. Chitra Sarkar (Co-PI). Funded by NBRC, DBT (2007–09). Funds: Rs 15 lakh.
8. Efficacy and safety of AP 12009 in adult patients with recurrence or refractory anaplastic astrocytoma (WHO grade III) as compared to standard treatment with temozolomide or BCNU: A randomized actively controlled, open label clinical phase III study. Chitra Sarkar (Co-PI). Funded by Antisense Pharma, Germany (2007–10). Funds: Rs 25 lakh.
9. Development of nanoparticulate system for selective receptor specific macrophage targeting. AK Dinda. Funded by DBT (2007–09). Funds: Rs 30.90 lakh.
10. p16INK4a and E-cadherin expression profile in pre-cancerous lesions of cervix and cervical carcinomas’. Sandeep Mathur. Funded by AIIMS (2007–2008). Funds: Rs 1 lakh.

11. Analysis of Her-2/neu status on fine-needle aspiration cytology smears and its correlation with hormone receptor status, proliferation markers and apoptosis in breast cancer: A fluorescent in-situ hybridization (FISH) and immunocytochemistry study. Sandeep Mathur. Funded by CSIR (2009–2011). Funds: Rs 14 lakh.

Departmental Projects

Completed

1. p53, EGFR & HER2 receptor in osteogenic sarcomas
2. GBMs with long term survival – Role of cell cycle regulatory genes
3. Transplant glomerulopathy; An ultra structural, immunohistochemical and morphometric study
4. An ultrastructural study of glomerular changes in renal biopsy of HIV positive patients with proteinuria
5. Study of C4d deposition in peritubular capillaries of renal transplant biopsy and its correlation with morphological features of severity of rejection
6. Ultrastructural evidence of injury to endothelial mitochondria in calcineurin inhibitor toxicity and its correlation with immunohistochemical detection of peroxynitrite and VEGF.
7. Idiopathic collapsing glomerulopathy: a clinicopathologic analysis of 20 cases
8. Atypical hemolytic uraemic syndrome: Histopathological features and significance of anti factor-H antibodies and CFHR1/CFHR 3 gene deletions
9. Hepatitis B-virus associated nephropathy: experience of a tertiary care centre in north-India
10. Focal segmental glomerulosclerosis in renal allograft biopsies: a clinico-pathologic study
11. Focal segmental glomerulosclerosis in idiopathic membranous glomerulonephritis: A morphological and stereological analysis of 15 cases
12. Histopathological spectrum and role of vascular endothelial growth factor (VEGF) and peroxynitrite radicals in development of calcineurine inhibitor (CNI) toxicity in renal allografts: lessons from protocol allograft biopsies
13. Rule-based decision support system in glomerular diseases: role in diagnosis and teaching
14. The spectrum of 11p13 and 11p15 deletions in Wilms tumor with histological correlation
15. Immunohistochemical and image analytic characterization of primary and recurrent giant cell tumor of bone
16. To analyse Immunohistochemical and Image Analytic Characterization of stromal Components in Primary and recurrent Giant cell tumor of Bone
17. Role of Urinary Cytology and Immunocytochemistry in the Diagnosis and Management of Acute Renal Allograft Dysfunction

Ongoing

1. Primary and secondary glioblastomas: A study of EGFR amplification, EGFR VIII mutants and p53 expression.
2. Study of gliomagenesis: Possible involvement of CNS developmental pathway
3. Study Of Limb Girdle Muscular Dystrophy (LGMD) Patients In Indian Population Using Calpain-3, Dysferlin And Sarcoglycan Protein Analysis
4. Clinicopathological study of angiogenesis in glioblastoma multiforme
5. Childhood GBMs : A clinicopathological and molecular genetic study
6. Study of iron metabolism associated proteins in renal cell lines in hyperglycemic and hypernatraemic condition
7. Role of macrophage in modulation of renal fibrosis
8. Ultrastructural study of podocyte changes in immune and non-immune mediated glomerular diseases
9. Study of endocytosis and fate of calcium phosphate based and gold nanoparticle
10. Modulation of macrophage function with nanoparticle
11. Airway remodeling in Bronchial Asthma; A study in experimental mice model.
12. Nanoparticle mediated antigen presentation and modulation of antigen processing by macrophage
13. Immuno-localization of podocalyxin and synaptopodin in patients with steroid resistant nephrotic syndrome
14. Clinico-pathological spectrum of hereditary nephritis (Alport's syndrome): an Indian perspective.
15. A study of histomorphological, immunohistochemical and ultrastructural study of renal toxicity induced by calcineurin inhibitors in childhood steroid resistant nephrotic syndrome (SRNS)
16. 1p and 11p Loss of heterozygosity in hepatoblastoma
17. Analysis of Her-2/neu, Proliferation Markers, Estrogen and Progesterone receptors and Apoptosis in Breast Cancer patients: An immunocytochemistry and Fluorescent *in situ* Hybridization (FISH) study.
18. Expression of p16 INK4a, E-cadherin, and Ki 67 in cervical cancer and its precursors compared with hyperplastic and metaplastic squamous epithelium of chronic cervicitis

Collaborative Projects

Completed

1. Pharmacological and molecular studies on cardioprotective potential of cox-2 inhibitor and indigenous antioxidant drugs in experimentally induced myocardial infarction (with Pharmacology)

2. Effect of blocking of HIF1 α gene expression on macrophage endocytosis and generation of ROS (with JNU, Delhi)
3. Detection and molecular characterization of *Pneumocystis jiroveci* from patients with clinical diagnosis of interstitial pneumonia (with microbiology)
4. To study the prevalence and predictors (clinical and laboratory) of celiac disease in patients with down syndrome. (with Paediatric, Pathology)
5. Characterization of thymoma using f18 fluorodeoxyglucose positron emission tomography (FDG PET-CT) and its correlation with histopathology. (with Pathology, Surgery and Nuclear Medicine)
6. Role of centchroman in regression of mastalgia and regression of fibroadenoma and its correlation to histopathology and estrogen and progesterone receptor (with Pathology, Surgery)
7. Studies of the role of intracellular and extracellular factors on the expression of LDL receptor and SREBP2: Correlation with cellular uptake of LDL and cell apoptosis (with Pathology, Biochemistry)
8. A pilot study comparing p53, p16, k-ras and c-erbB-2 expression in non neoplastic Gall Bladder epithelium and gallbladder cancer cases (with Pathology, Medical Oncology, Surgical Oncology)

Ongoing

1. Advanced centre for Liver diseases. Funded by ICMR for 5 years (2004–2009). (with Professor S. K. Acharya)
2. Analysis of immunomodulation property of IFN-g on classical, nonclassical MHC 1 and TGF-b expression in astrocytic tumors and their relevance in immunotherapy (with Neurobiochemistry, AIIMS).
3. Study of HIC-1 in tumorigenesis and cell response (with Biochemistry, AIIMS)
4. Effects of administration of human umbilical cord blood cells (HUCBG) in combination with melatonin versus HUCBG in rat with stroke (with Neurology)
5. Altered DNA sequences in gliomas: characterization of changes and context sequences with reference to tumor type (with Biochemistry)
6. Characterization of the properties of an amplified region of DNA in primary meningeal tumours (with Biochemistry)
7. Analysis of FAT gene in glial tumors (with Biochemistry)
8. Pilocytic astrocytomas : correlation of clinical features and outcome with proliferation index and angiogenesis (with Neurosurgery)
9. Histomorphometric analysis of intrapulmonary vessels in patients undergoing Bi-Directional Glenn and total cavopulmonary connection (with CTVS).
10. Left ventricular muscle biopsy in patients with Transposition of great arteries with prepared and regressed left ventricle (with CTVS)..

11. To study the 'Role of ^{18}F -FDG-PET-CT and MRI in Osteosarcoma for Chemotherapy Response Evaluation and Initial Staging (with Dr BRA IRCH)
12. Development of hydrogel patch with nanoparticle impregnation for wound healing (with Centre for Biomedical Engineering, IIT, Delhi).
13. Study on temperature responsive polymeric nanoparticle for anticancer drug delivery (with Centre for Biomedical Engineering, IIT, Delhi).
14. Development of amphotericin B loaded gelatin nanoparticles for specific macrophage targeting in Leishmaniasis (with Centre for Biomedical Engineering, IIT, Delhi)
15. Development of tumor targeting with nanogel system (with Centre for Biomedical Engineering, IIT, Delhi).
16. Role of macrophage and oxidative stress in airway remodeling (with IGIB, Delhi).
17. Fabrication of Tissue Engineering Scaffolds using Bubbles and their Biocompatibility Studies for Tissue Engineering Applications (Department of Textile Engineering, IIT, Roorkee)
18. Molecular detection and genotyping of HPV in cervical cancer—a population based study (with Biochemistry)
19. Study of genetic polymorphisms of dihydropteroate synthase (DHPS) gene in *Pneumocystis jiroveci* isolates: correlation with clinical outcome in patients with PCP (with Microbiology)
20. Development of HPV candidate vaccine: Preparation of a clinical trial site/cohort for vaccine testing (with Gynaecology).
21. Randomized study of preoperative short course radiotherapy (25 Gy) vs preoperative concurrent radiotherapy (45Gy) and chemotherapy followed by surgery in rectal cancer (Funded by ICMR). (With Radiotherapy).
22. A randomised phase II biomarker neoadjuvant study of sequential AC followed by Ixabepilone compared to sequential AC followed by Paclitaxel in women with early stage breast cancer not over expressing HER-2 and estrogen receptors (with Medical Oncology)
23. Correlation of HPV DNA testing with residual disease in treated cases of CIN (with Obstetrics and Gynaecology).
24. Age related fibrotic changes in islets of Langerhans and ductular system of human pancreas. (with Pathology, Anatomy)
25. Gene deletions and mutations in Wilm's tumour: correlation with histopathology and outcome (with Pathology, Paediatric Surgery, Genetics)
26. A Randomized controlled trial to determine gluten threshold for paediatric patients with celiac disease (with Pathology, Physiology, Paediatrics)
27. Evaluation of focal renal mass lesions using MDCT & MR with diffusion-weighted imaging (with Pathology, Radiodiagnosis, Urology)

28. Effect of Anti-TFN- Û therapy on severity of experimental acute pancreatitis and subsequent pancreatic regeneration (with Pathology, Anatomy)
29. The correlation of VEGF and TGF BETA1 expression of clinico-pathological response, ER, PR and HEP2/neu STATUS in locally advanced breast cancer: A pilot study (with Pathology, Radiation Oncology)
30. Analysis of Her-2/neu, proliferation markers, estrogen and progesterone receptors and apoptosis in Breast cancer patients; An immunocytochemistry and fluorescent in situ Hybridization (FISH) study) (with Pathology, Surgery).
31. Study to evaluate neoadjuvant chemotherapy followed by postoperative chemoradiotherapy and Nassium the expression of multidrug resistance gene and cell cycle specificity in locally advanced gastric and gastroesophageal junction adenocarcinoma (with Pathology, Radiation Oncology)
32. Cysts, tumours and tumour like lesions of the jaw: evaluation by panoramic radiographs and multi detector computed tomography with limited MRI correlation (with Pathology, Radio-Diagnosis)
33. Correlation of Hepatitis B virus DNA in serum with viral core and surface antigen detection in liver tissue by immunohistochemistry in occult hepatitis B virus infection (with Pathology, Gastroenterology).
34. Relationship between polymorphisms in drug metabolizing enzymes, CYP1A1 and GSTM1 and the risk of developing oral precancer and cancer among consumers of tobacco and chewing product. Funded by ICMR task force project cancer.
35. Histological diagnosis of Celiac disease and its correlation with other markers (with Pathology, Paediatrics)
36. Histopathology of Acute and Subacute Liver Failure (with Pathology, Gastroenterology)
37. A study of molecular markers in cervical cancers (with Pathology, Biochemistry, Obstetrics and Gynecology)
38. Emerging parasitic etiologies in malabsorption syndromes (with Pathology, Microbiology, Paediatrics, Gastroenterology)
39. Effect of Glutamine Supplementation on structure and function of the intestines in patients with Crohn's Disease (with Pathology, Gastroenterology)
40. Evaluation of Curcumin in advanced Cervical Cancer (with Pathology, Biochemistry, Obstetrics and Gynecology, Radiation Oncology)
41. Role of bone marrow derived mononuclear stem cells in obstructive cholangiopathy.

PUBLICATIONS

1. Madan K, Batra Y, Sreenivas V, Mizokami M, Tanaka Y, Chalamalasetty SB, *et al.* HBV genotypes in India: Do they influence disease severity?; HBV genotypes in India: do they influence disease severity? *Hepatal Res* 2009;**39**:157–63.

2. Madan K, Batra Y, Jha JK, Kumar S, Kalra N, Paul SB, *et al.* Clinical relevance of HBV DNA load in patients with chronic hepatitis B infection. *Trop Gastroenterol* 2008;**29**:84–90.
3. Bhatia V, Singhal A, Panda SK, Acharya SK: A 20-year single-centre experience with acute liver failure during pregnancy: Is the prognosis really worse? *Hepatology* 2008;**48**:1577–85.
4. Kar UK, Satpathy G, Das BK, Panda SK. Characterization of *Streptococcus pneumoniae* ophthalmic, systemic and commensal isolates by pulsed-field gel electrophoresis and ribotyping. *Indian J Med Res* 2008;**127**:171–7.
5. Rehman S, Kapur N, Durgapal H, and Panda SK. Subcellular localization of hepatitis E virus (HEV) Replicase. *Virology* 2008;**370**:77–92.
6. Jain A, Rishi A, Suri V, Garg A, Sharma MC, Sarkar C, *et al.* Recurrent ependymoma with cartilaginous metaplasia in an adult: report of a rare case and review of literature. *Neuropathology* 2009;**29**:323–6.
7. Jain A, Sharma MC, Sarkar C, Bhatia R, Singh S, Handa R. Increased expression of cell adhesion molecules in inflammatory myopathies: Diagnostic utility and pathogenetic insights. *Folia Neuropathol* 2009;**47**:33–42.
8. Sharma MC, Jain D, Sarkar C, Suri V, Garg A, Singh M, *et al.* Spinal teratomas: A clinicopathological study of 27 patients. *Acta Neurochir (Wien)* 2009;**151**:245–52.
9. Jain A, Suri V, Sinha S, Aggarwal D, Sharma MC, Sarkar C. A large posterior frontal solid cystic mass in 1-year-old female. *Neuropathology* 2009; **13**: 323-326.
10. Chosdol K, Misra A, Puri S, Srivastava T, Chattopadhyay P, Sarkar C, *et al.* Frequent loss of heterozygosity and altered expression of the candidate tumor suppressor gene ‘FAT’ in human astrocytic tumors. *BMC Cancer* 2009;**7**:9:5.
11. Gupta R, Suri V, Jain A, Sharma MC, Sarkar C, Singh MM, *et al.* Anaplastic meningioma in an adolescent: A report of a rare case and brief review of literature. *Childs Nerv Syst* 2009;**25**: 241–5.
12. Agarwal S, Suri V, Rishi A, Shukla B, Garg A, Sharma MC, *et al.* Glioneuronal tumor with neuropil-like islands: A new entity. *Neuropathology* 2009;**29**:96–100.
13. Sachin S, Goyal V, Singh S, Shukla G, Sharma MC, Gaikwad S, *et al.* Clinical spectrum of Hallervorden-Spatz syndrome in India. *J Clin Neurosci* 2009;**16**:253–8.
14. Borkar SA, Satyarthee GD, Das P, Suri V. Isolated brain metastasis from malignant melanoma of choroid seven years following enucleation. *Neurol India* 2009;**57**:92–4.
15. Mannan AA, Sharma MC, Singh MK, Bahadur S, Hatimota P. Vascular hamartoma of the paranasal sinuses: report of 3 rare cases and a short review of the literature. *Ear Nose Throat J* 2009;**88**:740–3.
16. Jain D, Sharma MC, Sarkar C, Gulati S, Kalra V, Singh S, *et al.* Congenital myopathies: A clinicopathological study of 25 cases. *Indian J Pathol Microbiol* 2008;**51**:474–80.

17. Sarkar C. Molecular profiling of tumours by immunohistochemistry. *Natl Med J India* 2008; **21**:154–5.
18. Suri V, Das P, Jain A, Sharma MC, Borkar SA, Suri A, Gupta D, Sarkar C. Paediatric glioblastomas: A histopathological and molecular genetic study. *Neuro Oncol* 2009; **11**:274–80.
19. Kasliwal MK, Suri A, Rishi A, Suri V, Sharma BS, Sarkar C. Symptomatic bilateral cerebellar mass lesions: An unusual presentation of intracranial xanthogranuloma. *J Clin Neurosci* 2008; **15**:1401–4.
20. Jain D, Sharma MC, Sarkar C, Suri V, Sharma SK, Singh S, *et al.* Tubular aggregate myopathy: A rare form of myopathy. *J Clin Neurosci* 2008; **15**:1222–6.
21. Tripathi M, Singh MS, Padma MV, Gaikwad S, Bal CS, Tripathi M, *et al.* Surgical outcome of cortical dysplasias presenting with chronic intractable epilepsy: A 10-year experience. *Neurol India* 2008; **56**:138–43.
22. Chandra PS, Padma VM, Shailesh G, Chandreshkar B, Sarkar C, Tripathi M. Hemispherotomy for intractable epilepsy. *Neurol India* 2008; **56**:127–32.
23. Suri V, Sharma MC, Suri A, Karak AK, Garg A, Sarkar C, *et al.* Myelolipomatous change in an interhemispheric lipoma associated with corpus callosum agenesis: Case report. *Neurosurgery* 2008; **62**:E745.
24. Jain D, Sharma MC, Sarkar C, Suri V, Garg A, Mahapatra AK, *et al.* Pituitary gland involvement by a gamma delta hepatosplenic lymphoma, a mimicker of pituitary adenoma: report of a rare case. *J Neurooncol* 2008; **88**:237–41.
25. Jain D, Sharma MC, Kulkarni KK, Aggrawal S, Karak AK. Urorectal septum malformation sequence: a report of seven cases. *Congenit Anom (Kyoto)* 2008; **8**:174–9.
26. Sinha S, Sharma MC, Sharma BS. Malignant paraganglioma of the sellar region mimicking a pituitary macroadenoma. *J Clin Neurosci* 2008; **15**:937–9.
27. Gupta R, Sharma MC, Attri S, Guleria S. Testicular metastasis of extraskeletal myxoid chondrosarcoma: report of first case. *Urology* 2008; **71**: 1–4.
28. Kasliwal MK, Gupta DK, Mahapatra AK, Sharma MC. Multicentric cerebellopontine angle glioblastoma multiforme. *Pediatr Neurosurg.* 2008; **44**:224–8.
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43. Khaira A, Upadhyay BK, Sharma A, Das P, Mahajan S, Makhariya G, Dinda AK, Agarwal SK, Tiwari SC. Hepatitis B virus associated focal and segmental glomerular sclerosis: report of two cases and review of literature. *Clin Exp Nephrol* 2009;**13**:373–7.
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PAPERS AND POSTERS:

1. Jha P, Sarkar C, Sharma MC, Suri V. Genome wide structural variations in malignant glioma samples of Indian population. Human Genome Meeting (HUGO) 2008 Workshops, Hyderabad; September 2008.
2. Sarkar C. Paediatric vs. adult glioblastomas: A comparative histopathological and molecular genetic study. 9th European Congress of Neuropathology, Athens, Greece; 8–10 May 2008.
3. Sarkar C. Clinicopathological Study of Limb Girdle Muscular Dystrophies (LGMD) in Indian patients. Annual Conference of Indian Academy of Neurology, New Delhi; October 2008.
4. Suri V, Sarkar C, Sharma MC. Role of Molecular Genetics in High Grade Gliomas. Neurooncology CME, Vidyasagar Institute of Mental Health and neurosciences, New Delhi; 26 October 2008
5. Suri V, Sarkar C, Sharma MC. Molecular techniques in neuropathology. XI Annual conference of DNACON, AIIMS; February 2009.
6. Sarkar C. Paediatric vs. adult glioblastomas: A comparative histopathological and molecular genetic study. 9th European Congress of Neuropathology, Athens, Greece; 8–10 May 2008.
7. Sarkar C. Clinicopathological Study of Limb Girdle Muscular Dystrophies (LGMD) in Indian patients. Annual Conference of Indian Academy of Neurology, New Delhi; October 2008.
8. Suri V, Sarkar C, Sharma MC. Role of Molecular Genetics in High Grade Gliomas. Neurooncology CME, Vidyasagar Institute of Mental Health and neurosciences, New Delhi; 26 October 2008.
9. Suri V, Sarkar C, Sharma MC. Molecular techniques in neuropathology. XI Annual conference of DNACON, AIIMS; February 2009.
10. Sarkar C. Paediatric vs. adult glioblastomas: A comparative histopathological and molecular genetic study. 9th European Congress of Neuropathology, Athens, Greece; 8–10 May 2008.
11. Sarkar C. Clinicopathological Study of Limb Girdle Muscular Dystrophies (LGMD) in Indian patients. Annual Conference of Indian Academy of Neurology, New Delhi; October 2008
12. Suri V, Sarkar C, Sharma MC. Role of Molecular Genetics in High Grade Gliomas. Neurooncology CME, 26th October 2008. Vidyasagar Institute of Mental Health and neurosciences, New Delhi.
13. Suri V, Sarkar C, Sharma MC. Molecular techniques in neuropathology. XI Annual conference of DNACON, AIIMS; February 2009.
14. Jain A, Suri V, Sharma MC, Sarkar C. Demographic profile of gliomas at a tertiary institute in India. Delhi Chapter IAPM; 5th April 2008.

15. Agarwal S, Suri V, Sharma M, Sharma MC, Gaikwad S, Sarkar C. Primary myeloid sarcoma involving the left cerebellopontine angle in an adult female: a case report and review of literature. Delhi Chapter IAPM; 5 April 2008.
16. Shrivastav A, Suri V, Goel RK, Mohanty M, Suri A, Sharma BS, *et al.* Effect of bone marrow derived mononuclear cells on nerve regeneration in rat sciatic nerve transection model. Delhi Chapter IAPM; 5th April 2008.
17. Jagan C, Agarwal S, Suri V, DattaGupta S, Ray R, Sharma MC, Sarkar C. Rhabdoid tumors and tumors with rhabdoid phenotype – a perspective of 3 years experience at a tertiary care setting in India. Delhi Chapter IAPM; 5th April 2008.
18. Shukla B, Suri V, Sharma MC, Sarkar C. Assessment of 1p/19q status in oligodendroglial tumours by interphase FISH assay. Delhi Chapter IAPM; 5th April 2008.
19. Srivastava A, Suri V, Goel RK, Mohanty S, Suri A, Sharma BS, Sarkar C. Effect of bone marrow derived mononuclear cells on nerve regeneration in rat sciatic nerve transection model. XI Annual conference of DNAICON, AIIMS; February 2009.
20. Prerana Jha, Jha P, Pathak P, Scaria V, Suri V, Sharma MC, Chosdol K, Sinha S, Kale S, Suri A, Gupta D, Sharma BS, Mukerji M, Sarkar C. Genome wide structural variations and copy number analysis in malignant glioma samples using high-density single-nucleotide polymorphism arrays. XI Annual conference of DNAICON, AIIMS; February 2009.
21. Jain A, Sharma MC, Suri V, Singh S, Bhatia R, Sarkar C. Role of histochemistry and electron microscopy in the diagnosis of mitochondrial myopathies. XI Annual conference of DNAICON, AIIMS; February 2009.
22. Pathak P, Sharma MC, Suri V, Singh S, Bhatia R, Sarkar C. Dysferlin protein analysis in LGMD2B, a universal approach for diagnosis: First report from India. XI Annual conference of DNAICON, AIIMS; February 2009.
23. Das P, Puri T, Jha P, Suri V, Sharma MC, Sharma BS, Gupta A, Sarkar C. Glioblastoma multiforme with long term survival. XI Annual conference of DNAICON, AIIMS; February 2009.
24. Agarwal S, Shukla B, Suri V, Pathak P, Sharma MC, Gupta D, Sharma BS, Suri A, Halder A, Sarkar C. Assessment of 1p and 19q deletion status by interphase Fluorescence in-situ hybridization assay and correlation with p53 and EGFR expression: A comparative study in oligodendroglial, mixed oligoastrocytic and astrocytic tumors. XI Annual conference of DNAICON, AIIMS; February 2009.
25. Makharia GK, Srivastava S, Singh U, Aggarwal A, Puri K, Sreenivas V, *et al.* Clinical, endoscopic and histological predictors for differentiation between Crohn's disease and intestinal tuberculosis. Paper presented at the Asia Pacific Digestive Diseases Week, New Delhi; 13–16 September 2008.
26. Goswami P, Singh N, Khadgawat R, Datta Gupta S, Makharia GK. Response to treatment in adult patients with celiac disease. Poster presented at the Asia Pacific Digestive Diseases Week, New Delhi; 13–16 September 2008.

27. Srivastava S, Makharia GK, Singh U, Goswami P, Tripathi M, Datta Gupta S, Joshi YK. Development of a Therapeutic algorithm for management of intestinal tuberculosis and Crohn's Disease in Tuberculosis endemic area. Poster presented at the Asia Pacific Digestive Diseases Week, New Delhi; 13–16 September 2008.
28. Yadav P, Makharia GK, Mirdha BR, Bhatnagar S, Datta Gupta S. Intestinal coccidial and microsporidial infections in patients with chronic diarrhea and malabsorption. Poster presented at the Asia Pacific Digestive Diseases Week, New Delhi; 13–16 September 2008.
29. Khan MA, Sengupta J, Mittal S, Datta Gupta S, Sharma R, Ghosh D, cDNA based expressional array analysis of human ectopic and eutopic endometrium. Poster presented at the International Congress on Bio-immuno Regulatory Mechanism associated with Reproductive organs relevance infertility and sexual transmitted infection. National Institute of Immunology, New Delhi. Poster awarded the Best Poster Award; 9–13 February 2009
30. Hasan Md. R, Chattopadhyay T.K., Datta Gupta S, Chauhan SS, Ralhan R. Clinical significance of E-cadherin and β -catenin expression in esophageal squamous cell carcinoma. Poster presented at the 28th Annual Convention of Indian Association for Cancer Research & International Symposium: Emerging Challenges and Approaches in Cancer Biology., Indian Institute of Science, Bangalore; 21–24 February 2009.
31. Sharma G, Mirza S, Parshad R, Datta Gupta S, Hazara P, Ralhan R. Prognostic significance of p16INK4A, p 14ARF and *Cyclin* D2 hypermethylation in tumor and serum of invasive breast cancer patients. Poster presented at the 28th Annual Convention of Indian Association for Cancer Research & International Symposium: Emerging Challenges and Approaches in Cancer Biology., Indian Institute of Science, Bangalore; 21–24 February 2009.
32. Mirza S, Sharma G, Parshad R, Datta Gupta S, Ralhan R. Prognostic significance of RASSF1A and BRCA 1 hypermethylation in Indian Breast cancer patients. Poster presented at the 28th Annual Convention of Indian Association for Cancer Research and International Symposium: Emerging Challenges and Approaches in Cancer Biology., Indian Institute of Science, Bangalore; 21–24 February 2009.
33. Tripathi SC, Matta A, Chauhan SS, Shukla NK, Datta Gupta S, Siu K.W. M, Ralhan R. Prognostic significance of 14-3-3zeta / 14-3-3 sigma in head and Neck/Oral Squamous cell carcinoma (HNSCC). Poster presented at the 28th Annual Convention of Indian Association for Cancer Research & International Symposium: Emerging Challenges and Approaches in Cancer Biology., Indian Institute of Science, Bangalore; 21–24 February 2009.
34. Hasan Md R, Sharma R, Chattopadhyay TK , Datta Gupta S, Chauhan SS, Ralhan R. Clinical significance of E-cadherin and slug in esophageal squamous cell carcinoma. Poster presented at RGCON 2009, 8th International Conference: Focus on Lung and Esophageal Cancer, New Delhi; 27–29 March 2009.
35. Dr VK Iyer, A Chopra, S Agarwala. Fine needle aspiration cytology of paediatric liver tumours with classification and prognostication using DNA ploidy and apoptotic gene expression in SIOP, Berlin ,Germany; October 2008.

PATIENT CARE

Laboratory services

Surgical Pathology Laboratory

Specimens processed	37324
Special stains	29564
Frozen sections	594

Cytopathology Laboratory

Total specimens **19,065**

FNAC (out patient)	6962
Exfoliatives routine	11,191
Millipore preparations	221
Immunocytology Specimens	194

Autopsies performed **19**

Electron microscopy

Specimens processed 888

Immunohistochemistry Laboratory

Specimens processed 14,702

Neuropathology

Neuropathology surgical specimens 2,744

Immunohistochemistry 4,219

Muscle biopsies:

Total number received 340

Muscle enzyme histochemistry 537

Myelin stain 155

Frozen sections 522

Tissue culture lab

Section cutting of blocks for research: 5418

H&E Staining: 1376

Special Stains [Warthin Starry, AB-Pas, Sirius Red]:	785
Immunohistochemistry:	1148
Frozen Sections:	695
Renal pathology Urine sediment analysis	910
Immunofluorescence of kidney biopsies	605
Electron microscopy of kidney biopsies	120
Cardiac pathology	
Routine Cases	1236
Research Cases	156
Poly. L Lysine (slides)	20,026
Special stains	312
Unstained	126
Hepatic pathology	
Markers for hepatitis viruses	
HBs Ag	1,490
HBe Ag	1,320
HBc-IgM	176
HAV IgM	320
Anti-HCV IgG	624
Anti-HEV IgM	86

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Dr Chitra Sarkar was elected as Fellow Royal College of Pathologists (FRCPath), London, April 2008; She is one of the 100 distinguished 'Women in science', India whose autobiography/biography has been published in an Indian Academy of Sciences' book entitled 'Lilavati's Daughters'.

P Das, T Puri, P Jha, V Suri, M C Sharma, BS Sharma, A Gupta, C Sarkar won the First Prize in Neurosurgery for the poster entitled 'Glioblastoma multiforme' with long-term survival in the XI annual conference of DNA (DNA CON- 2009), AIIMS, 6–7 February 2009.

S Agawam, B Shukla, V Suri, P Pathak, MC Sharma, D Gupta, BS Sharma, A Suri, A Halder, C Sarkar won Second Prize for paper entitled 'Assessment of 1p and 19q deletion status by interphase Fluorescence in-situ hybridization assay and correlation with p53 and EGFR expression: A comparative study in oligodendroglial, mixed oligoastrocytic and astrocytic tumours, In the XI annual conference of DNA (DNA CON- 2009); AIIMS 6–7 February.

P Pathak, MC Sharma, V Suri, S Singh, R Bhatia, C Sarkar won First Prize for Neurology for the poster entitled ‘Dysferlin protein analysis in LGMD2B, a universal approach for diagnosis: First report from India’, XI annual conference of DNA (DNA CON- 2009)), AIIMS 6–7 February.

Dr Seema Kaushal, Dr VK Iyer, Dr S Mathur won Second prize for best oral presentation for paper titled: Fine needle aspiration cytology of medullary carcinoma thyroid, 38th Annual Conference, Indian Academy of Cytologists, Ahmedabad, 2008.

Dr. Vaishali Suri’s recent publication in 2009 on ‘Genetic pathways in pediatric glioblastomas’ in Neuro-Oncology (Suri V, Das P, Jain A, Sharma MC, Borkar SA, Suri A, Gupta D, Sarkar CJ). Pediatric glioblastomas: A histopathological and molecular genetic study. *Neuro Oncol.* 2008 Dec 9. (Epub ahead of print) PubMed PMID: 18981259.) has been included in the Research Highlights sections of ‘*Nature Clinical Practice Neurology*’.

Dr AK Dinda was appointed as an expert and chairperson in ‘Application of Nanotechnology in Health and Textile Sectors’, Emerging Technologies In Developing Countries: Capabilities And Governance Issues as a part of the DS DS (Delhi Sustainable Development Summit), Tata Energy Research Institute (TERI) at India International Centre, 4 February 2009; He was nominated as one of the Indian resource persons for organizing Indo-US workshop on ‘Cancer Nanotechnology’, Delhi, 4–6 February 2009; was elected for the post of the Honorary Editor of Journal of Indian Society of Renal and Transplantation Pathology for the year 2008–2010.

VISITING SCIENTISTS

Dr Atul Bhan, Professor, Harvard University, Boston, USA visited the Department of Pathology and delivered a lecture, AIIMS, New Delhi; 10 November 2008.

9.28 Pharmacology

Professor and Head

Y. K. Gupta

Professors

V.L.Kumar

Kamal Kishore

S.K. Maulik

N.R. Biswas

(On leave w.e.f Sep 2007)

Associate Professors

D.S. Arya

Assistant Professors

Jagriti Bhatia

Jatinder Katyal

K.H.Reeta

Surender Singh

Scientists

Sujata Joshi
Thomas Kaleekal

Sharda S. Peshin

Amita Srivastava
Nabanita Halder

EDUCATION

The department is engaged in the teaching programme of MB,BS (3rd, 4th and 5th semester), BSc Nursing (Hons), MSc, MD, PhD and DM (Clinical Pharmacology) courses.

Continuing Medical Education

Organized by the department

- International Conference on Translational Pharmacology and 41st Annual Conference of Indian Pharmacological Society, AIIMS, New Delhi; 18–20 December 2008.
- Parallel pre-conference workshops on ‘Getting started in research and scientific communications’ and ‘Research methodologies in basic and clinical pharmacology’, AIIMS, New Delhi; 16–17 December 2008.

National and International Conferences

Lectures delivered

Y. K. Gupta

- ‘Clinical trials: The heart of medical science’, Shangri La Hotel, New Delhi; 9 July 2008.
- ‘Mercury release in the environment’, Training course on Mercury Management in Fluorescent Lamps, Lucknow; 6–8 August 2008.
- Workshop on ‘Management of occupational health and safety: Scopes and challenges’, National Institute of Occupational Health, Ahmedabad; 30 September to 1 October 2008.

- Workshop on ‘Life style disease and occupation’, National Institute of Occupational Health, Ahmedabad; 5–7 November 2008.
- Seminar on ‘Emerging food safety risks—What can we expect and what can we do’, Shri Ram Institute for Industrial Research, New Delhi; 11 November 2008.
- Workshop on ‘Clinical Trial’, Pune; 26 November 2008.
- Seminar on ‘Development for the medicinal chemistry based on biologically active natural products in the sub-tropical zone’, Tokyo, Japan; 13–15 January 2009.
- Seminar on ‘Human toxicology and environmental health: New frontiers and future challenges’, Indian Society of Toxicology, Aligarh Muslim University; 2 February 2009.
- 4th RBF International symposium on ‘Recent advances in pharmaceutical sciences’, 3–5 February 2009.
- Plenary session on ‘Medicinal preparedness and mass casualty management’, National Disaster Management Authority, New Delhi; 12 February 2009.
- Leader in pre-conference workshop, Second Drug Safety Asia Conference, Singapore; 16 February 2009.
- ‘Synergy approach by Academic, Industry, Regulators and Media for impactful Pharmacovigilance and Drug Safety’, Second Drug Safety Asia Conference, Singapore; 18 February 2009.
- Symposium on ‘Clinical research and training’, NIPER, Chandigarh; 20–22 February 2009.
- ‘Drug and environment interaction’, First Annual National Seminar of the Indian Society of Toxicology, Aligarh Muslim University; 22 February 2009.
- ‘Pharmacovigilance—an overview’, Seth GS Medical College and KEM Hospital; 7 March 2009.
- ‘Prerequisites including regulatory requirements for clinical trials and safety evaluation of Unani Drugs’, Workshop on project/report writing, CCRUM; 18 March 2009.
- CME on ‘Pharmacovigilance of ayurvedic drugs’, Banaras Hindu University; 19 March 2009.
- Oration on ‘How to be a good doctor’, National Medicos Organization Conference, New Delhi; 29 March 2009.

Dr K.H. Reeta

- ‘Rational use of drugs and rational prescribing’, Interns Orientation Programme, CMET, AIIMS, New Delhi; 7 February 2009.
- ‘How to write a research proposal and article’, Reorientation training programme, Department of Ilmul Advia, National Institute of Unani Medicine, Bangalore; 13 November 2008.
- ‘Role and functioning of ethics committee’, Training course on Health and Human Rights, National Institute of Health and Family Welfare, New Delhi; 5 August 2008.

- ‘Phases of clinical trials’, Workshop on recent trends in Novel Drug Delivery Systems, Faculty of Pharmacy, Jamia Hamdard, New Delhi; 19 May 2008.

RESEARCH

Funded Projects

Ongoing

1. Assessment of awareness of environmental mercury pollution in healthcare system: Solutions and strategies for prevention. Y.K. Gupta, Sharda S. Peshin, Nabanita Halder. Funded by Ministry of Environment and Forests, Government of India for 2 years (2008–2010). Funds: Rs 21,14,796.
2. Pharmacological evaluation of plant extracts and their medical products. Y.K. Gupta. Funded by Ranbaxy research foundation. Rs. 17,29,246.
3. Safety study of UNIM-401 and UNIM-403 in the treatment of chronic plaque psoriasis. Y.K. Gupta, Surender Singh, K.H. Reeta. Funded by Department of AYUSH, Government of India for 1 year (2008–2009). Funds: Rs 8,02,864.
4. Reversal of mercury induced toxicity in rats by combination therapy: A novel approach. Y.K. Gupta. Funded by ICMR for 3 years.
5. Evaluation of antihypertensive potential of *Emblica officinalis* in DOCA-salt model of rat hypertension. Jagriti Bhatia. Funded by Institute Research Grant for one year (2008–2009). Funds: Rs 1lakh.
6. Comparative study of platelet aggregation, micro-inflammatory state and oxidative stress in renal transplant patients receiving different immunosuppressants. K.H. Reeta. Funded by Institute Research Grant for one year (2008–2009). Funds: Rs 1lakh
7. Standardization and pharmacological studies of widely practiced antiarthritic unani formulation ‘Majoon Suranjan’ based on classical unani literature. Surender Singh, Y.K. Gupta, Mohd Ali (Jamia Hamdard). Funded by Indian Council of Medical Research (ICMR), Government of India for 3 years (2007–2010). Funds: Rs 28.62 lakhlh.
8. A randomized open-label prospective study of effect of atorvastatin on insulin sensitivity and pancreatic beta cell function in type-2 diabetic mellitus patients. Surender Singh. Funded by Institute Research Grant for one year (2008–2009). Funds: Rs 1lakh

Completed

1. Clinical trial of a standardized preparation of *Terminalia arjuna* in patients with left ventricular dysfunction. S.K. Maulik, Sandeep Seth, K.H. Reeta. Funded by Department of Biotechnology for 4 years (2004–2008). Funds: Rs 23 lakh.
2. Modulatory effects of phytoadaptogens on cardiovascular and neurological changes induced by experimental stress in rats. S.K. Maulik, A.K. Dinda. Funded by DST for 3 years (2006–2009). Funds: Rs 19.28 Lakh.

3. Effect of chronic antiepileptic drug treatment on cognition and oxidative stress parameters in pentylenetetrazole – kindled rats. J.P.K. Katyal. Funded by Institute Research Grant for one year (2007–2008). Funds: Rs 1lakh.

Departmental Projects

Ongoing

1. Pharmacokinetic and toxicity profile of high dose methotrexate and its relationship with serum creatinine in Indian children
2. Role of central neurotransmitters on cardiac hypertrophy in rats
3. Effect of *Terminalia arjuna* on cardiac hypertrophy in rats
4. Effect of curcumin, genestein and rutin on experimental cardiac hypertrophy
5. Effects of atorvastatin and pioglitazone on endothelial dysfunction in non-diabetic patients with hypertension or stable angina
6. Study of antihypertensive potential of *Emblica officinalis* in rat model of hypertension

Completed

1. Plasma level monitoring of mycophenolic acid and clinical outcome in renal transplant patients.
2. Neurobehavioral evaluation of hydroalcoholic extract of *Emblica officinalis* with special reference to its antiepileptic activity.

Collaborative Projects

Ongoing

1. Efficacy and safety of concomitant use of nevirapine and rifampicin in patients co-infected with HIV and tuberculosis in India (with Department of Medicine). Kamal Kishore. Funded by NACO for 3 years (2008–2011). Funds: Rs 15 Lakh.
2. Estimation of oxidative stress during oral iron supplementation (daily vs weekly) with or without Vitamin C among anaemic pregnant mothers—An ICMR Task Force Study (with Department of Obstetrics and Gynaecology, AIIMS and Department of Obstetrics and Gynaecology, PGIMER, Chandigarh). S.K. Maulik, K.H. Reeta. Funded by the Indian Council of Medical Research, New Delhi for 3 years (2007–2010). Funds: Rs 16.27 Lakh.

PUBLICATIONS

Journals

1. Kumar VL, Roy S. Protective effect of latex of *calotropis procera* in Freund's complete adjuvant induced monoarthritis. *Phytother Res* 2009;**23**:1–5.
2. Kumar VL, Wahane VD. Current status of alpha-reductase inhibitors in the treatment of benign hyperplasia of prostate. *Indian J Med Sci* 2008;**62**:167–75.

3. Kumar VL, Srivastava A, Kumar V. Observations on the expression of bcl-2 gene in breast tumour and adjacent tissue. *Indian J Cancer* 2008;**45**:77.
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15. Ojha SK, Nandave M, Arora S, Mehra RD, Joshi S, Narang R, *et al.* Effect of comniphora mukul extract on cardiac dysfunction and ventricular function in isoproterenol-induced myocardial infarction *J Expt Biol* 2008;**46**:646–52.

Abstracts

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5. Reeta KH, Mehla J, Gupta YK. Curcumin prevents phenytoin-induced cognitive impairment. *Indian J Pharmacol* 2008;**40** (Suppl 2):S114–S115.
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10. Kumar R, Padhy BM, Reeta KH, Gupta YK. A questionnaire based survey of self medication behaviour among non-medical and medical students in India. *Indian J Pharmacol* 2008;**40** (Suppl 2):S210–S211.
11. Singh S, Gupta YK, Vinod N, Sweetey J. Evaluation of antiarthritic activity of majoon suranjan (a Unani compound formulation) in experimental model. *Indian J Pharmacol* 2008;**40** (Suppl 2):S155.
12. Joshi D, Gupta P, Doval DC, Gupta YK, Talwarl V, Bakshi S. Prevalence and pattern of complementary and alternative medicine use among cancer patients: A questionnaire based study. *Indian J Pharmacol* 2008;**40** (Suppl 2):S178.
13. Halder N, Peshin SS, Srivastava A, Gupta YK. Pesticide poisoning trend from data reported to National Poisons Information Centre. *Indian J Pharmacol* 2008;**40** (Suppl 2):S162.
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18. Bharti S, Wahane VD, Kumar VL. Protective effect of calotropis procera latex against ethanol induced gastric ulcers. *Indian J Pharmacol* 2008;**40** (Suppl 2):S68–69.
19. Gupta P, Chauhan A, Padhy BM, Gupta YK. Incidence pattern of poisoning with aluminium phosphide: A common pesticide in India. *Can J Clin Pharmacol* 2008;**15**:e570–571.

Books/Chapters in Books/Monographs

1. Singh S. *Pharmacology for Dentistry*. 1st ed. New Delhi: New Age International Publishers; 2007.

PATIENT CARE

Clinical Pharmacology Wing

To facilitate the patient care facilities and in-patient wards for various clinical pharmacological activities, a new private ward, ‘Clinical Pharmacology Wing’ had been taken up in the newly constructed wing in collaboration with Forensic Medicine.

Inductively Coupled Plasma–Atomic Emission Spectrophotometer (ICP-AES) model: Jobin Yvon Horiba JY-2000-2 has been installed on 12 January 2009 in the Clinical Pharmacology wing of Department of Pharmacology. ICP is a valuable multi-element tool for rapid analysis of trace metals in a variety of samples such as herbal and traditional ayurvedic formulation, biological samples (blood, urine and tissues).

Therapeutic Drug Monitoring Facility

Therapeutic drug monitoring has become important for dose titration of many drugs of narrow therapeutic margin. Monitoring of antiepileptic drugs, immunosuppressants such as cyclosporine and methotrexate has been done for patients free of cost.

The National Poison Information Centre

This centre is operational round the clock and caters to calls from all over the country in providing information about poisoning, management, symptomatology and specific antidotes. Some qualitative as well as quantitative tests are done in the centre for detection of various poisons.

National Pharmacovigilance Programme – Zonal Centre

AIIMS (Department of Pharmacology) was designated as the zonal pharmacovigilance centre for the North-East region of the country by the Central Drugs Standard Control Organization (CDSCO), Ministry of Health, Government of India. The centre received adverse drug reaction data from the peripheral and regional centres. The data is then collated and analysed for causality assessment of the adverse drug reactions and submitted to CDSCO.

Urinary Catecholamin test

Urinary catecholamines estimation for screening of pheochromocytoma was done for 208 patients.

AWARDS AND HONOURS

Dr Y.K. Gupta was elected Chairman, National Technical Committee on Good Laboratory Practices (GLP); Member, Review Committee, Central Council for Research in Ayurveda and Siddha (CCRAS); Member, Review Committee, Central Council for Research in Unani Medicine (CCRUM); Member, Expert Group to review toxicity data for indigenous manufacture of pesticide formulation, Directorate of Plant Protection, Quarantine and Storage; Ministry of Agriculture; Member, Task Force to increase the undergraduate and postgraduate seats at AIIMS; Chairman, Project Advisory Committee on Biomedical Science and Technology, Department of Science and Technology; Member, Screening Committee for HIV/AIDS under Golden Triangle Partnership Programme; Member, Working Group on Development of Antifertility Agent ISM Drug Pippalyadi Yoga; Member, Task Force, 'Quality standards of Indian medicinal plants' by ICMR; Member, Task Force, Science and Society, Division of Department of Science and Technology; Member, Review Group, Programme 'Charak' by DRDO, Delhi; Chairman, Ethics Committee, Fortis Flt Lt Rajan Dhall Hospital, Vasant Kunj, New Delhi; Expert Member, Biomedical Ethics Committee, Sitaram Bhartiya Institute for Science and Research; Chairman, Committee for Amendment of Insecticides Rules, 1971 of Plant Protection and Quarantine and Storage, Faridabad; Member, Task Force, Biotechnology for Medicinal and Aromatic Plants, Department of Biotechnology; Member, Ethics Committee, Research on Human Subjects, AIIMS; Member, National Disaster Management Authority, Government of India; Member, Navodaya Vidyalaya Samiti; Member, High Powered Committee, 'Global Environment Change and Health', ICMR; Member, Drug Selection Committee, AIIMS; Member, Project Review Group, INDO-US Project proposals of National Institute of Occupational Health, Ahmedabad; Member, Scientific Advisory Committee, Food and Water Safety, International Life Sciences Institute, India; Editor, *IJPP (Pharmacology)*, A national peer-reviewed journal of pharmacology and physiology in India; Coordinator, Zonal Centre of National Pharmacovigilance Programme under the aegis of the CDSCO; Member, Research Council, Central Drugs Research Institute, Lucknow and Central for Cellular and Molecular Biology, Hyderabad; Member, Institutional Review Board for National Institute of Health and Family Welfare, Delhi; Member, IUNS–IUPS–IUPHAR National Committee; Member, IUPHAR-IOSP International Committee; Member, Consumer Awareness Task Force, Ministry of Health and Family Welfare; Member, National Environmental, Engineering Research Institute, Nagpur; Member, Editorial Board, *Indian Journal of Experimental Biology*, *Indian Journal of Pharmacology*, *Journal of Ecophysiology and Occupational Health*, *Annals of Neurosciences*, *Indian Journal of Medical and Pediatric Oncology*.

Dr Surender Singh, Member, Pharmacopeia's Committee (Unani), Department of AYUSH, Ministry of Health and Family Welfare, Government of India; Member, Project Evaluation Committee, CCRUM, Department of AYUSH, Ministry of Health and Family Welfare, Government of India; Member, Appraisal Committee, AICTE, Ministry of HRD, Government of India; Member, Inspection Committee, AICTE, Ministry of HRD, Government of India; Member, Inspection Committee, Pharmacy Council of India, Government of India; Member, Board of Research Studies, GGS

Indraprastha University, New Delhi; Member, Board of Research Studies, Jamia Hamdard, New Delhi; Member, Board of Research Studies, Uttar Pradesh Technical University, Lucknow; Member, Programme Expert Committee, IGNOU, New Delhi.

9.29 Physical Medicine and Rehabilitation

Professor and Head

U. Singh

Additional Professor

Sanjay Wadhwa

Associate Professors

S.L. Yadav

Gita Handa

EDUCATION

The department is involved in teaching undergraduate MB,BS students through lectures, integrated seminars and practical demonstration/visit to department including prosthetic–orthotic workshop.

The department is providing MD (PMR) training to postgraduate students, besides orientation training of MHA, MD (Community Medicine, Pharmacology, Medicine, Rheumatology, Paediatrics), MS (Orthopaedics), DM (Neurology and Pediatric Neurology) students, WHO Fellows and postgraduate nursing students. The faculty has been involved in guiding postgraduate students of Orthopaedics, Pharmacology, Community Medicine and Paediatrics in their thesis, and Computer Facility Project trainees are also provided guidance.

Continuing Medical Education

The faculty and resident doctors of the department participated in a number of national and international CME programmes, conferences, seminars, symposia and panel discussions.

Lectures delivered

Dr U. Singh

- ‘Recent advances in the management of osteoporosis’, Second Annual Conference, Indraprastha Association of Rehabilitation Medicine, VMMC and SJ Hospital, New Delhi; 12–13 April 2008.
- ‘Rehabilitation management of osteoarthritis’, Mid-Term CME of Indian Association of Physical Medicine and Rehabilitation, RIMS, Imphal; 30–31 August 2008.
- ‘Rehabilitation of patients with neurological and neurosurgical disabilities’, Workshop on Neuro-nursing update 2008, College of Nursing, AIIMS, New Delhi; 30 September 2008.
- ‘No need for aggressive management of high cervical injuries with quadriplegia’, Conference on Trauma 2008, JPN Apex Trauma Centre, AIIMS, New Delhi; 29 November 2008.

Dr Sanjay Wadhwa

- ‘Technological development in disability rehabilitation’, National Seminar on ‘Emerging issues in disability studies in India’, Convention Centre, IGNOU, New Delhi; 5 March 2009.
- ‘Challenges in curriculum development for locomotor impairment’, National Seminar on ‘Emerging issues in disability studies in India’, Convention Centre, IGNOU, New Delhi; 6 March 2009.

- Attended the Third Meeting of the Committee formed under Baba Farid University of Health Sciences, Faridkot, for framing MPT Syllabus and Ordinances, PGI, Chandigarh; 12 March 2009.
- ‘Manpower development-carrier options in disability sector in India’, National Seminar, University of Delhi; 14 March 2009.

Dr Gita Handa

- Delivered a lecture on ‘Work, Women and Empowerment’, Sri Venkateshwara College, New Delhi; 10 September 2008.
- ‘Multidisciplinary team approach and a holistic setup for management of ASD’, WHO sponsored workshop on Autism, IHC, New Delhi; 27–28 September 2008.
- Attended ‘Knowledge workshop’, National Trust, Vishwa Yuva Kendra, New Delhi; 11 September 2008.

National and International Conferences

Dr U. Singh

First Author

- ‘Contribution of Ministry of Health and Family Welfare for disability prevention and rehabilitation of persons with disability’, Regional workshop on Disability, National Human Rights Commission, National Law School of India University, Bengaluru; 17–18 November 2008.
- ‘Trauma rehabilitation in India, where are we?’, Conference on Trauma 2008, JPN Apex Trauma Centre, AIIMS, New Delhi; 29 November 2008.
- ‘Physical activity in diabetes mellitus’, WHO-DGHS meeting to develop guidelines for physical activity for prevention of non-communicable diseases.
- ‘Recommendations for promoting physical activity among people of various age groups’, WHO workshop on ‘Developing guidelines for appropriate and adequate physical activity for different sections of population’, Department of Rehabilitation, Safdarjang Hospital, New Delhi; 5 December 2008.

One of the Authors

- Srikumar V, Singh U. ‘An unusual cause of paraplegia’, 2nd Annual Conference, Indraprastha Association of Rehabilitation Medicine, VMMC and SJ Hospital, New Delhi; 12–13 April 2008.
- Jose NM, Singh U. ‘A prospective study to evaluate sexual problems in patients with spinal cord injury’, 2nd Annual Conference, Indraprastha Association of Rehabilitation Medicine, VMMC and SJ Hospital, New Delhi; 12–13 April 2008.
- Badhal B, Singh U. ‘Issues and challenges in HIV myelopathy’. 2nd Annual Conference, Indraprastha Association of Rehabilitation Medicine, VMMC and SJ Hospital, New Delhi; 12–13 April 2008.

- Prakash O, Singh U. 'Effect of alprazolam in spasticity—A preliminary report', 2nd Annual Conference, Indraprastha Association of Rehabilitation Medicine, VMMC and SJ Hospital, New Delhi; 12–13 April 2008.

Mass Media

Invited expert, Live Phone in Programme on 'Spinal Cord Injury' in Total Health, DD News TV Channel; 14 December 2008.

Dr Sanjay Wadhwa

Participated as an Expert, Weekly programme on 'Heart Attack and Cardiac Rehabilitation' in Total Health, Telecast live from Doordarshan; 15 March 2009.

Lectures delivered

Dr Gita Handa

1. Talk on 'Rehabilitation of a case of cerebral palsy', EMPC TV Programme aired Live on *Gyan Bharti*, National Board of Examination, IGNOU; 12 March 2009.
2. Participated in radio-counseling session for DNB, IGNOU, Live phone-in programme; 12 March 2009.

Camps

Faculty and residents participated in different camps at Srikrishna Janambhumi Mandir at Mathura.

RESEARCH

Collaborative Projects

1. Development of ICF core set for hand conditions, in collaboration with ICF Research Branch of WHO CC FIC (DIMDI) Institute for Health and Rehabilitation Sciences, Ludwig-Maximilian University, Germany.
2. Skeletal muscle strength including its energy metabolism, bone mineral homeostasis and Th1/Th2 cytokines expression in Asian Indians with chronic hypo-vitaminosis D before and after oral cholecalciferol supplementation. (with Dr R Goswami, Endocrinology and Metabolism,). Applied for funding to ICMR.

PUBLICATIONS

Dr U Singh

Singh U. Rehabilitation Management of Osteoarthritis. Proceedings of Mid-Term CME, Indian Association of Physical Medicine and Rehabilitation, Imphal; 2008.

Dr Gita Handa

'Ethical issues in physiatrist practice', Editorial. *Indian J Phys Med Rehabil* 2008;**19**:1.

Chapter in the book

CAD-CAM Technic, Fabricating Prosthesis, In: Professor AK Agrawal, Vaigyanic (ed). *Prosthetic and Orthotic* (Kritrim ung and caliper). Technical Shabdavali Ayog, Manav Sansthan Vikas Mantralaya, Government of India, Uttar Pradesh Hindi Sansthan, Lucknow; 2008 (Book and chapter in Hindi).

PATIENT CARE

The department provided outpatient, inpatient and outreach services to people with disabilities. The department had many diagnostic as well as therapeutic facilities which include comprehensive rehabilitation facilities, balance laboratory, computerized dynamometry, electrophysiology laboratory, minor OT, etc.

OPD and special clinics

New Cases

OPD	12,805
Ballabgarh	4,352
Camps	250
Prosthetic and Orthotic	2,709
Total	20,116

Old Cases

OPD	9,224
OPD visits: PT section	15,040
OPD visits: OT section	20,713
OPD visits: MSW	3,117
OPD visits: Vocational counsellor	1,013
Disability evaluation clinic	198
Railway concession certificates	601
Prosthetic and orthotic	10,785
Minor OT procedures	2,097
Total	62,788

AWARDS AND HONOURS

Dr U. Singh won the Second **Prize in the Essay Competition (Non-Hindi Bhasha Bhashi Group) in Hindi** during the '*Hindi Pakhwara*' organized by AIIMS, 16 September 2008; Awarded the Second Prize for Hindi Dictation (Non-Hindi Bhasha Bhashi Group) for non-Hindi speaking persons given by Hindi Section, AIIMS, during 2007–08; continued to be Member, Sub-Committee on Locomotor, Leprosy Cured, etc., of Rehabilitation Council of India, Ministry of Social Justice and Empowerment; Chairman, Specialty Advisory Board in PMR, National Board of Examinations; Chairman, Technical Advisory Group, Mission Mode Project, Ministry of Social Justice and

Empowerment, Government of India; Member, Executive Council, National Institute for the Orthopaedically Handicapped, Kolkata; Inspector, GGS IP University, Government of NCT, Delhi; Inspector, Rehabilitation Council of India; Member BIS, Rehabilitation Appliances and Equipment for Disabled Sectional Committee (MHD 10); Consulting Editor and Reviewer, *Journal of Rehabilitation Council of India Locomotor and Associated Disabilities*; Editor, *Indian Journal of Physical Medicine and Rehabilitation*; Editorial Board Member, *Indian Journal of Physiotherapy and Occupations Therapy*; Member, Advisory Committee to monitor upgradation of facilities in the departments of PMR in medical colleges, DGHS, Ministry of Health and Family Welfare, Government of India; Chairman, Expert Committee for upgradation of facilities in the Departments of Physical Medicine and Rehabilitation in Medical Colleges, DGHS, Ministry of Health and Family Welfare, Government of India; Member, Academic Committee, National Institute for the Orthopaedically Handicapped, Kolkata; Chairman, Scientific Session I, during the Second Annual Conference, Indraprastha Association of Rehabilitation Medicine, VMMC and SJ Hospital, New Delhi, 12–13 April 2008; Member, Research Committee, Guru Nanak Dev University, Amritsar.

Dr Gita Handa was elected External Expert (thesis co-guide) for dissertation of a student from National Institute of Social Defence on ‘An epidemiological study of obesity among elderly in Delhi’; Assistant Editor, *Indian Journal of Physical Medicine and Rehabilitation*.

9.30 Physiology

Professor and Head

J. Sengupta

Professors

R. Mathur

K. K. Deepak
(on leave from 16.9.2008)

H. N. Mallick
(on leave from 25 April 2008)

D. Ghosh

S.C. Mahapatra

Additional Professors

K.P. Kochhar

Associate Professors

Ratna Sharma

Nalin Mehta

Assistant Professors

Suman Jain
Sanjay Kumar Sood

Ashok Kumar Jaryal
Anjana Talwar

Raj Kumar Yadav

EDUCATION

Undergraduate, Postgraduate, Paramedical

The department provided about 400 hours of teaching to the first year MB.BS students, and about 60 hours of teaching to students of BSc Nursing and allied courses, besides conducting MSc (Physiology) and MD (Physiology) courses and guiding PhD students.

Short-term and long-term training

The department provided short-term training for one month (20 August–19 September 2008) to a Professor and Head and a Professor, Department of Physiology, Gauhati Medical College, Assam; to a MSc student (Advance Zoology), Department of Zoology, H.N.B. Garhwal University, Srinagar, Garhwal for four months (5 March–4 July 2008) to a MSc student, Biomedical Sciences, Bundelkhand University, Jhansi for six month (25 February–24 August 2008) to a MSc student, Neuroscience, Gwalior for six month (25 February–24 August 2008) to a PhD Scholar, Institute of Genomics and Integrative Biology (CSIR) for two months (19 May–18 July 2008) to a PhD student, IGIPSS, Department of Physical Education and Sports Science, University of Delhi for one month (4 June–2 July 2008) to a PhD student, IGIPSS (Department of Physical Education and Sports Science, University of Delhi for one month (4 June–2 July 2008) to a BTech student from Jaypee Institute of Information Technology, Noida for one month (5 June–16 July 2008).

Continuing Medical Education

Organised by the department

The Department conducted the national workshop on ‘Assessment Methods for Learning Evaluation in Basic Medical Sciences’ from 22–24 September 2008. The workshop was attended by 37 faculty members from the Anatomy, Physiology, Biochemistry and pre-medical disciplines from various

medical colleges across the country . The workshop was an extensive ‘hands-on’ training in groups for making, analysing and improving questions for each tool of assessment. The organizing committee was: J. Sengupta (Chairperson), A. Talwar (Organizing Secretary), R. Sharma (Finance Secretary), N. Mehta, S. Jain and A. K. Jaryal (Members).

Session resourced by

Dr N. Mehta

- ‘Group Aynamin’ and ‘Improving practical assessment: use of OSPEs’ in national workshop on ‘Assessment methods for learning evaluation in basic medical sciences’, AIIMS, 22–24 September 2008.
- ‘Good teaching practices: How learning principles relate to concepts of interaction’, National workshop on ‘Teaching Learning Methods in Health Profession Education’, K.L. Wig Centre for Medical Education and Technology, AIIMS; 10–12 November 2008.

Dr S. Jain

- MCQ’s, SAQ’s and OSPE’s Session in the national workshop on ‘Assessment methods for learning evaluation in basic medical sciences’, AIIMS; 22–24 September 2008.

Dr A.K. Jaryal

- ‘Good teaching practices’, National workshop on ‘Teaching Learning Methods in Health Profession Education’, K.L. Wig Centre for Medical Education and Technology, AIIMS; 10–12 November 2008.

Dr S. K. Sood

- SAQ session in the National Workshop on ‘Assessment Methods for Learning Evaluation in Basic Medical Sciences’, AIIMS; 22–24 September 2008.

National Conference

Organized by the department

Dr K.K Deepak

- workshop, ‘Autonomic function testing: Principles and methods’ Goa Medical College, Bambolim, Goa; 18–19 July 2008.

Dr N. Mehta

- workshop on ‘Ethics in health care and research’, K.L. Wig Centre for Medical Education and Technology, AIIMS ; 7–9 August 2008.
- National workshop on ‘Ethics in Health Care and Research’, K.L. Wig Centre for Medical Education and Technology, AIIMS; 7–9 August 2008.
- Member, Organizing Committee, National workshop on ‘Teaching learning methods in health professions’, Education held at K.L. Wig Centre for Medical Education and Technology, AIIMS; 10–12 November 2008.

- Panel discussion for ‘Can exercise be a modern day panacea for new age diseases?’, CME programme on ‘Exercise: The wisdom of mind and body in stress and lifestyle diseases’, Government Medical College, Chandigarh; 1 November 2008.
- Panel discussion for ‘Laws applicable to hospitals’, CME programme on ‘Laws applicable to hospitals’, Department of Hospital administration, AIIMS, i; 21 March 2009.

International Conference

Lectures delivered

Dr R. Mathur

- ‘Effect of whole body magnetic field exposure on the sensori-motor recovery in spinalised rats’, XXIX General Assembly of International Union of Radio Science, Chicago, Illinois, USA; 7–16 August 2008.

Dr K.K. Deepak

- ‘How to use R-Type (extended matching type) MCQ’, workshop on ‘Assessment Strategies –I’, Saudi Arabia; 22–24 December 2008.
- ‘Item Analysis: How to conduct and interpret the results’, workshop on ‘Assessment Strategies –I’, Saudi Arabia; 22–24 December 2008.
- ‘Test Blue-Printing: Principles and practice; Use of IDEAL classification’ workshop on ‘Assessment strategies –I’, Saudi Arabia; 22–24 December 2008.
- ‘IDEAL Banking System’ workshop on ‘Assessment Strategies –I’, Saudi Arabia; 22–24 December 2008.

Dr D. Ghosh

- ‘Embryo-endometrium interfacing towards ovo-implantation: A systems biology view’, International Congress on ‘Bio-immunoregulatory mechanisms associated with reproductive organs: Relevance in fertility and in sexually transmitted infections’, National Institute of Immunology II, New Delhi; 9–13 February 2009.

National Conference

Dr R. Mathur

- ‘Whole body magnetic field exposure promotes sensori-motor functional restoration in chronic hemisected spinal cord of adult rats’, ‘Recent advances in microwave theory and applications’, Jaipur; 21–24 November 2008.

Dr R. Sharma

- ‘How to conduct an objective structured practical examination’, ‘Assessment methods for learning evaluation in basic medical sciences’, AIIMS; 22–24 September 2008.
- ‘Mechanics of paper setting’, ‘Assessment methods for learning evaluation in basic medical sciences’, AIIMS, New Delhi; 22–24 September 2008.

- ‘Objective structured practical examination’, ‘Assessment methods for learning evaluation in basic medical sciences’, AIIMS; 22–24 September 2008.

Dr N. Mehta delivered lectures on

- ‘Evolution and principles of bioethics’, ‘Ethics in healthcare and research’, K.L. Wig Centre for Medical Education and Technology, AIIMS; 7–9 August 2008.
- ‘Informed consent: Elements and process’, ‘Ethics in Healthcare and Research’, K.L. Wig Centre for Medical Education and Technology, AIIMS; 7–9 August 2008.
- ‘Ethical concerns in healthcare delivery’, ‘Ethics in healthcare and research’, K.L. Wig Centre for Medical Education and Technology, AIIMS; 7–9 August 2008.
- ‘Priority setting in healthcare and research’, Workshop on ‘Ethics in healthcare and research’, K.L. Wig Centre for Medical Education and Technology, AIIMS, New Delhi; 7–9 August 2008.
- ‘Teaching ethics with cases’, ‘Ethics in Healthcare and Research’, K.L. Wig Centre for Medical Education and Technology, AIIMS, New Delhi; 7–9 August 2008.
- ‘Group dynamics’, ‘Assessment methods in learning evaluation’, AIIMS; 22–24 September 2008.
- ‘Improving practical assessment: Role of OSPE’, ‘Assessment Methods in Learning Evaluation’, AIIMS; 22–24 September 2008.
- ‘Objectively organizing oral examinations’, ‘Assessment methods in learning evaluation’, AIIMS; 22–24 September 2008.
- ‘Exercise: A work place’, ‘Exercise: The wisdom of mind and body in stress and lifestyle diseases’, Government Medical College, Chandigarh; 1 November 2008.
- ‘Good teaching practices: How learning principles relate to concepts of Interaction’, ‘Teaching learning methods in health professions’, Education, AIIMS; 10–12 November 2008.
- ‘Priority setting in healthcare and research’, ICMR-NIH training programme on Bioethics, Indian Council of Medical Research (ICMR), Saint John’s Academy of Health Sciences, Bangalore; 4 December 2008.
- ‘Problem based learning principles and process’ ‘Problem Based Teaching/Learning and Formulation of a Need Based Contemporary Curriculum in UG Pharmacology Education’, University College of Medical Sciences, Delhi; 27–28 February 2009.

Dr A. K. Jaryal

- ‘Multiple choice question’, ‘Assessment methods in learning evaluation’, AIIMS, New Delhi; 22–24 September 2008.
- ‘Item analysis’ ‘Assessment methods in learning evaluation’, AIIMS; 22–24 September 2008.

RESEARCH

Funded Project

Completed

1. Multicentric trial of integrated software for quantification of autonomic tone. K.K. Deepak, A.K. Jaryal. Funded by Department of Information Technology, Ministry of Communication and Information Technology (2004–2008). Funds: Rs 28.33 lakh.
2. Standardization of *Vamana*. S.C. Mahapatra. R.K. Yadav. Funded by Central Council for Research in Ayurveda and Siddha (CCRAS), Ministry of Health and Family Welfare New Delhi (2008–2009). Funds: Rs 6.5 lakh.
3. A study on stress reactivity of students as a function of their general and emotional intelligence and effect of meditation on the stress response. R. Sharma, A. Talwar. Funded by AIIMS Research Grant (2007–2008). Funds: Rs 1 lakh.
4. Estimation of beta-endorphin and nociceptin in ventromedial nucleus of hypothalamus after prolonged sucrose ingestion by microdialysis. S. Jain, R. Mathur, T. Velpandian. Funded by AIIMS Research Grant (2007–2008). Funds: Rs 1 lakh.
5. Adiponectin concentrations in serum and peritoneal fluid of patients with endometriosis. R.K. Yadav, A. Kriplani. Funded by AIIMS Research Grant, (2008–2009). Funds: Rs 1 lakh.
6. Assessment of pain modulation status in chronic tension type headache and migraine patients. R. Mathur. R. Bhatia. Funded by CSIR (2007–2009). Funds: Rs 0.20lakh.

Ongoing

1. Elucidating endometriosis using genomic strategy. J. Sengupta. D. Ghosh. Funded by DBT (2008–2010). Funds: Rs 1,66 lakh .
2. Defining endometrial receptivity for blastocyst implantation using DNA based array technology. D. Ghosh, J. Sengupta. Funded by DST (2006–2009). Funds: Rs 44 lakh, .
3. Role of human chorionic gonadotropin in endometrial receptivity for pregnancy establishment. J. Sengupta, D. Ghosh. Funded by DST (2008–2011). Funds: Rs 33.89lakh.
4. Motor responses to noxious/non-noxious stimuli in spinalised humans and rats: Role of electromagnetic stimulation in recovery. R. Mathur, M. Behari, J. Behari, A. Gupta. Funded by DST, (Integrated long term programme of cooperation in science and technology between India and Russia) (2006–2009). Funds: Rs 32.67lakh.
5. Event related evoked potential studies in dyslexics. Funded by Department of Science and Technology, Government of India. S.K. Sood, R. Sagar from 2009–2011. Funds: Rs 32.45lakh.
6. Development of blood flow variability (BFV) software using impedance plethysmography technique and derivation of BFV-BPV relationship. A.K. Jaryal, K.K. Deepak. Funded by Ministry of communication and information technology (MCI) (2008–2010). Funds: Rs 29 lakh.

7. To study the effect of repeated magnetic stimulation on sensori-motor recovery in spinal cord injured patients. R. Mathur, S. Jain, J. Behari, S.Y. Kothari. Funded by DST (2009–2011). Funds: Rs 19.88lakh.
8. Effect of bone marrow stromal cells transplantation and magnetic stimulation in the sensory-motor functional recovery of spinalised rats. R. Mathur, S. Mohanty, S. Jain. Funded by ICMR (2008–2011). Funds: Rs 16,lakh.
9. The role of proteomic approach and biomarkers in the diagnosis of endometriosis. R.K. Yadav, A. Kriplani. Funded by CSIR (2008–2011). Funds: Rs 16lakh.
10. A study to assess acute mental stress induced changes in EEG, cognitive behavior and neurosteroids across the menstrual cycle and effect of meditation on stress induced changes. R. Sharma, R.L. Bijlani, A. Talwar. Funded by Central Council for Research in Yoga and Naturopathy, Ministry of Health (2006–2009). Funds: Rs 15 lakh.
11. Prenatal auditory sound stimulation: Effect on spatial memory and expression of synaptic proteins in chick hippocampus. S. Jain, R. Mathur, S. Wadhwa. Funded by Council of Scientific and Industrial Research (2006–2009). Funds: Rs 15 lakh.
12. Immunomodulatory effects of Tulsi (*Ocimum sanctum* Lin) extracts on healthy human subjects. S.C. Mahapatra. N. Mehta, S.N. Naik, S. Verma, A.C. Kar. Funded by Central Council of Research in Ayurveda and Siddha, New Delhi (2007–2010). Funds: Rs 14.92lakh.
13. Psychoneuroimmune effects of meditation: An evaluation by PET and biochemical markers. R.K. Yadav, C.S. Bal. Funded by DBT from 2008–2011. Funds: Rs 11.6 lakh.
14. Role of glutamate microinjection at the POA on sleep-wakefulness. H.N. Mallick, Professor V. Mohan Kumar. Funded by the Ajinomoto, Incorporation Company, Japan (2006–2009). Funds: Rs 6 lakh.
15. Role of the warm receptors of the preoptic area in altering sleep. H.N. Mallick. Funded by Defense Institute of Physiology and Allied Sciences (2003- 2009). Funds: Rs 5.0 lakh. (extension)
16. The role of lateral preoptic area in regulation of body temperature, thermal preference, sleep-wakefulness and homeostatic restoration of sleep during chronic cold exposure in rats. Professor H.N. Mallick, V. Mohan Kumar. Funded by ICMR (2007–2010). Funds: Rs 5 lakh.
17. Neural correlates of conflict: An event related functional magnetic resonance imaging study: S.K. Sood, S. Kumaram. Funded by AIIMS Research Grant (2006–2008). Funds: Rs 1.3 lakh.
18. Effect of exposure to magnetic field following implantation of ferromagnetic plates on the recovery from spinal cord injury in rats. S. Jain, R. Mathur. Funded by AIIMS Research Grant, (2008–2009). Funds: Rs 1 lakh.

Departmental Projects

Completed

1. Effect of magnetic field on aggressive behaviour

2. Effect of varying stimulus onset asynchronies on multisensory prepulse modulation of startle response (Postgraduate thesis)
3. Effect of speech and non-speech stimuli variation on preattentive processing in dyslexic children (Postgraduate thesis)
4. Effect of acute deep brain stimulation of the subthalamic nucleus on selective attention in Parkinson's disease (Postgraduate thesis)

Ongoing

1. Effect of chronic magnetic field exposure on pain modulation status of rat (Postgraduate thesis work)

Collaborative Project

Completed

Nil

Ongoing

1. Purglautation of human adult retinal pigment epithelial (GRPE) cells in the 6-OHD and lesioned rat model of Parkinsons' disease (PD) (with Neurology,)
2. Calibration and interpretation of the physiological measurement in research development of new curriculum in the area of sound and vibration (with Mechanical and industrial engineering, IIT, Roorkee)
3. Non-invasive assessment of vascular function in patients with chronic endogenous hypercortisolism (with Endocrinology)
4. Heart rate variability in chronic obstructive pulmonary disease, association with systemic inflammation and clinical implications (with Vallabhbai Patel Chest Institute, Delhi University)
5. A comparison of autonomic function before and after surgical intervention in patients with temporal lobe epilepsy (with Neurology, Neurosurgery)
6. Correlation between cardiovascular autonomic function and myocardial ischemia. (with Cardiology)
7. Cardiovascular autonomic functions after myocardial infarction: effect of short-term exercise training (with Cardiology)
8. Autonomic dysfunction in newly detected Type-II diabetes mellitus patients (with Endocrinology)
9. Electroencephalographic and sympathetic responses to visual and cues with emotional and rational contents (with Atal Bihari Vajpayee Indian Institute of Information Technology and Management, Gwalior)
10. Influence of prenatal chronic noise exposure on brain stem auditory nuclei, hippocampus and spatial memory in chicks (with Anatomy)

11. Influence of prenatal auditory stimulation on the development of synaptic proteins, brain derived growth factor and spatial memory in chick hippocampus (with Anatomy)

PUBLICATIONS

Journals

1. Ghosh D. Fundamentalism in science. *Indian J Physiol Pharmacol* 2008;**52**:103– 5.
2. Ghosh D. Obituary: Arthur Kornberg. *Indian J Physiol Pharmacol* 2008;**52**:1–2.
3. Jaryal A, Selvaraj N, Santhosh J, Anand S, Deepak KK. Monitoring of cardiovascular reactivity to cold stress using digital blood volume pulse characteristics in health and diabetes, *J Clin Monitor Comput* 2009. [DOI: 10.1007/s10877-009-9174-z.]
4. Jaryal AK, Joshua Lederberg. *Indian J Physiol Pharmacol* 2008;**52(1)**:3–6.
5. Jyotsna VP, Sahoo A, Sreenivas V, Deepak KK. Prevalence and pattern of cardiac autonomic dysfunction in newly detected type 2 diabetes mellitus. *Diabetes Res Clin Pract* 2009; **83**:83–8.
6. Kochhar KP. Teaching physiology by poetry. An Ode to Nephros. *Indian J Physiol Pharmacol* 2007;**51**:421–2.
7. Kochhar KP. Creativity in biomedical Research. Guest Editorial. *Indian J Physiol Pharmacol* 2007;**51**:307–310.
8. Kochhar KP. Dietary spices in health and disease (I). *Indian J Physiol Pharmacol* 2008; **52**:106–22.
9. Kochhar KP. Dietary Spices in health and disease (II). *Indian J Physiol Pharmacol* 2008;**52**:327–54.
10. Mathur R. Effect of chronic intermittent exposure to AM radiofrequency field on responses to various types of noxious stimuli in growing rats. *Electromagnetic Biolo Med* 2008;**27**:266–76.
11. Rishi M, Rakesh, Mathur R. Threshold of pain in chronic magnetic field- (50 Hz, 17.9 T) Exposed Rats: Effect of Sucrose Ingestion. *A Electromagnetic Biolo Med* 2008;**27**:254–65.
12. Selvaraj N, Jaryal A, Santosh J, Deepak KK, Anand S. Assessment of heart rate variability from finger-tip photoplethsmography as compared to electrocardiography. *J Med Eng Technol* 2008;**32**:479–84.
13. Selvaraj N, Jaryal A, Santosh J, Deepak KK, Anand S. Assessment of heart rate variability from finger-tip photoplethsmography as compared to electrocardiography. *J Med Eng Technol* 2008;**32**:479–84.
14. Selvaraj N, Jaryal AK, Santhosh J, Deepak KK, Anand S. Influence of respiratory rate on the variability of blood volume pulse characteristics, *J Med Eng Tech* 2009;DOI: 10.1080/03091900802454483.

15. Selvaraj N, Shivplara NB, Bhatia M, Santhosh J, Deepak KK, Anand S. Heart rate dynamics during *Shambhavi Mahamudra*—A practice of Isha Yoga. *J Complementary Integrative Medicine* 2008;**5**:1–9.
16. Sharma P, Makharia G, Ahuja V, Dwivedi SN, Deepak KK. Autonomic dysfunctions in patients with inflammatory bowel disease in clinical remission. *Dig Dis Scis* 2009;**54**:853–61.
17. Sharma R, Gupta N, Bijlani RL. Effect of yoga based lifestyle intervention on subjective well being. *Indian J Physiol Pharmacol* 2008;**52**:123–31.

Abstracts

1. Ghosh D, Najwa A.R, Sengupta J. An inductive approach to explore the time-domain characteristics of differential molecular expression of endometrium toward blastocyst implantation in the primate. *Placenta* 2008;**29**:A86.
2. Kar M, Ghosh D, Sengupta J. A comparative analysis of cDNA-based expression array profiles of 6, 7 and 8 week gestational human villous placenta. *Placenta* 2008;**29**:A97.
3. Najwa AR, Sengupta J, Ghosh D. Transcript profiles of receptive stage endometrium in the Rhesus monkey. *Placenta* 2008;**29**:A.87.
4. Sengupta J, Kar M, Ghosh D. A Homeodynamic model of first trimester placental villous cytotrophoblast cell proliferation, differentiation and syncytialization *in vitro*. *Placenta* 2008;**29**:A97.

Chapters in books

1. Bhattacharjee M, Jain S, Mathur R. Consequences of pain in early life and its remedy: Maternal responsibility. *Marriage and Family Review*. In: Steinmetz SK (ed). The Haworth Press 2008;**44(2–3)**:238–46.
2. Selvaraj N, Jaryal A, Santhosh J, Deepak KK, Anand S. Monitoring of cardiovascular reactivity during cold pressor test using photoplethysmography. ICSCN: International conference on Signal Processing Communication and Networking. *IEEE Conference Publications Management Group*. New Jersey; 2008:363–67.

PATIENT CARE

Endocrine assays of 15 patients for IVF-ET from Department Obstetrics and Gynaecology, AIIMS was provided by Departmental Central Biochemistry laboratory.

Neurophysiology Research Laboratory offered objective assessment of pain and pain modulation status by a battery of electro physiological and biochemical tests for select, referred patients of chronic pain. 60 patients (headache, fibromyalgia) were assessed during the year. Relief in pain was provided by transcranial magneto therapy to 6 patients of fibromyalgia.

Autonomic function laboratory and vascular function laboratory provide diagnostic facility for referred patients. The laboratory provide routine test of autonomic reactivity along with autonomic tone

quantification and non-invasive recording of gastric motility (electrogastrography, EGG). A total number of 888 persons were tested for autonomic function test this year, which included 715 patients.

Intra-operative monitoring of spinal cord: The department of physiology provided support to the orthopaedic department for monitoring of integrity of spinal cord during corrective surgeries for kypho-scoliosis. patient: (1–2 patients per month)

Integral Health Clinic (IHC)- is a centre of mind body medicine. IHC is an outpatient facility which is used not only for therapeutic gains but also as part of a developing health consciousness. A total of 55 participants (including patients and nursing students) were enrolled at IHC for the year 2008–2009. Additionally, for the benefit of depression patients, IHC facility was being used by the department of laboratory. Medicine, AIIMS.

The Department provided central facilities for

Autonomic function and vascular function;

Confocal imaging;

Molecular biology;

Pain modulation status;

Transcranial magneto therapy for chronic pain patients.

AWARDS AND HONOURS AND SIGNIFICANT EVENTS

The department faculty had chaired several sessions in national and international conferences/symposium. The faculty also had been assisting various universities in India and abroad in various capacities as experts and examiners.

Dr J. Sengupta, member Programme Advisory Committee in Health Sciences, Department of Science and Technology, Government of India; member, National Committee of IUNS-IUPS- IUPHAR, Indian National Science Academy.

Dr R. Mathur was appointed subject expert for appointment /promotion of faculty, Chhatrapati Shahuji Maharaj Medical University, Lucknow; was appointed Expert Member for promotion of faculty in the Department of Physiology, Institute of Medical Sciences, Banaras Hindu University, Varanasi; was appointed Member selection board, faculty, Institute of Postgraduate Medical Education and Research, Medical College, Rohtak; was appointed subject expert for selection of faculty in Physiology, Autonomous Medical Colleges, Madhya Pradesh, Bhopal; was appointed External expert in the discipline of Physiology, for recruitment of scientist (B, C) in Defense Research Developmental Organization, Government of India; was nominated expert member for appointment of faculty in the Department of Physiology, Delhi University, Delhi; member, Board of Studies of Department of Anatomy and Physiology, Jamia Hamdard University, Delhi; Expert, Postgraduate Board of Studies in Physiology, Pt. B.D. Sharma University of Health Sciences, Rohtak; member, Expert Committee for selection of Senior Research Associates in Medical Sciences, Council of Scientific and Industrial Research, New Delhi; Continued as a treasurer of Indian Society of Pain Research and Therapy, Delhi; Member, B.B. Dixit Library Committee, AIIMS, New Delhi; member, Sub-Committee, Research proposal, AIIMS, New Delhi; serving Inspector, Medical Council of India, Delhi.

Dr K.K. Deepak Rita Khadka Received the ‘Young Investigator Travel Award of International Union of Physiological Sciences, 2009 for the abstract: Khadka R, Patel CD, Jaryal A, Narang R, Deepak KK: Cardiovascular autonomic modulation increases with severity of myocardial ischemia; serving as Member, Education Committee of International Union of Physiological Sciences; appointed Member, Board of Specialty of Physiology of Medical Council of India; served as Professor-Incharge, Examination Section, AIIMS; 14 September 2008; served as Appellate Authority under RTI act 2005 for entire AIIMS till 10 September 2008; served as member, Advisory Committee, Central Board of Secondary Education; Expert selection committee to assess a reader for promotion as professor under career advancement scheme in the Department of *Tashseeh-wa-Munaful Aza*, Faculty of Medicine, Jamia Hamdard, New Delhi; served as Member, Institutional Animal Ethics Committee, AIIMS; member expert committee for Evaluation/Ballistic trial of Bullet Proof Patka, Bureau of Police R and D, Ministry of Home Affairs, Government of India; served as member Project Advisory Committee (DST) for Biomedical ‘International Collaborative Projects’, Department of Science and Technology (DST), Government of India; 14 September 2009; Member, Project Review and Steering Group for MCIT funded project on ‘pulse examination and diagnostics’ under Medical Electronics and Telemedicine division, Ministry of Communication and Information Technology, Government of India; served as Director’s nominee for ‘Project Management Committee’ under *Pradhan Mantri Swasthya Suraksha Yojana*, Government of India; July 2008; serving as member, Academic council, Netajee Subhash National Institute of Sports Patiala, Punjab; member, selection board for recruitment of scientist (G) in Defense Research Developmental Organization, Government of India; Member, Selection Board, Jamia Hamdard, New Delhi; served as sub-editor for *Indian Medical Journal*; served as reviewer for *Internal Journal of Yoga*, *Journal of Post Graduate Medium and Indian Journal of Physiology and Pharmacology*; project reviewer, National Research Development Corporation, Government of India; member, editorial board, *International Journal of Yoga*; Member, editorial board, Biomedicine an *International Journal for Biomedical Sciences*; invitation as Guest Faculty to participate in group/panel discussion on Working Memory and Executive functions in the 16th Annual Meeting of the Cognitive Neuroscience Society, at the Hyatt Regency San Francisco, USA; 21–24 March 2009.

Dr D. Ghosh continued Executive Editor, *Indian Journal of Physiology and Pharmacology*.

Dr S.C. Mahapatra was appointed Convener, International Society for Horticulture Sciences, for the forthcoming ‘International Symposium on Medicinal and Nutraceutical Plants’, AIIMS, New Delhi; 25–27 November 2009;; Chairman, Institutional Ethics Committee of Central Insecticide Laboratory, Ministry of Agriculture, Government of India.

Dr A.K. Jaryal panel member, Applications of Tele-ECG in Rural Health–2009, ATERH–2009, Electronics division and Medical Division–BARC; 4 February 2009.

Dr R.K. Yadav successfully completed the annual training course in Endocrinological Techniques and their application, National Institute of Nutrition, Hyderabad; 18 August–26 September 2008.

VISITING SCIENTISTS

1. Dr Natalija Alexandrovna Shcherbakova, and Dr Valeriy Dmitrievich Avelev, Pavlov Institute of Physiology, Sankt-Petersburg, Russia visited Department of Physiology, for 14 days from 10

December 2008 for joint work under the Integrated Long Term Programme (ILTP) of cooperation in Department of Science and Technology, Ministry of Science and Technology, Government of India.

2. Dr Indu Taneja, Assistant Professor, New York Medical College, USA had delivered a talk and demonstrated use of Transcranial Doppler for assessment of Brain Blood flow; August 2008.
3. Dr Alan David Phillips, Professor Paediatric Gastroenterology, Consultant Clinical Scientist and Centre Director, Centre for Paediatric Gastroenterology, Department of Paediatrics and Child Health, London; 11 December 2008.
4. Professor Mark Bernstein, Neurosurgeon, Toronto Western Hospital, University Health Network and Professor of Surgery, University of Toronto, delivered guest lecture entitled 'Ethics in clinical research: myth, mystery, or missing in action?' 23 October 2008.

9.31 Psychiatry

Professor and Head

Rajat Ray

Professors

Manju Mehta
Pratap Sharan

S.K. Khandelwal

R.K. Chadda

Associate Professor

Rajesh Sagar

Assistant Professors

Nand Kumar

Mamta Sood

EDUCATION

Undergraduate

Teaching

24 hours 3rd Semester

14 hours 6th Semester

6 hours 8th Semester

Clinical posting

20 days 4–5 Semester

40 days 6–8 Semester

Undergraduate Teaching in CRHSP Ballabgarh.

BSC Nursing

38 hours in 2 semesters

PhD and Postgraduate teaching

- Journal discussion once every week
- Seminar once every week
- Case Conference once every week
- Psychotherapy supervision for postgraduate psychiatry and doctoral level clinical psychology students
- Supervision of Consultation-Liaison training for junior residents in psychiatry.
- Faculty/Staff presentation once every week besides CCR and CGR in every semester

Continuing Medical Education:

Lectures delivered

Dr R.K. Chadda

- ‘Medico legal aspects of insanity’, for the officers of Central Bureau of Investigations, Government of India, CBI Academy, Ghaziabad; 27 January, 2009.
- ‘Target mental disorders in primary care’, WHO sponsored National Workshop to develop Essential Medicine List for Common Mental Disorders, New Delhi; 19 February, 2009.
- ‘Severe mental illnesses leading to neuropsychological impairments’, National CME on ‘Neuropsychological Assessments and Remediation’, New Delhi; 27–29 March 2009.

Dr Pratap Sharan

- ‘Art of interviewing and history taking: some footnotes’, 10th Postgraduate Development Programme Workshop, Jaipur; April 2008.
- ‘Response scales’, Workshop for training of investigators on World Health Organization Quality of Life Instrument – HIV Module. Central Council for Research on Homeopathy, New Delhi; July 2008.
- ‘Self-harm’, In: Course Writers Group for Course 5 of the Postgraduate Diploma Programme in Counselling, Family Therapy and Mediation, Indra Gandhi National Open University, New Delhi; August 2008.
- ‘World Health Organization Quality of Life (WHOQOL) and other scales’ Workshop for training of investigators on World Health Organization Quality of Life Instrument – HIV Module. Central Council for Research on Homeopathy, New Delhi; March 2009.

Dr Rajesh Sagar

- ‘Mental health aspects of HIV’, SEARCH HIV/AIDS Training, New Delhi; July-August 2008.
- ‘Panel discussion’, National Consultation on United Nations Convention on Rights of Persons with Disabilities (UNCRPD) Art-12, Chennai; June 2008.
- Panel discussion, National consultation meet of National Alliance on Access to Justice for People with Mental Illness (NAAJMI), New Delhi; October 2008.

Dr Mamta Sood

- ‘Duration of untreated psychosis: an overview’, Annual CME of Military Psychiatrists, Armed Forces Medical College, Pune; June 2008.

National and International Conferences

Conferences\Workshop

Dr R.K. Chadda

- ‘Hospital-based intervention for suicidal behaviour’, 33rd Annual Conference of the Indian Psychiatric Society, North Zone, Chandigarh; 18–19 October, 2008.

- ‘GHPUs in India’, 61st Annual Conference of the Indian Psychiatric Society, Agra; 8–11 January 2009.

Dr Pratap Sharan

- ‘Impact of climate change on mental health’, Workshop on Impact of Climate Change on Health, National Institute of Malaria Research (ICMR), Delhi, August 2008.
- ‘Medical co-morbidity in bipolar affective disorders’, (Sharan P, Shyamsundar A). 33rd Annual Conference of Indian Psychiatric Society–North Zone, Chandigarh, September 2008.
- ‘Survey of mental health research priorities in low- and middle-income countries of Africa, Asia, and Latin America and the Caribbean’, (Sharan P, Gallo C, Gureje O, Lamberte E, Mari JJ, Mazzotti G, Patel V, Swartz L, Olifson S, Levav I). 12th International Congress of International Federation of Psychiatric Epidemiology (IFPE), Vienna, Austria; February 2009.

Dr Rajesh Sagar

- ‘Communication skills’, National Conference of Medical Education, Teaching and Learning Methods, New Delhi; November 2008
- ‘Psychiatric aspects of trauma’ Trauma-2008: Annual National Conference of Indian Society of Trauma Care, New Delhi; November 2008.
- ‘National mental health programme current status and Mental Health Act’, 61st Annual National Conference of Indian Psychiatric Society, Agra, January 2009.
- ‘Rural mental health care in India: A developing country’s perspective.’ World Psychiatry Association Conference, Saskatchewan, Canada; May 2008
- ‘Trans-cultural aspects and issues related to survey instrument in developing countries’, World Psychiatry Association Conference, Saskatchewan, Canada; May 2008.
- ‘Post-tsunami: psychiatric and psychosocial care in Andaman and Nicobar Islands.’ Robert Gordon University, Aberdeen, United Kingdom; September 2008.
- ‘Integration of mental health into primary health care’, 2nd Indo-US Healthcare Summit, New Delhi; January 2009.

Dr Nand Kumar

- ‘Measurement of disability in person suffering from major mental illness’, 61st Annual Conference of Indian Psychiatry Society, Agra; 8–9 January 2009.
- ‘Treatment outcome in subjects with disability related to major psychiatric disorders attending tertiary health care centre in India: a longitudinal study.’ International Leadership Exchange Programme (IIHML), Brisbane, Australia; 2–6 March 2009.

Dr Manju Mehta

- ‘Risk factors of substance use and abuse in the offspring of substance abuse patients’, 10th Annual Conference of International Society of Addiction Medicine, Cape-Town, South Africa; 16–20 November 2008.

- ‘Experience of cognitive behaviour therapy-based treatment modules for substance abusing adolescents in Indian setting’, 10th Annual Conference of International Society of Addiction Medicine, Cape-Town, South Africa; 16–20 November 2008.

RESEARCH

Funded Projects

Ongoing

1. Development of pharmacogenomics SNP database for critical candidate genes involved in drug response in schizophrenia – multicentric study. R.K. Chadda, Mamta Sood. Funded by Department of Biotechnology (2008–2010). Funds: Rs 2.5 lakh.
2. Bibliometric analysis of literature search related to diagnosis and classification of mental and behavioural disorders. Pratap Sharan. Funded by World Health Organization (2007–2009). Funds: Rs 2 lakh.
3. Validation of depression identification instrument in an outpatient population. Pratap Sharan, Rajesh Sagar. Funded by World Health Organization–South East Asia Region Office (2008–2009). Funds: Rs 6 lakh.
4. Supervision and preparation of a technical report of the Depression Identification Instrument – Phase III. Pratap Sharan, Funded by World Health Organization – South East Asia Region Office (2008–2009). Funds: Rs 1.6 lakh.
5. Data analysis, interpretation of data and preparation of a technical report for SEARO Depression Project-Phase III. Rajesh Sagar. Funded by WHO-SEARO (2008–2009). Funds: Rs 1.6 lakh.
6. Prospective longitudinal study on duration of untreated psychosis in patients with first episode of psychosis. Mamta Sood. Funded by AIIMS Research Scheme (2008–2009) Funds: Rs 0.25lakh.
7. Association between a catechol-O-methyl-transferase polymorphism G158A and OCD in Indian subjects and its correlation with neuropsychological findings. Nand Kumar. Funded by AIIMS Research Scheme. Funds: Rs 1 lakh.
8. Comparison of the breathing technique Sudarshan Kriya Yoga with standard treatment in depressive disorder patients with standard treatments alone. Nand Kumar. Funded by ICMR (2009-2010). Funds: Rs 11 lakh.

Completed

1. Second phase trial of norepinephrine reuptake inhibitor (NERI) in depression. Pratap Sharan, Rajesh Sagar. Funded by Eli Lilly (2006–2008). Funds: Rs 10 lakh.
2. Feasibility testing of an identification instrument for identifying depression in patients attending psychiatric outpatient department. Pratap Sharan, Rajesh Sagar. Funded by World Health Organization – South East Asia Region Office (2007–2008). Funds: Rs 2.65 lakh.
3. Prospective longitudinal study on relationship of duration of untreated psychosis with course, outcome and burden. Mamta Sood, Pratap Sharan. Funded by AIIMS Research Scheme (2008–2009). Funds: Rs 1 lakh.

4. Efficacy and safety of agomelatine given orally compared to placebo, in addition to a mood stabilizer in bipolar I patients with a current major depressive episode. Rajesh Sagar. Funded by Servier international (2006–2009). Funds: Rs 7 lakh.

Collaborative Research

Ongoing

Funded

1. Effect of Yoga and naturopathy on serum interleukin levels in adolescents with depression. Funded by AYUSH. AK Mukhopadhyay, Manju Mehta, Rajesh Sagar. (with Department of Laboratory Medicine)
2. Assessment of patients suffering from paroxysmal nonepileptic seizures. Achal Srivastava, Nand Kumar. Funded by AIIMS. (with Department of Neurology)
3. Association between catechol-O-methyltransferase (COMT) polymorphism and obsessive-compulsive disorder (OCD) in the Indian population. Pratap Sharan, Nand Kumar, S. Sinha, K Chosdol (with Department of Biochemistry).
4. Long-term cognitive outcome in children cured for acute lymphoblastic leukemia (ALL). Suman Bhaskar, Pratap Sharan. (with Department of Radiotherapy)

PUBLICATIONS

Journals

1. Bhardwaj R, Chakrabarti S, Mittal BR, Sharan P. A single photon emission computerized tomography (SPECT) study of regional cerebral blood flow in bipolar disorder. *World J Biol Psychiatry* 2008;1–9.
2. Chadda RK, Sood M, Kumar N. Sensitising primary-care physicians to common mental disorders using a problem-based learning approach. *International Psychiatry* 2009;6:25.
3. Grover S, Subodh B, Avasthi A, Chakrabarti S, Kumar S, Sharan P, *et al.* Prevalence and clinical profile of delirium: a study from a tertiary-care hospital in north India. *Gen Hosp Psychiatry* 2009;31:25–9.
4. Gupta A, Chadda RK. Disability in schizophrenia: do short hospitalizations have a role? *International Journal of Psychosocial Rehabilitation* 2008;13:91–6.
5. Khandelwal SK, Chadda RK. Working in the National Health Services, UK as consultant psychiatrists - opportunities and challenges. *Natl Med J India* 2008;21:193–6.
6. Kumar N. Buspirone induced hypomania. <http://bjp.rcpsych.org/cgi/eletters/190/1/81-a>, 2008
7. Painuly N, Sharan P. Effectiveness of training of non-mental health care providers in mental health in low- and middle-income countries: a systematic review. *Primary Care and Community Psychiatry* 2008;13:83–9.

8. Sagar R, Berry N, Sadhu R, Mishra S, Kahn DA. Clozapine-induced cardiomyopathy presenting as panic attacks. *Journal of Psychiatry Practice* 2008;**14**:182–5.
9. Sharan P, Malhotra S. Telepsychiatry: The bridge across the access gap in child and adolescent mental health (Ed). *Journal of Indian Association of Child and Adolescent Mental Health* 2007;3:18–21 (Published in 2008).
10. Sharan P, Bhargava R. Intellectual disabilities: public policy and resources. *Journal of Indian Association of Child and Adolescent Mental Health* 2007;3:37–40 (Published in 2008).
11. Sood M, Chadda RK. Women physicians in India. *Natl Med J India* 2008;21:154.

Books/Chapter in Books/Monographs

1. Chadda RK, Kumar A. How to help caregivers of patients with HIV/AIDS? In: Bhatia MS, Grover V, Gupta R (eds). *A Textbook of HIV Infection and AIDS in Adolescents*. Delhi: New Age International Publishers; 2008: 275–86.
2. Chadda RK, Garg R. An international view of hospitalization laws for psychiatric patients. In: Verma VK, Kala AK, Gupta N (eds). *Culture, personality and mental illness—a perspective of traditional societies*. Delhi: Jaypee Brothers Medical Publishers; 2008:363–81.
3. Chadda RK. Psychiatric conditions. In: Sharma S, Sethi GR, Gupta U (eds). *Standard Treatment Guidelines. 3rd edn*. New Delhi: Delhi Society for Promotion of Rational Use of Drugs, WHO - India Programme on Essential Drugs; 2009:374–400.
4. Khandelwal SK. Cultural psychodynamics in mental health and illness. In: Varma VK, Kala AK, Gupta N (eds). *Culture, personality, and mental illness*. Delhi: Jaypee Brothers Medical Publishers; 2008:152–7.
5. Mehta M, Sadhu R. HIV counselling in adolescents. In: *A Text book on HIV Infection and AIDS in Adolescents*. New Delhi: New age International Publishers; 2009:221–32.
6. Mehta M. *Behavioural Sciences in Medical Practice*. 2nd edn. Delhi: Jaypee Brothers; 2009.
7. Sagar R, Garg R. Integrating spirituality and indigenous methods in mental health delivery. In: Sharma A (Ed.). *Spirituality and Mental Health*. New Delhi: Indian Psychiatry Society; 2009:433–54.
8. Sharan P. Psychological health. In: *WHO's International Travel and Health (ITH) 2009 version*. Geneva: World Health Organization; 2009.
9. Sharan P, Ray R. *ICD-11: Draft Proposal for Changes in the Classification of Mental and Behavioural Disorders*. New Delhi: Department of Psychiatry AIIMS; 2008.
10. Sharan P, Dhawan A, Shyam Sundar A. *Souvenir of the XVI National Conference of the Indian Association for Social Psychiatry*. New Delhi: Indian Association for Social Psychiatry; 2008.
11. Sharan P, Gupta T. Conduct disorders. In: Gautam S, Avasthi A (Eds.). *Child and Adolescent Psychiatry Clinical Practice Guidelines for Psychiatrists in India, Volume 4*. New Delhi: Indian Psychiatric Society 2008.

12. Sharan P, Shyam Sundar A, Saxena S. Mental health research in India: a focus on health research system issues. In: Varma VK, Kala A, Gupta N (Eds.). *Culture, personality and mental illness—a perspective of traditional societies*. Delhi: Jaypee Brothers; 2008:397–413.
13. Sood M, Vaswani M. Compulsive buying disorder. In: Browne-Miller A (ed). *The Praeger International Collection on Addictions*, Santa Barbara, California: Praeger Publishers; 2009;4: 81–96.

PATIENT CARE

Outpatients

	NEW	OLD	TOTAL
Walk in clinic	11,965	23,450	35,415
Detailed assessment	1,829	–	1,829
Total	13,794	23,450	37,244

Specialty clinic

Child guidance	486	456	942
De-addiction clinic	178	1367	1545

Inpatients

Total admission	325
Total discharges	288

Laboratory investigations for patient care

Total Number of Serum Lithium levels: 1130

Patient care initiative

The department has taken a new initiative, ‘Structuring and expansion of consultation-liaison (C-L) psychiatry services’:

- Introduction of supervised C-L training for junior residents and establishment of referral structure.
- Introduction of psychoeducation groups for patients and relatives of medical oncology inpatients.
- Development of outpatient liaison interaction with endocrinology department.

AWARDS AND HONOURS AND SIGNIFICANT EVENTS

Dr Manju Mehta was invited to deliver a keynote address at Indore University and at the U.G.C. Seminar in the Department of Psychology, Punjab University, Chandigarh. to conduct a workshop on ‘Stress Management’ for residents of Postgraduate Institute of Medical Education and Research, Chandigarh.

Dr S.K. Khandelwal had been nominated as a member of the Delhi High Court Legal Services Committee to assist it with psychosocial issues. While at Antarctica, he had initiated and maintained a live web-blog, www.himalayanadventurer.blogspot.com. This had been recognized as the first ever live Indian blog from Antarctica. The Limca Book of Records has awarded an entry to this fact in its

2009 edition; participated in the Workshop on ‘Psychotherapy in Routine Clinical Practice’, Agra, 15–16 September 2008.

Dr R.K. Chadda was appointed the Secretary General of the Indian Association for Social Psychiatry and the Organizing Secretary of the XVI National Conference of Indian Association for Social Psychiatry, New Delhi, 28–30 November 2008; Member, Ethics Committee, Institute of Human Behaviour and Allied Sciences, Delhi; Chairperson, Awards Committee, Indian Psychiatric Society, North Zone; Chaired a free paper session, 61st Annual Conference of the Indian Psychiatric Society (8–11 January 2009); 33rd Annual Conference of the Indian Psychiatric Society, North Zone (18–19 October 2008); chaired the theme symposium ‘Social psychiatry and clinical practice’ XVI National Conference of the Indian Association for Social Psychiatry, New Delhi (28–30 November, 2008); participated in the Workshop on ‘Psychotherapy in Routine Clinical Practice’, Agra, 15–16 September 2008.

Dr Pratap Sharan Editor *Journal of Indian Association of Child and Adolescent Mental Health*, Editorial board member *Journal of Mental Health and Human Behavior*; resource person for the following: WHO’s Essential package for mental, neurological and substance use disorders - Scoping document on Child and Adolescent Mental Health (2008–2009), WHO’s Research for Change Initiative: Enhancing the quality of mental health publications from low- and middle-income countries (2003-Onwards), Director of Civil Aviation’s Committee on prevention of and negotiating with hijackers (2006-Onwards), Government of Madhya Pradesh’s Expert Group on Improvement of Mental Health Services in the State (2006-Onwards); Chaired the Symposium entitled “Community based rehabilitation of mentally ill patients in the XVI National Conference of the Indian Association for Social Psychiatry, New Delhi, 2008; reviewer, national and international journals: *Comprehensive Psychiatry (International)*, *International Psychogeriatrics (International)*, *International Journal of Social Psychiatry (International)*, *National Medical Journal of India (Indexed)* and *Journal of Mental Health and Human Behavior*. Workshop on ‘Psychotherapy in Routine Clinical Practice’, Agra, 15–16 September 2008.

Dr Rajesh Sagar was selected by the Royal Society of Edinburgh for International Exchange Programme and visited the Robert Gordon University, Aberdeen, United Kingdom, September 2008; Coordinator, Awards Committee of the Delhi Psychiatry Society (December 2008); He was elected as a Member, Executive Council of the Indian Association for Social Psychiatry (IASP), November 2008; Project Review, Central Council for Homeopathy Research (CCRH), August 2008; Resource person, WHO sponsored National Workshop to develop Essential Medicine List for Common Mental Disorders, New Delhi (February 2009); invited for a special meeting by Government of Uttarakhand for development of mental health services for state health institutions and the state in Dehradun (February 2009). participated in the Annual Scientific Advisory Committee meeting of the National Brain Research Centres, Gurgaon, March 2009; Member, peer review committee of Guidelines for Management of Epilepsy in India (GEMIND). He is serving as a Technical Advisory Group (TAG) member of the multi-centric research project on Neuro-developmental Disability in Children by INCLIN; Chief Guest, National consultation meet, National Alliance, Access to Justice for People with Mental Illness (NAAJMI), New Delhi (October 2008); India coordinator, World Mental Health Survey Consortium Annual Meeting, Annapolis, USA (July 2008).

Dr Nand Kumar was nominated as an Executive Council member of National Institute of Mental Health, Secunderabad by the Ministry of Social Justice and Empowerment, Government of India for 2 years (2008–2020); Chaired a scientific session in the XVI National Conference of the Indian Association of Social Psychiatry, Delhi (28–30 November 2008).

Dr Mamta Sood was appointed as the Assistant Secretary of the General of the Indian Association for Social Psychiatry and served as the Assistant Organizing Secretary of the XVI National Conference of Indian Association for Social Psychiatry, New Delhi (28–30 November 2008); Chaired a free paper sessions in the same conference;. Trainee Editor, *Journal of Indian Association for Child and Adolescent Mental Health*.

9.32 Radio-Diagnosis

Professor and Head

Arun Kumar Gupta

Professor

Deep Narayan Srivastava

Additional Professor

Raju Sharma

Associate Professors

Sanjay Thulkar (IRCH)

Sanjay Sharma (RPC)

Ashu Seith Bhalla

(on leave w.e.f. 19 May 2008 – 7 March 2009)

Assistant Professors

Smriti Hari

Shivanand Gamanagatti
(Trauma Centre)

Atin Kumar
(Trauma Centre)

Scientist-IV

Shashi B. Paul

EDUCATION

Undergraduate and Postgraduate

A batch of 8 students was admitted to BSc (Hons) Medical Technology in Radiography course in 2008-2009. The duration of the course is three years. A total of 21 students are enrolled.

MD: There were a total of 28 Junior Residents out of whom 5 were sponsored candidates.

Short-term training

- *Short-term training in CT was imparted to one Radiologist from Ministry of Health and Family Welfare UP Government for 6 months and .*
- *one Radiologist from Kasturba Gandhi Hospital, New Delhi for 2 months.*

Continuing Medical Education

Organized by the department

Third AIIMS-MAMC-PGI imaging course series on 'Gastrointestinal and hepatobiliary imaging', AIIMS; 23–24 October 2008.

Lectures delivered

Dr Deep N Srivastava

- 'Interventional treatment of liver tumours', 3rd AIIMS-MAMC-PGI Imaging Course Series, AIIMS, New Delhi; 23–24 October 2008.

- ‘Gastrointestinal haemorrhage: Imaging and interventions’, 3rd AIIMS-MAMC-PGI Imaging Course Series, AIIMS, New Delhi; 23–24 October 2008.
- ‘Interventional radiology quiz’, 3rd AIIMS-MAMC-PGI Imaging Course Series, AIIMS, New Delhi; 23–24 October 2008.

Dr Raju Sharma

- ‘Medical imaging applications of ultrasound’, Ultrasound Society of India Meeting, National Physical Laboratory, Delhi; 19 May 2008.
- ‘MR evaluation of the biliary tree and MRCP’, IRIA and Mallinckrodt Institute of Radiology, USA, Joint CME, Agra; 2 August 2008.
- ‘MR evaluation of focal lesions of the liver’, IRIA and Mallinckrodt Institute of Radiology, USA, Joint CME, Agra; 2 August 2008.
- ‘Fetal MRI’, IRIA Assam Branch Annual Conference, Shillong; 14 December 2008.
- ‘MRI of focal liver lesions’, IRIA Assam Branch Annual Conference, Shillong; 14 December 2008.
- ‘Film reading session’, Imaging Update 2009. GB Pant Hospital, New Delhi; 28 February-1 March 2008.
- ‘Malignant focal liver lesions’, AIIMS-MAMC-PGI Imaging Course on GI Radiology, AIIMS, New Delhi; 23–24 October 2008.
- ‘MR evaluation of focal liver lesions’, Symposium on Advances in MRI. NMR Foundation Day Celebration, AIIMS, New Delhi; 22 March 2009.

Dr Shivanand Gamanagatti

- ‘Case presentation: Complication of transarterial chemoembolisation’, Annual registry meet combined with CME on ‘Clinical practice guidelines for evidence-based management in cardiovascular and interventional radiology’, AIIMS, New Delhi; 26–27 April 2008.
- ‘Percutaneous nonvascular gastrointestinal interventions’, ‘Gastrointestinal and hepatobiliary imaging’, 3rd AIIMS-MAMC-PGI imaging course series, AIIMS, New Delhi; 23–24 October 2008.

Dr Atin Kumar

- ‘Imaging in abdominal trauma’, ‘Gastrointestinal and hepatobiliary imaging’, 3rd AIIMS-MAMC-PGI Imaging Course Series, AIIMS, New Delhi; 23–24 October 2008.
- ‘Imaging in abdominal trauma’, Annual CME of Haryana Chapter of IRIA, PGIMS, Rohtak; 28 March 2009.

Dr Sanjay Thulkar

- ‘Imaging in malignant lesions of stomach and small intestine’ and ‘Gastrointestinal and hepatobiliary imaging’, 3rd AIIMS-MAMC-PGI Imaging Course Series, AIIMS, New Delhi; 23–24 October 2008.

- ‘Recent advances in image guided breast biopsy’, CME on Advancements in Breast Biopsy, Sir Ganga Ram Hospital, New Delhi; 5 March 2009.
- ‘Ovarian Cancer: Radiologists view’, Symposium on Ovarian Cancer, AIIMS, New Delhi; 26–27 March 2009.

Dr Sanjay Sharma

- ‘Evidence for radiofrequency ablation of early breast cancer’, Annual Registry Meet of the Indian Society of Vascular and Interventional Radiology, AIIMS, New Delhi; 25 April 2008.
- ‘Top 20 Radiological diagnosis in Ophthalmology’, 59th Annual Conference of the Delhi Ophthalmological Society, New Delhi; 29 March 2008.

Dr Ashu Seith Bhalla

- ‘CT and MRI in Sialology’, Surgical workshops on Phonosurgery and Sialology, AIIMS, New Delhi; 19–20 April 2008.
- ‘Diffuse liver diseases’ and ‘Gastrointestinal and hepatobiliary imaging’, 3rd AIIMS-MAMC-PGI Imaging Course Series, AIIMS, New Delhi; 23–24 October 2008.
- Panel discussion on ‘Management of early lung cancer: RF Ablation’, Rajiv Gandhi Cancer Institute Conference (RGCON 2009); 27–29 March 2009.

Dr Smriti Hari

- ‘Liver anatomy and imaging techniques’ and ‘Gastrointestinal and Hepatobiliary Imaging’, 3rd AIIMS-MAMC-PGI imaging course series, AIIMS, New Delhi; 23–24 October 2008.

National and International Conferences

Lectures delivered

Dr Deep N Srivastava

- ‘Hepatic Interventions’, Onco Imaging 2008, Nizam Institute of Medical Sciences, Hyderabad; 22–23 November 2008.
- ‘MR Evaluation of Shoulder Joint’, 62nd Annual Conference of Indian Radiological and Imaging Association, Patna; 9–11 January 2009.
- ‘Interventional Radiology Management of GI Bleeding, Interventional Radiology Conference, Nagpur; 28–29 March 2009.
- ‘Interventional Radiology Management of Liver Cancers, Interventional Radiology Conference, Nagpur; 28–29 March 2009.

Dr Shivanand Gamanagatti

- ‘Chemoembolisation of HCC: current status’, Annual Conference of Indian Society of Vascular and Interventional Radiology, Mumbai; 31 October–4 November 2008.

Dr Ashu Seith Bhalla

- ‘Radiofrequency Ablation in Lung Cancer: Current Status’, Annual Conference of Indian Society of Vascular and Interventional Radiology, Mumbai; 31 October–4 November 2008.

Dr Smriti Hari

- ‘Clinico-Radio-Pathological Discussion’, APICON 64th Annual conference of Association of physicians of India, New Delhi; 30 January 2009.
- ‘Clinico-Radio-Pathological discussion’, APICON 64th Annual conference of Association of physicians of India, New Delhi; 31 January 2009.
- ‘Thoracic applications of Multi-Detector CT’, APICON 64th Annual Conference of Association of physicians of India, New Delhi; 31 January 2009.

International Conferences

Dr Raju Sharma

- ‘Staging of Pancreatic Cancer’, Asia Pacific Digestive Week, 2008, New Delhi; 14–18 September 2008.

Dr Shivanand

- ‘Radiology of Obscure Gastrointestinal Bleed’, Asia Pacific Digestive Week, 2008, New Delhi; 14–18 September 2008.
- ‘Interpretation of Plain X-rays in Major Trauma’, Trauma 2008, International Conference Cum Live Workshop, Organized by JPNA Trauma Centre, New Delhi; 28–30 November 2008.
- ‘Ultrasound guided Vascular Access’, Trauma 2008, Trauma 2008, International Conference Cum Live Workshop, JPNA Trauma Centre, New Delhi; 28–30 November 2008.

Dr Atin Kumar

- ‘CT evaluation of abdominal trauma’, Trauma 2008, International Conference Cum Live Workshop, Organized by JPNA Trauma Centre, New Delhi; 28–30 November 2008.
- ‘FAST in abdominal trauma: Radiology workshop’, Trauma 2008, International Conference Cum Live Workshop, Organized by JPNA Trauma Centre, New Delhi; 28–30 November 2008.

RESEARCH

Funded Projects

Completed

1. Incidence of deep venous thrombosis in high risk patients admitted in medical wards and ICU in a tertiary care hospital. S.K. Sharma. Atin Kumar, Ashu Seith. Funded by Pfizer for 2006–2008. Funds: Rs 5 lakh.

Ongoing

1. Diagnostic accuracy of whole body diffusion weighted MRI in oncologic imaging: Comparison with whole body STIR MRI and FDG-PET-CT. R. Sharma. Funded by AIIMS. Funds: Rs 1 lakh.
2. Effects of arzoxifene on vertebral fracture incidence and on invasive breast cancer incidence in postmenopausal women with osteoporosis or with low bone density. (Endocrinology). Dr A.C. Ammini. Dr Ashu Seith. Funded by Eli Lilly and Company for 2005–2009. Funds: Rs 50 lakh.
3. Antibiotic prophylaxis in the management of VUR- A randomized double blind placebo controlled trial. Dr Pankaj Hari, Dr Smriti. Funded by ICMR (2006–2009). Funds: Rs 12 lakh.

Departmental Projects

Completed

1. Comparison of US, CT and MR Portography in children with EHPVO
2. MRI and PET-CT evaluation of soft tissue sarcomas
3. Role of PET-CT Enteroclysis and double balloon enteroscopy in the evaluation of Crohn's disease
4. Role of PET-CT colonography and colonoscopy in the evaluation of ulcerative colitis
5. To evaluate the role of CT-guided radiofrequency ablation in the management of inoperable primary lung cancer.

Ongoing

1. Comparison of MDCT, Endoscopic Ultrasound, MRI and PET-CT in evaluation of pancreatic malignancy
2. MRI in evaluation of chronic wrist pain
3. Percutaneous management of patients with malignant biliary obstruction
4. Diffusion weighted MRI: A new tool for evaluation of focal liver lesions Comparison of CT and MRI including diffusion weighted MRI in renal mass lesions
5. Cysts, tumors and tumour like lesions of the jaw: Evaluation by panoramic radiographs and multidetector CT with limited MRI correlation
6. Radiofrequency ablation in the treatment of symptomatic lower limb varicosities.
7. Magnetic resonance evaluation of chronic internal derangements of knee
8. Utility of cardiac MRI in RV function evaluation in health and disease
9. Differentiating recurrent gliomas from post radiotherapy changes: Utility of advanced MRI techniques and their correlation with 99m tc-glucoheptonic acid (GHA) brain SPECT

10. Imaging and intervention in vascular malformations of the extremities
11. Role of computed tomography and splenic artery embolisation in patients with blunt splenic injury
12. Role of MDCT in staging of laryngeal carcinoma with limited MRI correlation
13. Role of ultrasound in mamographically detected breast carcinomas
14. Differentiating recurrent gliomas from post radiotherapy changes: Utility of advanced MRI techniques and their correlation with ^{99m}tc-glucoheptonic acid (GHA) brain SPECT
15. Role of MDCT in staging of laryngeal carcinoma with limited MRI correlation.
16. A prospective study on radiological approach in patients with vascular malformations of extremities
17. Comparison of accuracy of image guided and palpation guided core needle biopsy in palpable breast masses
18. Ultrasound and CT evaluation of the neck for the assessment of metastases in clinically NO patients with squamous cell carcinoma of upper aero-digestive tract
19. Role of multi detector row CT in epiphora

Collaborative Projects

Completed

1. Role of Alfa 1 reductase inhibitors in treatment of nasopharyngeal angiofibroma (with ENT)
2. Study of quality assurance programme, identify gaps and recommend steps for improvement in department of Radiodiagnosis (with Hospital administration)
3. Renal functions and their maturation and renal volume in normal and growth restricted neonates (with Paediatrics)
4. Study of radio-diagnostic services of AIIMS hospital and their utilization pattern so as to identify equipment, physical facilities and manpower for the diagnostic imaging services of hospitals of Coal India Ltd. Commensurating with their needs (with Department of Hospital Administration)
5. Assessment of endothelial dysfunction and oxidative stress in chronic kidney disease of varying severity and after renal transplantation (with Nephrology)
6. To determine the efficacy of Flutamide as a tumour volume reducing agent in nasopharyngeal angiofibroma (with ENT)
7. A Phase 3, Open-Label, Parallel-Group Study to evaluate the efficacy of preprandial Human Insulin Inhalation Powder (HIIP) Compared to preprandial Injectable Insulin I patients with Type 1 Diabetes Mellitus (with Endocrinology)
8. Noninvasive screening for early preclinical atherosclerosis in children on phenytoin on Carbamazepine monotherapy for more than 18 months.(with Paediatrics)

9. Role of FDG PET CT in evaluation of patients with recurrent ovarian cancer: A pilot study (with Medical Oncology)
10. Role of FDG-PET and MRI in assessment of Osteosarcoma: Prechemotherapy and Post-chemotherapy. (with Medical Oncology)
11. Comparison of FDG-PET and Dynamic MRI in correlation of VEGF expression on tumour cells in patients with Osteosarcoma. (with Medical Oncology)
12. A comparative evaluation of changes in ultrasonographic dimensions of masseter muscle with EMG activity prior and subsequent to twin block therapy (with Dental)

Ongoing

1. Role of PET-CT in differentiating benign and malignant pancreatic mass lesions in patients with or without chronic pancreatitis (with Nuclear Medicine)
2. Use of CT as an adjunct to pre-operative planning and monitoring for osteo-odonto-keratoprosthesis in patients with end-stage Steven Johnson syndrome (with Ophthalmology)
3. Correlation between splenic volume with splenic vein diameter, portal pressure before and after the shunt, grade of varices in extrahepatic portal vein obstruction (with Paediatric Surgery)
4. Comparison of seizure recurrence in neurocytotoxicosis patients with calcified and non calcified healed lesions (with Paediatrics)
5. Incidence of acute kidney injury in sick, hospitalized children: A prospective observational study (with Paediatrics)
6. To study the clinical and neurodevelopment profile in children with Tuberous sclerosis (with Paediatrics)
7. Molecular Genetic Studies in patients with Leukodystrophy. (with Paediatrics)
8. Efficacy of Zinc supplement as an adjunct with ATT in children below 15 years of age with pulmonary tuberculosis in reducing time to sputum conversion, a randomized blind trial (with Paediatrics)
9. Study of non alcoholic fatty liver disease and atherosclerosis in Asian Indians (with Medicine)
10. Evaluation of testicular blood flow and volume in patients undergoing laparoscopic inguinal hernia repair (with Surgery)
11. Evaluation of pancreatic tumours (with Surgery)
12. Prevalence of metabolic syndrome in obstructive sleep apnea and the effect of treatment with continuous positive airway pressure (CPAP) on metabolic syndrome (with Department of medicine)
13. Study of clinical and neurodevelopmental profile in patients of Tuberous Sclerosis (with Paediatrics)
14. Optic nerve sheath diameter measurement for raised ICP in severe head injury patients (with Neurosurgery)

15. Utility of PET scan in assessing extent of disease and response to treatment in sarcoidosis (with Medicine)
16. Correlation between splenic volume with- splenic vein diameter, portal pressure before and after the shunt, grade of varices in extrahepatic portal vein obstruction (with Paediatric Surgery)
17. A clinical and cephalometric study of temporary anchorage device (TAD) supported anchorage in the management of maximum discrepancy extraction cases (with Dental Surgery)
18. Clinical and radiographic hand abnormalities in patients with Systemic Sclerosis and their correlation with systemic features of the disease (with Medicine)
19. Oncology adequacy and functional outcome of transoral laser microsurgery (tlm) for early and moderately advanced laryngeal and hypopharyngeal cancers (with ENT)
20. Plastination of brain sections by Silicone(S-10) and polyester(P-40) techniques (with Anatomy)
21. Structural and functional abnormalities in lungs in Achalasia cardia patients-Pre and Post treatment evaluation (with Surgery)
22. Study of rheumatic musculoskeletal symptoms/disease and osteoarthritis of knee in older patient (with Medicine)
23. Role of PET-CT in diagnosing unknown primary of head and neck cancer with cervical metastases (with ENT)
24. Gastrointestinal involvement in systemic sclerosis—a cross sectional study (with Medicine)
25. Role of whole body 18F-fluorodeoxyglucose (FDG) Positron emission tomography (PET)–CT scan in the diagnosis, disease activity and monitoring response to therapy in patients with sarcoidosis (with Medicine)
26. Role of MRI in evaluation of pelvic organ prolapsed and its relationship with POPQ classification relationship of fetal Doppler velocimetry to biophysical profile and foetal outcome in normal pregnancies and in pregnancies with intrauterine growth retardation (with Obstetrics and Gynaecology)
27. Evaluation of PET Scan in preoperative assessment of cases of endometrial carcinoma (with Obstetrics and Gynaecology)
28. Feasibility of Virtopsy: Minimally invasive autopsy using ultrasonography and percutaneous organ biopsies as an alternative to open body autopsy in fetal abnormality (with Obstetrics and Gynaecology)
29. Correlation of stage and imaging of endometriosis with fertility outcome (with Obstetrics and Gynaecology)
30. Endothelial dysfunction in systemic sclerosis (with Medicine)
31. Evaluation of the efficacy of thrice weekly DOTS regimen in TB pleural effusion at six months (with Medicine)

32. A Survey on the prevalence of tuberculosis (with Medicine)
33. Prevalence of dyslipidemia in children with chronic kidney disease and measurement of carotid intima-media thickness and flow mediated vasodilatation (with Paediatrics)
34. Study of visual function and fundus findings in orbital tumours and their alterations after surgery (with Ophthalmology)
35. Randomized study comparing up front surgery followed by chemotherapy versus upfront chemotherapy followed by interval debulking surgery in previously untreated epithelial ovarian cancer stage 3C and stage 4 (pleural effusion only) (with Medical Oncology)
36. Validation of gel dosimetry as 3D verification tool in highly conformal radiotherapy techniques (with Neurobiochemistry and Radiotherapy)
37. Prospective comparative evaluation of 3D CT based treatment planning and 2D radiography based treatment planning for intracavitary brachytherapy in carcinoma cervix (with Radiotherapy)
38. A study of angiogenesis, proliferative activity and DNA ploidy in squamous cell carcinoma of larynx and their correlation with lymph node metastasis (with Pathology)
39. The role of multidetector computed tomographic dacryocystography in patients with epiphora (with Ophthalmology)
40. Incremental role of F-18 FDG PET-CT in evaluating response to primary treatment in advanced epithelial ovarian cancer patients (with Nuclear Medicine)
41. Follow up of patients of cirrhosis for detection of Hepatocellular carcinoma-a cohort study (with Gastroenterology)
42. Validation of the symptom complex for prediction of Hepatocellular carcinoma in patients of cirrhosis of liver (with Gastroenterology)
43. Randomized controlled trial of Radiofrequency ablation versus Percutaneous acetic therapy for the treatment of small hepatocellular carcinoma (with Gastroenterology)
44. Randomized control trial of Transarterial chemoembolisation (TACE) versus TACE plus oral chemotherapy in the treatment of Unresectable Hepatocellular carcinoma (with Gastroenterology)
45. Randomized control trial of Transarterial chemotherapy (TAC) versus Oral chemotherapy in the treatment of Unresectable Hepatocellular carcinoma (with Gastroenterology)
46. Randomized Control Trial of N-Acetylcysteine in Prevention of Renal Failure in Hepatocellular Carcinoma patients undergoing Transarterial Chemotherapy and Transarterial Chemoembolisation (with Gastroenterology)
47. Randomized control trial of Oral chemotherapy versus supportive therapy in the treatment of Unresectable Hepatocellular carcinoma. (with Gastroenterology)
48. Comparison of minimally invasive techniques and conservative treatment in vertebral collapse (with Orthopaedics)

49. Clinico-radiological evaluation of total knee arthroplasty short term retrospective-prospective study (with Orthopaedics)
50. Arthroscopic and MR evaluation of elbow in patients (with Rheumatoid Arthritis)
51. Intralesional autologous bone marrow stem cell injection in avascular necrosis of femoral head: Follow up with bone scan, PET scan and MRI (with Orthopaedics)
52. Pattern of peripheral arterial diseases in tertiary care surgical practice (Indian scenario) (with Surgery)
53. Safety and efficacy of autologous stem cells in prevention of amputation in patients with chronic critical limb ischemia (with Surgery)
54. A comparative Evaluation of changes in ultrasonographic dimensions of masseter muscle with EMG activity prior and subsequent to twin blocks therapy (with Dental Surgery)
55. USG evaluation of Intimal-medial thickness of carotid artery in patients with SLE (with Medicine)
56. To study the effect of cricoids split with interpositioning rib cartilage graft for subglottic with or without tracheal or glottis stenosis (with Otorhinolaryngology)

PUBLICATIONS

Journals

1. Goenka A, Jain V, Sharma R, Gupta AK, Bajpai M. MR diagnosis of penile agenesis: Is it just absence of a phallus? *Pediatr Radiol* 2008;**38**(10):1109–12.
2. Bhatia V, Garg PK, Arora VK, Sharma R. Isolated pancreatic tuberculosis mimicking intraductal pancreatic mucinous tumor. *Gastrointestinal endosc* 2008;**68**:610–11.
3. Kandpal H, Sharma R, Gamangatti S, Srivastava DN. Imaging the Inferior Venacava: A Road Less Traveled. *Radiographics* 2008;**28**:669–89.
4. Kumar J, Seith A, Kumar A, Sharma R, Bakshi S, Kumar R, *et al.* Whole body MR Imaging with the use of parallel imaging for detection of skeletal metastases in paediatric patients with small cell neoplasms: Comparison with skeletal scintigraphy and FDG-PET/CT. *Pediatric Radiol* 2008;**38**:953–62.
5. Shukla P, Balakrishnan P, Agarwal N, Ghosh M, Kabra M, Sharma R, *et al.* Prenatal diagnosis of megalencephalic leukodystrophy. *Prenat Diagnosis* 2008;**28**:357–9.
6. Yadav P, Sharma R, Santosh S, Kumar U. MR features of cerebral malaria. *Acta Radiologica* 2008;**49**:566–9.
7. Sinha A, Sharma R, Kandpal H, Seenu V, Sharma MC. Imaging appearance of parasitic lesions of the breast: A report of two cases and review of literature. *Acta Radiologica* 2008;**49**:506–09.
8. Kandpal H, Sharma R, Kumar A, Dattagupta S. Solitary Fibrous Tumour of the liver: A rare imaging diagnosis using MRI and Diffusion weighted MRI. *British J Radiol* 2008;**81**:e282–6.

9. Naranje S, Mittal R, Nag HL, Sharma R. Arthroscopic and Magnetic Resonance Imaging evaluation of meniscus lesions in chronic anterior cruciate ligament Deficient Knee. *Arthroscopy* 2008;**24**:1045–51.
10. Kandpal H, Sharma R, Bhatia V, Garg P. Annular Pancreas in an adult patient: Diagnosis with endoscopic ultrasound and MR cholangiography. *Singapore J Medicine* 2009;**50**:e29–31.
11. Sinha A, Srivastava DN. Thalassaemia with extensive intracranial calcifications. *Pediatr Radiol* 2008;**38**:917.
12. Ambat S, Mittal S, Srivastava DN, Misra R, Dadhwal V, Ghosh B. Uterine artery embolization versus laproscopic occlusion of uterine vessels for management of Symptomatic Uterine Fibroids. *Int J Gynaecol Obstet* 2009;**105**(2):162–5.
13. Das CJ, Goenka AH, Srivastava DN. MR guided abdominal biopsy using a 1.5 Tesla closed system: A feasibility study. *Abd Imaging* 2009;(Epub ahead of print).
14. Hallenbeck J, Gupta D, Mishra S, Bhatnagar S, Jain V, Gamanagatti S. Trial of angioembolization of advanced stage tumors feeding arteries exemplifying aggressive and active interventional palliation. *J Palliat Med* 2008;**11**:250–3.
15. Yadav R, Gupta NP, Gamanagatti S, Yadav P, Kumar R, Seith A. Supra-twelfth supracostal access: When and where to puncture? *J Endourol* 2008;**22**:1209–12.
16. Gamanagatti S, Kumar S. Acute abdomen after the termination of pregnancy. *Br J Radiol* 2008;**81**:758–9.
17. Khan SA, Thulkar S, Shivanand G, Kumar A, Varshney MK, Yadav CS, *et al.* Computed tomography-guided radiofrequency ablation of osteoid osteomas. *J Orthop Surg* 2008;**16**:179–81.
18. Kumble SM, Shivanand G. An uncommon cause of right hypochondriac pain. *Saudi J Gastro* 2009;**15**:70–71.
19. Kumar J, Kumar A, Seith A, Agarwala S, Bakhshi S. Multifocal neuroblastoma with stage IV disease in an 8-year-old boy. *J Pediatr Hematol Oncol* 2008;**30**:408–9.
20. Kumar A, Kumar J, Aggarwal R, Srivastava S. Abernethy malformation with portal vein aneurysm. *Diagnost Interventional Radiol* 2008;**14**:143–6.
21. Hari S, Kumar J, Kumar A, Saha S, Chumber S. Posterior mediastinal teratoma. *Int Med J* 2008;**38**:448–9.
22. Garg A, Kumar A, Ahmad F, Suri A. Occipital condyle fracture with lower cranial nerve palsies in a patient with minor head injury. *Pan Arab J Neurosur* 2008;**12**:66–9.
23. Das CJ, Seith A, Debnath J, Kumar U, Sharma SG, Aron M. Aspergillus colonisation of pulmonary rheumatoid nodules: A rare cause of ‘bull’s eye’ appearance. *Indian J Chest Dis Allied Sci* 2009;**51**:41–3.

24. Khadgawat R, Singh Y, Kansara S, Tandon N, Bal C, Seith A, *et al.* PET/CT localisation of a scapular haemangiopericytoma with tumour-induced osteomalacia. *Singapore Med J* 2009;**50**:e55–7.
25. Makharia GK, Seith A, Sharma SK, Sinha A, Goswami P, Aggarwal A, Puri K, Sreenivas V. Structural and functional abnormalities in lungs in patients with achalasia. *Neurogastroenterol Motil* 2009. [Epub ahead of print].
26. Kulshreshtha B, Ganie MA, Praveen EP, Gupta N, Lal Khurana M, Seith A, *et al.* Insulin response to oral glucose in healthy, lean young women and patients with polycystic ovary syndrome. *Gynecol Endocrinol* 2008;**24**:637–43.
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PATIENT CARE

Radiological procedures

Details of Investigations for the period April 2008–March 2009.

Routine X-rays

OPD	1,08,108
Indoor	23,339
Casualty	26,140
Portable	42,144
Total	1,99,731

Special Investigations

Contrast Studies

Barium studies	2,941
Intravenous pyelography	1,701
Micturating cystoutethrography	1,745
Hysterosalpingograhhy	254
Operation theatre studoes	51
Other contract studies: sonogram, fistulogram etc	1,025
Total	7,717

Mammography

Mammogram 1,487

Ultrasound

Routine 23,582

Emergency 16,497

Doppler (routine + casualty) 3107

Total 43,186

CT

Body 10,611

Head 4,852

Total 15,463

Vascular Studies

Digital subtraction arteriography (DSA) 132

Venography 53

Total 185

Special Achievements

Dr Sanjay Thulkar

Elected as joint secretary of 'Indian Society of Vascular and Interventional Radiologists' for 2008–2009.

Dr Ashu Seith Bhalla

Elected as Executive Member of 'Indian Society of Vascular and Interventional Radiologists' for 2008–2009.

Dr Shashi B. Paul

Won the ISG-Win Medicare Award at the 49th Annual Conference of Indian Society of Gastroenterology, New Delhi; September 2008 for the poster—'Acetic acid ablative therapy for hepatocellular carcinoma: A promising and affordable option'.

Dr Smriti Hari

Won the Best Poster Presentation award at the Conference of All India Coordination Committee: Royal College of Obstetricians and Gynaecologists- North Zone, New Delhi; 1–2 March, 2009 for the poster- Magnetic resonance imaging (MRI) findings in women with suspected tubercular tubo-ovarian masses.

MRI	
MRI	2,636
Interventional Procedures	
Ultrasound-guided	1,906
CT- guided	455
Vascular	1,505
Total	3866
Grand Total	2,74,271
(Total of routine and special investigations)	4,74,002

New equipment

- Definium 8000 Dual Detector System (Digital X-ray Machine), GE.
- Sonosite Micromax Portable Ultrasound–Two units.
- Radiofrequency Ablation System.
- Digital Flat Panel Detector System (Digital X-ray Machine), Siemens.
- Motorised X-ray Film Viewer, Planilux.
- Computerized Radiography System (CR System), Agfa.
- Dry star camera (Agfa).

9.33 Reproductive Biology

Professor and Head

Anand Kumar

Associate Professors

Narendra Nath Sarkar

Ashutosh Halder

Assistant Professor

Pradeep Kumar Chaturvedi

EDUCATION

Undergraduate/Postgraduate Training

- PhD/DM/MD/MS- 9 candidates.
- Postgraduate-MD Laboratory Medicine Students in Central RIA Facility.

Short-term and long-term training

Long-term training

Two trainees as WHO fellowship (6 months)

Short-term

Short-term training was provided to 4 students

Continuing Medical Education

Nil

National and International Conferences/Workshops

The department organized/participated in the National Workshop on 'Molecular cytogenetics: Rapid prenatal diagnosis by FISH', AIIMS; November 2008.

Lectures delivered

Professor Anand Kumar

- Invited Presenter in the International Conference on 'Gonadotropins and receptors', Middlesex University, London; 6–9 July 2008.
- 'Application of molecular biology techniques in comparative endocrinology', Chief Guest National Workshop Aligarh Muslim University, Aligarh; 27 February 2009.
- Chief Guest, Annual Day Function, Ram Lal Anand College, University of Delhi; 20 March 2009.
- 'Recent trends in biochemistry', National Seminar Pondicherry University, Pondicherry.

Dr A. Halder

- ‘FISH: Diagnostic application in genetic disorders as well as on macroarray and microarray’, Winter Workshop on ‘Cytogenetics and molecular cytogenetics in genetic disorders’, Foundation for Research in Genetics and Endocrinology, Institute of Human Genetics, Satellite, Ahmedabad; 1-6 December 2008.
- ‘FISH on Clinical Genetics’, SGPGIMS, Lucknow in ICMR Course on Genetic Counseling.
- **Dynamics of Pre-Zygotic and Post-Zygotic sex ratio**’ISHG Annual Conference on ‘’, **Delhi; March 2009.**
- ‘**Understanding dynamics of sex ratio**’ISSRF Annual Conference on ‘’, IISc, Bangalore; February 2009.
- Attended International Congress on PCOS 2008, Goa, India; August 2008.

Dr N.N. Sarkar

- Dr N. N. Sarkar also attended ‘Indian Science Congress’, NEHU in Shillong, Meghalaya; 3-7 January 2009.
- Dr N. N. Sarkar attended the Second Congress of the Asia-Pacific Council on Contraception (APCOC), Macau, China; 4-6 December 2008.

RESEARCH

Funded Projects

Ongoing

1. Prevalence of 22q11 deletion syndrome in children with structural cardiac malformation in tertiary care referral hospital-based study. Founded by ICRM, Delhi for 3 years. Funds: Rs 9 lakh.
2. Rapid Detection of Chromosome X,Y,21,18 and 13 aneuploidy by primed *in situ* labeling (intramural/AIIMS) for 2 years. Funds: Rs 2 lakh, (1 lakh for each year)
3. Role of hypoxia on vascular endothelial growth factors secretion in MA10 Leydig cells. P.K. Chaturvedi. Funded by ICMR SRF Project.
4. Quality control for hCG kits procured by HLL Lifecare Limited, Gurgaon done by the Department under Professor Anand Kumar.

Completed

1. Secretion of progesterone and expression of hypoxia inducible factor 1 α during hypoxia induced by cobalt chloride in MA 10 cells. Anand Kumar. Funded by ICMR, RIA Project.
2. Evaluation of sexually transmitted diseases among adolescents and young adults in India (Literature review).
3. Enumeration of elucidation of barriers to condom use (Literature review).

RESEARCH

Departmental

Ongoing

1. Role of hypoxia on progesterone and vascular endothelial growth factor secretions in MA-10 cells
2. Regulation of proliferation of prostatic cancer cell line LNCaP
3. Regulation of granulosa cell steroidogenesis
4. Genetic and endocrine factor in primary testicular failure
5. Role of cobalt chloride induced hypoxia on MA-10 cells
6. Evaluation of the impact of intimate partner violence on woman's reproductive health and pregnancy outcome
7. Evaluation of the hormonal profiles behind the heart of a man
8. Evaluation of emergency contraception, a contraceptive intervention confronting ethical and cultural barriers

Completed

1. Childhood sexual or physical abuse and its impact on woman's life (Literature review)
2. Evaluation of the impact of intimate partner violence on woman's reproductive health and pregnancy outcome (Literature review)
3. Elucidation of barriers to emergency contraception (EC): Does promoting EC increase risk for contacting sexually transmitted infections, HIV/AIDS? (Literature review)
4. Chromosome aneuploidy and mosaicism in preimplantation embryo (on mouse model and human embryo; PhD thesis)
5. An investigation on underlying etiology on primary testicular failure
6. Dynamics of sex ratio

Collaborative Research

Ongoing

1. Characterization of chromosomal anomalies in multiple myeloma patients using cytogenetics and FISH. PhD project of Rakseh Verma, Med Oncology, IRCH. Dr Lalit Kumar, Dr Ashutosh Halder, Dr Lalit Kumar, Dr Ashutosh Halder. Funded by DBT.
2. Several others collaborative researches with IRCH (Dr Atul Sharma, Dr Raina, *et al.*), Pathology (Dr Chitra Sarkar, Dr Vaisali Suri, Dr Sandeep Mathur, *et al.*), etc.

3. Use of letrozole versus clomiphene citrate combined with gonadotropins in superovulation and IUI cycles. Dr Alka Kriplani, Obstetrics and Gynaecology.
4. Effect of oral contraceptive containing ethinyl estradiol combined with drospirenone vs desogestrel on clinical and biochemical parameters in patients of polycystic ovarian syndrome. Dr Alka Kriplani, Obstetrics and Gynaecology.

PUBLICATIONS

1. Yadav R, Mehta SN, Kumar A, Guleria S, Seenu V, Tiwari SC. A prospective analysis of testicular androgenic function in recipients of a renal allograft. *Int Urol Nephrol* 2008;**40**:397–403.
2. Halder A, Gupta RK. Male like external genitalia with epididymis in a case of 46, XX disorder of sex development due to congenital adrenal hyperplasia. *J Res Med Sci* 2008;**13**:141–5.
3. Halder A, Jain M, Kabra M, Gupta N. 22q11.2 Mosaic 22q11.2 microdeletion syndrome: Diagnosis and clinical manifestations of two cases. *Molecular Cytogenetics* 2008;**1**:18. [doi:10.1186/1755-8166-1-18]
4. Fauzdar A, Sharma RK, Kumar A, Halder A. A preliminary study on chromosome aneuploidy and mosaicism in early preimplantation human embryo by fluorescence *in situ* hybridization. *IJMR* 2008;**128**:287–93.
5. Fauzdar A, Halder A, Kumar A. Effect of gonadotropins on chromosome aneuploidy, chromosome mosaicism and skewed sex ratio in mouse preimplantation embryos. *IJMR* 2009 (in press; Ref. 2008–2011).
6. Sarkar NN. Sexually transmitted infections among adolescents and young adults in India. *Int Med J* 2008;**15**:205–08.
7. Sarkar NN. Socio-economic and gender disadvantage affecting physical, mental and reproductive health of women in India. *Int Med J* 2008;**15**:261–4.
8. Sarkar NN. Barriers to emergency contraception (EC): Does promoting EC increase risk for contacting sexually transmitted infections, HIV/AIDS? *Int J Clinical Practice* 2008;**62**: 1769–75.

PATIENT CARE

Routine assays for LH, FSH, Prolactin, T3, T4, TSH, Testosterone, Estradiol, Progesterone, alpha Feto-Protein, Prostate Specific Antigen (PSA), Beta hCG, CA-125 and cortisol in the blood samples of patients were carried out in the facility.

Name of Assays	Number
FSH	2,928
LH	2,448
Prolactin	2,203
T3	4,895
T4	5,997
TSH	10,727
Testosterone	1,282
Estradiol	915
Progesterone	318
AFP	2,597
PSA	1,761
Beta hCG	706
CA-125	1,214
Cortisol	312
Total number of tests	38,303

Sample number has been increased from 33419 last year to 38303 this year 14.6% increase.

- **Andrological examinations**

Semen Examination 364

Seminal Fructose 188

- Genetic investigations and counseling: About 200 cases were referred, though not on regular basis, to the department for reproductive genetic investigations and counseling.

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Professor Anand Kumar member Advisory Committee of the UGC-SAP programme in Zoology of M.L. Sukhadia University, Udaipur. Life Member of Indian Society of Comparative Endocrinology and Member of International Federation of Comparative Endocrine Society, February 2009. Member Editorial Board, the Open Andrology Journal (Bentham) since 14 October 2008. Nominated as an Expert-member of the NIHFWS for promotion of Readers to Professor. Appointed as an External Paper Setter and evaluator for the MSc. Biochemistry of the National Dairy Research Institute, Karnal. Appointed as an Expert in Faculty Selection Committee meeting of Sanjay Gandhi Postgraduate Institute of Medical Sciences, Lucknow. Reviewer of Indian Journal of Medical and

Pediatric Oncology. Nominee of the Committee for the Purpose of Control and Supervision of Experiments on Animals (CPCSEA) to the Institutional Animal Ethics Committee of Dr B.R. Ambedkar Centre of Biomedical Research, University of Delhi, Delhi. Served as Referee to the prestigious Journal of Fertility and Sterility.

Dr Ashutosh Halder continuing as Executive Committee Member, ADNAT (Association for the Promotion of DNA Fingerprinting and other DNA Technologies), CCMB, Hyderabad in its second year. Member, Board of Specialty of Medical Genetics, Medical Council of India. Nominated for DM Medical Genetics Examiner of SGPGIMS, Lucknow Appointed as member, Board of Speciality of Medical Genetics by Medical council of India and drafted MD Medical Genetics Curriculum.

Dr N.N. Sarkar was awarded, 'Bayer Schering Pharma Talents Encouragement Award' for attending the Second Congress of the Asia-Pacific Council on Contraception (APCOC) on 4–6 December 2008 in Macau, China and visited Hong Kong on this occasion. Paper, 'Barriers to emergency contraception (EC): Does promoting EC increase risk for contacting sexually transmitted infections, HIV/AIDS?' was selected as 'Editor's choice' paper (best paper in the issue) and profiled on <http://www.ijcp.org> for free access to all. Is the Reviewer of the *Journal of African Health Sciences*, *Archives of Gynaecology and Obstetrics*, *International Journal of Gynaecology and Obstetrics*, *International Journal of STD and AIDS*, *Journal of Women's Health*, *Sexual and Relationship Therapy*, *Expert Reviews*.

Dr P.K. Chaturvedi selected as member of membership committee of Society for the Study of Reproduction (SSR), USA. Nominee for purchase committee of NIHFW, New Delhi.

9.34 Surgical Disciplines

Professor and Head

M.C. Misra

Professor

Anurag Srivastava

Arvind Kumar

Additional Professor

Sunil Chumber

Sandeep Guleria

Rajender Prashad

Associate Professor

V. Seenu

Sandeep Aggarwal
(On leave)

Assistant Professor

V.K. Bansal

Anita Dhar

EDUCATION

Short-term training

1. Dr Okidi, Okechukwu O (1 May–1 November 2008)(Six months).

Elective Training

1. Ms. Anina Zeumer, Germany (4 February–3 May 2008) (Four months)
2. Mr. Bhagteshwar Singh, U.K.. (1 November.2007–31January 2008) (Two months)
3. Ms. Manvi Solanki, Mumbai. (8 April–3 May 2008) (26 days)
4. Ms. Ho Weng Yan, Singapore.(5–28 May 2008) (23 days)
5. Ms. Jenica Yong Su-Ern, Singapore, (5–28 May 2008) (23 days)
6. Ms. Amanda Loh Wenying, Singapore (5–28 May 2008) (23 days)
7. Mr. Donovan Eu Kum Chuen, Singapore.(5–28 May 2008)(23 days)
8. Ms. Michelle Lim Hui Ping, Singapore (5–28 May 2008) (23 days)
9. Ms. Ker Liang, Singapore (5–28 May 2008) (23 days)
- 10 Ms Lim Jia Yang, Singapore (5–28 May 2008) (23 days)
11. Mr. Kosalarajah Paheenthararajah , Germany(29 September–23 November 2008)(1m 25 days)
12. Ms. Konika Chatterjee, Australia (16–29 November 2008) (14 days)
13. Ms. Marie-Laura Veronika Berger , Germany (8 December 2008–2 March 2009) (4 months).

Continuing Medical Education

Organized by the Department

Professor M.C. Misra

Course Director for

- 15th ‘Training course in operative laparoscopy—basic and advanced’; 23–27 March 2009.
- 3rd ‘Training course in laparoscopic hernia surgery’; 10–12 February 2009.
- 2nd ‘Training course in laparoscopic colorectal surgery’; 19–21 January 2009.
- 14th ‘Training course in operative laparoscopy—basic and advanced’; 5–9 January 2009.
- 13th ‘Training course in operative laparoscopy—basic and advanced’; 8–13 December 2008.
- 2nd ‘Training course in laparoscopic hernia surgery’; 25–27 November 2008.
- 12th ‘Training course in operative laparoscopy—basic and advanced’; 10–14 November 2008.
- 11th ‘Training Course in operative laparoscopy—basic and advanced’; 13–17 October 2008.
- 3rd ‘Training course in laparoscopic suturing skills’; 20–21 September 2008.
- 10th ‘Training course in operative laparoscopy—basic and advanced’; 1–5 September 2008.
- 1st ‘Training course in laparoscopic hernia surgery’; 6–8 August 2008.
- 2nd ‘Training course in laparoscopic suturing skills’; 21–23 July 2008.
- 9th ‘Training course in operative laparoscopy- basic and advanced’; 7–11 July 2008.
- 1st ‘Training course in laparoscopic colorectal surgery’; 5–7 May 2008.
- 8th ‘Training course in operative laparoscopy- basic and advanced’, 31 March–4 April 2008.

Conference

- Organizing Chairman, of ‘Third AIIMS Surgical Week International Minimal Access Surgery Conference’, CME cum Live Workshop, Endosurg 2009, AIIMS, New Delhi; 13–15 March 2009.

Professor Anurag Srivastava

- Co- Organizing Secretary of ‘Third AIIMS Surgical Week International Minimal Access Surgery Conference’, CME cum Live Workshop, Endosurg 2009, AIIMS, New Delhi; 13–15 March 2009.

Dr Sandeep Guleria

- Organizing Committee of ‘Third AIIMS Surgical Week International Minimal Access Surgery Conference’, CME cum Live Workshop, Endosurg 2009, AIIMS, New Delhi; 13–15 March 2009.

Dr Sandeep Agarwal

- Co-Organizing secretary, of ‘Third AIIMS Surgical Week International Minimal Access Surgery Conference’, CME cum Live Workshop, Endosurg 2009, AIIMS, New Delhi; 13–15 March 2009.

Dr V.K. Bansal

- Organizing Secretary of ‘Third AIIMS surgical week’, AIIMS, New Delhi; 13–15 March 2009.

He was also Course Coordinator for the following training courses in laparoscopic surgery:

- 15th ‘Training course in operative laparoscopy—basic and advanced’; 23–27 March 2009.
- 3rd ‘Training course in laparoscopic hernia surgery’; 10–12 February 2009.
- 2nd ‘Training course in laparoscopic colorectal surgery’; 19–21 January 2009.
- 14th ‘Training course in operative laparoscopy—basic and advanced’; 5–9 January 2009.
- 13th ‘Training course in operative laparoscopy—basic and advanced’; 8–13 December 2008.
- 2nd ‘Training course in laparoscopic hernia surgery’; 25–27 November 2008.
- 12th ‘Training course in operative laparoscopy—basic and advanced’; 10–14 November 2008.
- 11th ‘Training course in operative laparoscopy—basic and advanced’; 13–17 October 2008.
- 3rd ‘Training course in laparoscopic suturing skills’; 20–21 September 2008.
- 10th ‘Training course in operative laparoscopy—basic and advanced’; 1–5 September 2008.
- 1st ‘Training course in laparoscopic hernia surgery’; 6–8 August 2008.
- 2nd ‘Training course in laparoscopic suturing skills’; 21–23 July 2008.
- 9th ‘Training course in operative laparoscopy—basic and advanced’; 7–11 July 2008.
- 1st ‘Training course in Laparoscopic Colorectal Surgery’; 5–7 May 2008.
- 8th ‘Training course in operative laparoscopy—basic and advanced’; 31 March–4 April 2008.

Guest Faculty and Invited Lectures

Professor M.C. Misra

- Delivered a Guest Lecture on ‘Laparoscopic adrenalectomy’, Joint CME and Live Workshop, Oman Medical College, Sohar, Oman; 9–10 April 2008.
- Surgical Meet, BP Koirala Institute of Health Sciences; 25–26 April 2008.
- Inspection of Renal Transplant Facilities, Base Hospital, New Delhi; 3 May 2008.
- Obesity Fortis Hospital, Vasant Kunj; 4 May 2008.

- Laparoscopic inguinal hernia repair with TEP technique' and participate in the establishment of Micro Invasive a Hernia Repair Therapy and Training Centre, Beijing, China; 20–25 May 2008.
- Congress President, 2nd National Conference of Indian Hernia Society, Srinagar; 6–8 June 2008.
- State Civil Hospital, Naharlagun; 11–12 July 2008.
- Chaired a session ASICON CME, Jaipur Golden Hospital; 27 July 2008.
- 'Constitution of national task force on ksharsutra', The Department of Ayurveda, Yoga and Naturopathy, Unani, Siddha and Homeopath (AYUSH), Ministry of Health and Family Welfare; 24–25 August.
- Visit of teams of Senior Doctors, AIIMS, Ladakh; 1–8 September 2008.
- Appointed examiner, IMRCS Part 3 Examinations, Delhi; 8–12 September 2008.
- Technical Experts Committee Review meeting, HDR Brachytherapy and Modular OT's, Delhi Cancer Institute, Delhi; 22 September 2008.
- Assisted the Interview Board for Selection of the GDMOs, FAZAL Chamber, SCOPE Convention Centre, Lodhi Road; 27 September 2008.
- 3rd Annual Surgery CME Series International Upper GI and Hepatobiliary Conference, CMC Ludhiana; 8 October 2008.
- Ist North Zone SELSICON 2008, Agra; 18–19 October 2009.
- ATLS Course, UAE; 29 October–6 November 2008.
- XXXIV Annual Conference, UPASICON 2008, Bareilly; 7–9 November 2008.
- Indo-US Workshop, Low Cost Diagnostic and Therapeutic Technologies, Hyderabad; 18–20 November 2008.
- Chaired Pubic Lecture, 'Liver Donation', Maulana Azad Medical College, New Delhi; 4 December 2008.
- Visited Imphal, Member of a committee constituted by MOH to look into the additional requirements of RIMS, Imphal; 22–23 December 2008.
- Delivered Guest Lecture on 'Developments in Laparoscopic Hepatobiliary Surgery in last 10 years', ASICON 2008, Ludhiana; 28 December 2008.
- Symposium 'Ethical issues with doctor patient relationship', Nainital; 11 January 2009.
- Live Workshop and CME ,Laparoscopic Surgery, Chittrakoot; 17–18 January 2009.
- Upgradation, Government Medical College, the second phase of PMSSY, Nagpur; 21–22 January 2009.
- ASICON CME, 'Laparoscopic Hernia Repair'; 25 January 2009.

- Meeting of the Members of the Board- finalization of curriculum in the Specialty of General Surgery, Medical Council of India.
- Delivered guest lecture and performed liver Laparoscopic Surgery, Baba Raghav Das Medical College, Gorakhpur; 7–8 February 2009.
- Forth Annual Meeting of International Endohernia Society (IEHS) and Live Workshop, New Delhi; 19–21 February 2009.
- Guest Faculty, Live Laparoscopic workshop of Gynaecology and Surgery, Singrauli; 27–28 February 2009.
- Guest Faculty ,Indo Australian Workshop on Biomedical Devices, New Delhi; 5 March 2009.
- Delivered guest lecture, Laparoscopic workshop cum CME, Shillong; 20–21 March 2009.
- IMRCS Part 3 examination, Dubai; 27 March–3 April 2009.

Professor Anurag Srivastava

‘Diagnosis and management of breast cancer’, Breast CME at the following places.

- Kamla Nehru Regional Cancer Centre, Allahabad.
- Kastubra Medical College, Manipal.
- M.V.J Medical College, Bangalore.

Dr Sandeep Guleria

Lectures Given

- ‘Management of a breast lump’, Indian Society of Interventional and Vascular Radiology, AIIMS; 26 April 2008.
- chaired session, Obesity Fortis Hospital, Vasant Kunj; 4 May 2008.
- IMA East Zone ‘Surgical aspects of renal transplantation’, Max Hospital, Patparganj; 25 May 2008.
- *Deh Daan Samiti*, Organ Donation.
- Chaired session on Varicose Veins, Mata Channan Devi Hospital, the ASICON CME; 29 June 2008.
- Chaired session in ASICON CME, Jaipur Golden Hospital; 27 July 2008.
- ‘Ethics in transplantation’, CMET, 7 August 2008.
- ‘Medical and legal aspects of transplantation’, AIIMS in Legal Conference organized; AIIMS; 30 August 2008.
- Awarded DS Rana Memorial Oration, Maulana Azad Medical College, ‘Current Status of Organ Transplantation’ 22 September 2008.

- Simultaneous kidney pancreas transplantation, Asian Congress of Urology, 2 October 2008.
- IL-2 Inhibitors in Transplantation, Indian Society of Organ Transplantation Annual Meeting, Ludhiana; 18 October 2008.
- Chaired Session on Pancreatic transplantation Indian society of Organ Transplantation Annual Meeting, Ludhiana; 19 October 2008.
- Post Transplant Malignancy, Sindh Institute of Urology and transplantation Karachi Pakistan; 24 October 2008.
- New onset diabetes mellitus Sindh Institute of Urology and transplantation , Karachi Pakistan; 24 October 2008.
- Evidence-based surgery Delhi State chapter Association of Surgeons of India Annual Meeting Action Hospital; 28 November 2008.
- Current status of Organ Transplantation, Association of Surgeons of Rajasthan (ASIRAJ) , India; 30 November 2008.
- Organ harvesting, Trauma Conference, Sirifort Auditorium, New Delhi; 7 December 2008.
- ASICON 2008, CME , ASI , Ludhiana; 24 December 2008.
- Complications of Laparoscopic Donor Nephrectomy, ASICON CME ; 25 January 2009.
- ‘Brain death’, Symposium ‘Deceased organ donation’, PGI, Chandigarh; 8 February 2009.
- ‘Organ transplantation’ IMA Jalandhar‘; 8 March 2009.
- IMRCS Part 3 Examination, Dubai; 27 March–3 April 2009.

Dr Sandeep Agarwal

- ‘Ten golden steps for laparoscopic sleeve gastrectomy’, ASICON CME, Fortis Hospitals, Vasant Kunj.
- ‘Diaphragmatic injuries—complications and management’, CME ASICON-North Zone, AIIMS, New Delhi; January 2009.
- ‘Bariatric surgery, AIIMS, Endosurg 2009, AIIMS, New Delhi; March 2009.
- ‘Perforation-peritonitis’, symposium on ‘Gut Health’ and ‘Probiotics’, Indian Dietetic Association; September 2008.

Invited Faculty

- First Asian Consensus Meeting, Metabolic Surgery, Trivandrum; August 2008.
- ‘Consensus in diagnosis and management of obesity and metabolic syndrome’, Obesity and Metabolic Summit, New Delhi; November 2008.

Dr Virinder K. Bansal

- ‘Laparoscopic management of hydatid cyst of the liver’, Live workshop on laparoscopic surgery, Nazareth Hospital, Shillong; 20–21 March 2009.
- ‘Laparoscopic management of incisional hernias’, Live workshop on laparoscopic surgery at Nazareth Hospital, Shillong; 20–21 March 2009.
- ‘Technical considerations in laparoscopic incisional hernia repair’, Third AIIMS Surgical Week; 13–15 March 2009.
- ‘Laparoscopic incisional and ventral hernia-experience at a tertiary care centre’, International Consensus Congress of International Endohernia Society, New Delhi; 19–21 February 2009.
- ‘Transvaginal cholecystectomy—AIIMS experience’, PSG Surgicon 2008, Coimbatore; 2–4 May 2008.
- two sessions on Live Laparoscopic Surgery at First North Zone Conference and Live workshop of SELSI, Agra; 17–19 October 2008.
- Chaired two sessions on Live operative laparoscopic surgery at Second National Conference of Indian Hernia Society, GMCH, Srinagar; 5–7 June 2008.

Papers Presented by the Faculty in conferences

Professor M.C. Misra

- ‘Friction burn—a clinical study’, 14th Congress of International Society for Burn Injuries, Montreal, Canada; September 2008.
- ‘Laparoscopic incisional hernia repair using composite mesh’, Second National Conference of Indian Hernia Society, Srinagar; June 2008.
- ‘Laparoscopic incisional hernia using polypropylene mesh’, Second National Conference of Indian Hernia Society, Srinagar; June 2008.
- ‘TAPP vs TEP—preliminary results’, Second National Conference of Indian Hernia Society, Srinagar; June 2008.
- ‘Balloon dissection vs telescopic dissection in TEP, Second National Conference of Indian Hernia Society, Srinagar; June 2008.
- ‘TEP repair in groin hernia—prospective evaluation in testing care centre’, Second National Conference of Indian Hernia Society, Srinagar; June 2008.
- ‘Laparoscopic repair of Parastomal Hernia’, Second National Conference of Indian Hernia Society, Srinagar; June 2008.
- ‘Use of pre-shaped mesh groin hernia repair’, Second National Conference of Indian Hernia Society, Srinagar; June 2008.

- ‘TEP vs TAPP repair for inguinal hernia—a prospective randomized trial presented’, International Consensus Congress of International Endohernia Society, New Delhi; 19–21 February 2009.
- ‘Suture vs stacker fixation in patients with primary ventral hernia and incisional hernia—a prospective randomized trial presented’, International Consensus Congress of International Endohernia Society, New Delhi; 19–21 February 2009.

Dr Sandeep Guleria

- ‘Are protocol biopsies indicated in a live related renal transplant Programme?’, XXII International Conference of the Transplantation Society, Sydney, Australia.
- ‘NGAL as a biomarker to predict ATN in renal transplant recipients’, XXII, International Conference of the Transplantation Society, Sydney, Australia.
- ‘Is laparoscopic donor Nephrectomy really the way ahead?’, XXII, International Conference of the Transplantation Society, Sydney, Australia.
- ‘Quality of life of live related renal donors’, Annual Meeting Indian society of Organ Transplantation Annual Meeting, Ludhiana; 18 October 2008. (Awarded the Best Oral Presentation)
- ‘Impact of Protocol biopsies in a live related renal transplant programme’, Indian society of Organ Transplantation Annual meeting, Ludhiana; 18 October 2008. (Awarded the Best Oral Presentation)

Dr Rajinder Parshad

- R Bhamrah, PK Julka, O Nair, R Parshad, S Dattagupta, R Ralhan, S Dwivedi, DS Bhamrah, GK Rath, G Kumar. Correlations between epidermal growth factor receptor, her-2-neu and estrogen receptor in carcinoma breast: A study from cancer centre in India, ASCO 2008 Annual meeting Proceedings, Vol. 26, No. 15S, 22173.

Dr Sandeep Agarwal

- ‘Is laparoscopic donor Nephrectomy really the way ahead’, XXII International Conference of the Transplantation Society, Sydney, Australia.

Dr V.K. Bansal

- ‘Laparoscopic incisional hernia repair using composite mesh’, Second National Conference of Indian Hernia Society, Srinagar; June 2008.
- ‘Laparoscopic incisional hernia using polypropylene mesh’, Second National Conference of Indian Hernia Society, Srinagar; June 2008.
- ‘TAPP vs TEP—preliminary results’, Second National Conference of Indian Hernia Society, Srinagar; June 2008.
- ‘Balloon dissection vs telescopic dissection in TEP’, Second National Conference of Indian Hernia Society, Srinagar; June 2008.

- ‘TEP Repair in groin hernia—prospective evaluation in testing care centre’, Second National Conference of Indian Hernia Society, Srinagar; June 2008.
- ‘Laparoscopic repair of Parastomal Hernia’, Second National Conference of Indian Hernia Society, Srinagar; June 2008.
- ‘Use of pre-shaped mesh groin hernia repair’, Second National Conference of Indian Hernia Society, Srinagar; June 2008.
- ‘TEP vs TAPP repair for inguinal hernia—a prospective randomized trial’, International Consensus Congress of International Endohernia Society, New Delhi; 19–21 February 2009.
- ‘Suture vs stacker fixation in patients with primary ventral hernia and incisional hernia—a prospective randomized trial’, International Consensus Congress of International Endohernia Society, New Delhi; 19–21 February 2009.

Dr Anita Dhar

- ‘Triple negative breast cancer: A review’, SURGICON 2008, New Delhi; 29 November 2008.
- Poster: ‘Endovascular graft repair for pseudo aneurysm of common iliac artery presenting as intestinal obstruction’, SURGICON 2008. Received the Second award in Surgicon 2008; 29 November 2008.
- ‘Role of FDG PET-CT in evaluation of axillary lymph node involvement in T1 T2 N0 M0 breast cancer in comparison with sentinel node Biopsy’, SURGICON 2008; 29 November 2008.
- ‘Role of centchroman in regression of fibroadenoma and its correlation to histopathology and estrogen and progesterone receptor’, 3rd award in the competition session in Surgicon, 2008.

RESEARCH

Funded Projects

1. A randomized controlled trail of laparoscopic inguinal hernia repair— transabdominal preperitoneal versus total extra peritoneal approach. Professor M.C. Misra. Funded by Institute Research Grant for 2007–2008. Funds: Rs 1,62,500.
2. To evaluate the efficacy and Tolerability of Tacrolimus in patients undergoing renal transplantation. Funded by Panacea Biotec. Funds: Rs 6 lakh.
3. To evaluate the risk factors for new onset diabetes mellitus after renal transplantation. Sandeep Guleria. Funded by Institute Research. Funds: Rs 80,000.
4. Induction of therapeutic angiogenesis in limb ischemia by intra-arterial delivery of autologous bone marrow derived stem cells. Funded by A DBT. Sanjeev Sharma, Sandeep Guleria, VK Bansal. (with Department of Cardiac-Radiology, Cardiology and Surgical Disciplines)
5. Cost effectiveness analysis and comparison of single stage vs two stage management of patients with concomitant gall stone disease and common bile duct stones—a randomized controlled trial.

Virinder Kumar Bansal, Professor MC Misra, Parmod Garg, CS Pandav. Funded by Department of Gastroenterology and Community Medicine. SAGES Research Grant. Funds: USD 30,000.

6. Safety and efficacy of autologous stem cell transplantation in prevention of amputation in patients with chronic limb ischemia. A multi-centric study. Anita Dhar. Funded by DBT. Funds: Rs 50 lakh.

Departmental Projects

Completed

1. BhCG expression in patients with benign and malignant breast diseases (June 2008)
2. To study the clinical efficacy of transvaginal cholecystectomy in patients with uncomplicated gall stones with the new instruments (March 2008)
3. Efficacy of training of laparoscopic hepatico-jejunostomy using porcine model—a prospective study
4. Feasibility study on Injury and Road Traffic Injury surveillance. MC Misra, Amit Gupta. Funded by MoHSW- WHO-ICMR.
5. Quality of life of live renal Donors
6. Assessment of the Value of Protocol biopsies in patients undergoing renal transplantation in the Tacrolimus era
7. Genetic polymorphisms in Cox-2 gene in breast cancer patients (with Department of biophysics and Biotechnology)
8. Advanced sentinel lymph node evaluation in carcinoma breast (with Departments of Pathology and Nuclear Medicine)
9. Characterization of thymoma using F18 flurorodeoxyglucose positron emission tomography (FDG PET-CT) and its correlation with histopathology (with Departments of Pathology and Nuclear Medicine).
10. Feasibility of fast track discharge in breast cancer patients; undergoing definitive surgery and impact on Quality of Life; Co
11. Guide BhCG expression in patients with benign and Malignant breast diseases
12. To study the clinical efficacy of Transvaginal cholecystectomy in patients with uncomplicated gall stones with the new Instruments (March 2008)
13. Efficacy of training of laparoscopic hepatico-jejunostomy using porcine model: A prospective study
14. Role of FDG PET-CT in evaluation of axillary lymph node involvement in T1 T2 N0 M0 breast cancer in comparison with Sentinel node Biopsy

15. Role of Centchroman in regression of Mastalgia and regression of Fibroadenoma and its correlation to histopathology and estrogen and progesterone receptor

Ongoing

1. A randomized controlled study of comparison of single stage vs two stage treatment for patients with gall stones and common bile duct stones
2. Comparison of chronic groin pain, testicular functions and quality of life after open and laparoscopic inguinal hernia repair: A prospective randomized control trial
3. Comparison of various imaging modalities in the diagnosis and staging of the periampullary tumors and study of various perioperative factors in predicting the outcome of the patients with periampullary tumors
4. Laparoscopic suturing skills acquisition: A comparison between trained and novice surgeons
5. Prospective evaluation of laparoscopic skills acquisition in a short term focused training programme on a phantom model using porcine gall bladder
6. Major trauma outcome study in a level-I trauma centre
7. A prospective randomized control trial of sutured vs tacker fixation of mesh in patients undergoing laparoscopic incisional hernia repair
8. A prospective randomized comparison of TAPP vs TEP repair in patients undergoing laparoscopic inguinal hernia repair
9. The effect of renal transplantation on coronary artery calcification and carotid artery intima medial thickness
10. To study the incidence and risk factors for new onset diabetes Mellitus
11. Evaluation of donor kidney weight on renal transplant outcomes
12. Feasibility of fast track discharge in breast cancer patients
13. Structural and functional abnormalities in lungs in achalasia cardia patients—pre- and post-treatment evaluation
14. Feasibility of fast track discharge in breast cancer patients undergoing definitive surgery and impact on quality of life
15. To assess the impact of renal transplantation on cognitive function on patients on haemodialysis
16. To assess and compare mini-donor nephrectomy with laparoscopic donor nephrectomy

PUBLICATIONS

Journals

1. Bansal VK, Kumar S, Jindal V, Misra MC, Bhatia V. Duodenal gastrinoma: A diagnostic dilemma. *Am J Surg* 2009;**197**:e48–e50. (Epub 2009 Feb 23. PMID: 19233342 [PubMed - in process])

2. Misra MC, Bhowate PD, Bansal VK, Kumar S. Massive scrotal hernias: Problems and solutions. *J Laparoendosc Adv Surg Tech A* 2009;**19**:19–22. (PMID: 19196090 [PubMed - indexed for MEDLINE])
3. Becerra Garcia FC, Misra MC, Bhattacharjee HK, Buess G. Experimental trial of transvaginal cholecystectomy: An *ex vivo* analysis of the learning process for a novel single-port technique. *Surg Endosc* 2009;**1**. [Epub ahead of print] PMID: 19118415 [PubMed - as supplied by publisher]
4. Buess G, Becerra-Garcia F, Misra MC. Instruments for transluminal laparoscopic surgery or 'NOTES'. *Minim Invasive Ther Allied Technol* 2008;**17**:331–5. PMID: 19003593 [PubMed - indexed for MEDLINE]
5. Misra MC, Aggarwal S, Guleria S, Seenu V, Bhalla AP. Clipless and sutureless laparoscopic surgery for adrenal and extra-adrenal tumors. *JLS*. 2008;**12**:252–5. PMID: 18765047 [PubMed-indexed for MEDLINE]
6. Misra MC, Kumar S, Bansal VK. Total extraperitoneal (TEP) mesh repair of inguinal hernia in the developing world: Comparison of low-cost indigenous balloon dissection versus direct telescopic dissection—A prospective randomized controlled study. *Surg Endosc* 2008;**22**:1947–58. Epub 2008 Apr 24. PMID: 18437480 [PubMed - indexed for MEDLINE]
7. Srivastava A, Sood A. Oncologists should measure life, not death: A newer perspective of cancer statistics. *Indian J Cancer* 2009;**46**:13–16.
8. Bagadi SA, Prasad CP, Kaur J, Srivastava A, Prashad R, Gupta SD, Ralhan R. Clinical significance of promoter hypermethylation of RASSF1A, RARBeta2, BRCA1 and HOXA5 in breast cancers of India patients. *Life Sci* 2008;**82**:1288–92. Epub1.
9. Guleria S, Kamboj M, Chatterjee A, Sharma M, Awasthy V, Dinda A, *et al*. Generic tacrolimus (Pan Graf) in renal transplantation: An experience of 155 recipients in India. *Transplant Proc* 2008;**40**:2237–9.
10. Arora R, Sharma A, Bhowate P, Bansal VK, Guleria S, Dinda AK. Hepatic tuberculosis mimicking Klatskin tumor: A diagnostic dilemma. *Indian J Pathol Microbiol* 2008;**51**:382–5.
11. Panigrahi A, Siddiqui JA, Rai A, Margoob A, Khaira A, Bhowmik D, *et al*. Allosensitization to HLA and MICA is an important measure of renal graft outcome. *Clin Transpl* 2007:211–7.
12. Yadav R, Mehta SN, Kumar A, Guleria S, Seenu V, Tiwari SC. A prospective analysis of testicular androgenic function in recipients of a renal allograft. *Int Urol Nephrol* 2008;**40**:397–403.
13. Gupta R, Sharma MC, Attri S, Guleria S. Testicular metastasis of extraskeletal myxoid chondrosarcoma: Report of first case. *Urology* 2008;**71**:984.e1-4. [Epub 2008 Mar 4]
14. Bhowmik D, Dinda AK, Xess I, Sethuraman G, Mahajan S, Gupta S, *et al*. *Transpl Infect Dis* 2008;**10**:286–9. [Epub 2007 Dec 11]
15. Kher V, Guleria S. Consensus on the Use of CNI in Transplantation. *Indian J Tansplant* 2008:11.

16. Guleria S, Kumar R, Reddy S, Jain S, Agarwal S, Mahajan S, *et al.* Is Laparoscopic Donor Nephrectomy Really the Way Ahead? *Transplantation* 2008;**86**:125–6.
17. Guleria S, Jain S, Dinda A, Mahajan S, Gupta S, Bhowmik D, *et al.* Are Protocol Biopsies Indicated in A Live Related Renal Transplant Programme?: *Transplantation* 2008;**86**:19.
18. Panigrahi A, Shidhiki J, Margoob A, Bhowmik D, Tiwari S, Guleria S, *et al.* Neutrophil gelatinase—associated lipocalin (Ngal) As A Biomarker To predict Acute Tubular Necrosis (Atn) in Renal Transplant Allografts. *Transplantation*. 2008;**86**:32.
19. Hazrah P Dhir M Gupta SD Deo V, Parshad R. Prognostic significance of location of the primary tumour in operable breast cancers. *Indian J Cancer* 2009;**46**:139–45.
20. Singh G, Thulkar S, Seith A, Parshad R, Kumar P. An approach for assessment of tumour volume from mammography I locally advanced breast cancer. *Malaysian J Med Sci* 2008;**15**:37–41.
21. Bhamrah R, Julka PK, Nair O, Parshad R, Dattagupta S, Ralhan R, *et al.* Prognostic value of epidermal growth factor receptor in breast cancer. An Indian Experience. *Gastric Breast Cancer* 2008;**7**:56–64.
22. Parshad R, Hazrah P, Saraya A, Garg P, Makharia G. Symptomatic Outcome of Laparoscopic Cardiomyotomy Without an Antireflux Procedure: Experience in Initial 40 Cases. *Surg Laparosc Endosc Percutan Tech* 2008;**18**:139–43.
23. Julka PK, Chacko RT, Nag S, Parshad R, Nair A, Oh DS, *et al.* A phase II study of sequential neoadjuvant gemcitabine plus doxorubicin followed by gemcitabine plus cisplatin in patients with operable breast cancer: Prediction of response using molecular profiling. *Br J Cancer* 2008;**98**:1327–35. [Pub 2008 Apr 1]
24. Dadhwal V, Ghosh B, Jindal VL, Vaid A, Aggarwal S, Mittal S. A case of colouterine fistula managed laparoscopically. *J Minim Invasive Gynecol* 2008;**15**:652–4.

Books

1. Khan RN, Challa V, Dhar A, Anand S, Srivastava A. Abdominal wound dehiscence: The science and art of its occurrence and prevention. In: Gupta RL (ed). *Recent Advances in Surgery Vol. 11*. New Delhi: Jaypee Brother; 2009:225–50.

SIGNIFICANT EVENTS

Professor M.C. Misra, Convener, Society of Endoscopic and Laparoscopic surgeons of India. Team Leader of the group of Doctors and Nurses to take ATLS Provider and Instructor course in Furairah, UAE; 29 October–4 November 2008.

Professor Anurag Srivastava was involved in enriching the research experience of the faculty by conducting teaching workshops on ‘Introduction to Research Methodology at Clinical Epidemiology Unit, The Clinical Epidemiology Unit of AIIMS. This was attended by faculty and residents.

Dr Sandeep Guleria was elected as secretary of the Indian Society of Organ Transplantation. He was also awarded the Dr D.S. Rana memorial oration by the Maulana Azad Medical College.

9.35 Transplant Immunology & Immunogenetics

Professor and Head

N.K Mehra

Associate Professor

D.K Mitra

Scientists

Uma Kanga
Arundhati Panigrahi

Gurvinder Kaur

Sunil Kumar
Sanjeev Goswami*

* Joined the department from December 2008

EDUCATION

Short-term training

The department provided short term training to the junior residents of Pathology and Laboratory Medicine and senior residents (DM Students) of the Department of Nephrology and Haematology. During the year, 14 students from various universities and institutions as well as doctors from hospitals in and around Delhi received 4–6 months' training for laboratory techniques in HLA testing and other immunological investigations.

Long-term training

One doctor (Lt Col) from the Armed Forces Medical Services (AFMS) has underwent long term training in Clinical Immunogenetics.

Training to DM students: Several DM students from the Departments of Pathology, Nephrology, Medical Oncology and AIIMS undertook training in the Department and learnt techniques in HLA testing and other immunological investigations.

Continuing Medical Education

The faculty of the department participated and delivered several lectures in national and international conferences. A quality control exercise for DNA typing of HLA genes is in progress at the national level. Training on various cell culture assays, including flowcytometry-based assays have been regularly given to students and visiting trainees. The Faculty also delivered special lectures in various department of the institute (Biotechnology, Medical Oncology, Medicine) as part of the academic curriculum of these departments.

National and International Conferences

Lectures delivered

National

Professor N.K. Mehra

- 'Haematopoietic stem cell transplantation', National Symposium on Tribal Health, organized by Indian Medical Association, Chanderpur (M.S.); 4 April 2008.

- ‘Genetics of pulmonary tuberculosis’, DBT Expert Group on tuberculosis, Ahmedabad; 7 April 2008.
- ‘Cross match test: How is it done and how to improve sensitivity and specificity?’, Postgraduate Nephrology Course, Shimla; 22 April 2008.
- ‘Strides in medicine and biology: Can man live for 150 years?’, SMS Medical College, Jaipur; 18 July 2008.
- Session Chair—International Congress on ‘Role of microbicides’, New Delhi; 6–10 May 2008.
- ‘Asian Indian donor marrow registry: Status and requirements’, International Steering Committee Meeting on Indian Bone Marrow Registries, Udaipur; 8 August 2008.
- ‘Session chair—Role of unrelated donor marrow registries in India’, National Symposium on Thalassemia, New Delhi; 30 August 2008.
- ‘Genetics of HIV transmission and disease progression’, National HIV Science Symposium, YRG Care, Discussant in the Session on HIV Genetics.
- Chennai; 22–23 September 2008. ‘Genetic architecture of complex infectious diseases’, International Conference on Functional and translational research on HIV/AIDS. Global Perspectives, Mumbai; 5–8 October 2008.
- “Strides in medicine and biology”, Symposium on Biotechnology, Miranda House, New Delhi; 10 October 2008.
- ‘Haematopoietic stem cell transplantation: Immunological perspectives’, Institute Rotary Cancer Hospital, AIIMS, New Delhi; 13 October 2008.
- ‘Planning and design of a transplant immunology facility’, South Asian Conference and CME on Synergy in Healthcare, New Delhi; 3–6 November 2008.
- ‘Probiotic immunomodulation in health and disease’, 2nd Probiotic Symposium on Health and Disease, New Delhi; 7–8 November 2008
- ‘Haematopoietic stem cell transplantation—challenges and limitations’, Invited talk at the 1st International Stem Cell Summit India-2008, Chennai; 14–16 November 2008.
- ‘Antibody basis of graft rejection during organ transplantation’, ICMR-INSERM Workshop on Translational Research: Biotherapies and Stem Cell Research, Centre for Cellular and Molecular Biology, Hyderabad (AP); 17–18 November 2008.
- ‘Genetic architecture of infectious diseases’, Indo-German Conference on Molecular Epidemiology of infectious diseases, Hyderabad (AP); 28–30 November 2008.
- ‘Genetics of tuberculosis infection’, International Symposium on Emerging trends in tuberculosis research, ICGEB, New Delhi; 1–3 December 2008.
- ‘Haematopoietic stem cell transplantation: Challenges and opportunities’, National Conference of stem cell’ voice of India, New Delhi; 6 December 2008.

- ‘Genetics of type 1 diabetes mellitus: New perspectives’, 34th National Conference of the Indian Immunology Society, Bhubhaneshwar; 12–14 December 2008.
- ‘Strides in immunology: Can man live for 150 years’, National Symposium on Recent Advances in Immunology, Deshbandhu College, Delhi University, Delhi; 30 January 2009.
- ‘A journey into the world of HLA and Medicine’, DBT Workshop on HLA, SGPGI, Lucknow; 20 February 2009.
- ‘Antibody basis of graft rejection: Role of flowcytometry’, Symposium on advanced clinical applications of flowcytometry, Mumbai; 25 February 2009.
- ‘A journey into the world of HLA and Medicine’, International Symposium on Tribal Health, Jabalpur; 27 February–1 March 2009.
- ‘A Journey into the world of HLA in Medicine and Biology’, Seminars in Molecular Medicine and Biotechnology, AIIMS, New Delhi; 13 March 2009.
- ‘Immunogenetics in health and disease’, National Symposium on Biotechnology, Punjab University, Chandigarh; 28 February 2009.
- ‘Strides in immunology: Can man live for 150 years?’, Biosparks-2009, Jawaharlal Nehru University, New Delhi; 6 March 2009.
- ‘Genetic architecture of infectious diseases’, Immunogenetics Session, 34th Annual Conference of the Indian Society of Human Genetics, New Delhi; 19 March 2009.
- ‘Genetic basis of HIV-I susceptibility, transmission and progression to AIDS in North Indians’, Immunogenetics Session, 34th Annual Conference of the Indian Society of Human Genetics, New Delhi; 19 March 2009.

International

- ‘Genetics of rheumatic fever and rheumatic heart disease’, XVII Lancefield International Symposium on Stretococci and Streptococcal diseases, Porto Heli, Greece; 21–27 June 2008.
- ‘Genetics of HIV infection, transmission and disease progression’, JACIN 2008 (Jakarta Allergy and Clinical Immunology network) Conference, Jakarta; 27–29 June 2008.
- ‘HLA and disease associations: Mechanisms and general considerations’, Plenary Lecture in Mini Symposium. 15th International Histocompatibility and Immunogenetics Workshop Conference, Rio de Janeiro, Brazil; 17–20 September 2008.
- Delivered 10 more lectures and chaired a ‘Mini Symposium’ at the 15th International Histocompatibility and Immunogenetics Workshop Conference, Rio de Janeiro, Brazil; 17–20 September 2008.
- ‘Predictive Cytokine polymorphic genes in organ and hematopoietic stem cell transplantation’, 4th FIMSA Congress of Immunology, Taipei, Taiwan; 17–20 October 2008.
- ‘Evolution of disease associated HLA-DR3+ve haplotypes’, Type 1 Diabetes Genetics Consortium (T1DGC) Investigators meeting, Washington DC, USA; 22–25 October 2008.

Dr D.K. Mitra

‘Regulatory T-cells in tuberculosis at the Department of Biotechnology’, AIIMS , New Delhi, 2 April 2008; Colorado State University, Colorado, USA, 10 January 2009; Stanford University, CA, USA, 17 January 2009; UC Davis, USA, 14 January 2009.

Dr Uma Kanga

Scientist-II participated in the International Steering Committee meeting on Unrelated Donor Marrow Registries, Udaipur; 8 August 2008; Delivered lecture on Immunogenetics of Type 1 Diabetes at 15th International Histocompatibility and Immunogenetics Workshop Conference, Rio de Janeiro, Brazil; 17–20 September 2008; Type 1 Diabetes Genetics Consortium (T1DGC) Investigators meeting, Washington DC, USA; 22–25 October 2008.

Dr Gurvinder Kaur

Scientist-II participated in the International Steering Committee on Unrelated Bone Marrow Registries, Udaipur; 8 August 2008; Delivered two lectures on, (i) Genetic architecture of complex infectious disease like HIV; (ii) Polymorphism in toll like receptors in pulmonary tuberculosis, 15th International Histocompatibility and Immunogenetics Workshop Conference, Rio de Janeiro, Brazil; 17–20 September 2008; ‘Invited Faculty’ at the National Workshop on DNA MDRF, Chennai; 3–9 January 2009. DNA Extraction protocol Workshop, Chennai; 3–9 January 2009, Delhi; 25–27 March 2009.

Organized by department

- XV Annual Symposium of the Ranbaxy Science Foundation on ‘Hormonal Receptors and Women’s Health’. Professor N.K. Mehra, AIIMS, New Delhi; 19 March 2009.
- Professor N.K. Mehra organized the full session on ‘Immunogenetics’, ISHG-2009 34th Annual Conference of the Indian Society of Human Genetics, New Delhi; 16–19 March 2009.

RESEARCH

Funded Projects

Ongoing

1. Monitoring T-cell activation markers and cytokine production following allogenic renal transplantation. N.K Mehra. Funded by ICMR for 3 years (2005–2008). Funds: Rs 17 lakh.
2. Programme support for Advanced Programme in Histocompatibility and Immunogenetics (PS-APHTI). N.K Mehra. Funded by DBT for 3 years (2005–2008 extended upto June 2009). Funds: Rs 163.43 lakh.
3. ICMR-INSERM Project on Type 1 Diabetes. N.K Mehra. Funded by ICMR for 5 years (2004–2009). Funds: Rs 120.20 lakh.
4. Comprehensive approach to understand streptococcal disease and their sequel to develop innovative strategies for diagnosis, therapy, prevention and control. N.K Mehra. Funded by European Commission for 3 years (2006–2009). Funds: Rs 114 lakh.

5. Type 1 diabetes genetics consortium: An international effort. Professor N.K Mehra. Funded by NIH, USA for 3 years (2005–2008). Funds: US\$ 25,000.
6. HLA profile of Raika Community of Rajasthan. N.K Mehra. Funded by ICMR for 2 years (2006–2008). Funds: Rs.10.08 lakh.
7. Genomic analysis of MHC region genes (HLA and non-HLA) in Type-1 diabetes in the Indian population. N.K Mehra. Funded by ICMR for 3 years (2006–2009). Funds: Rs 27 lakhs.
8. Comparative study on the Immunogenetic similarities between Euro Caucasians and Asian Indians: An Indo-Hungarian initiative. N.K Mehra. Funded by DST for 3 years (2007–2010).
9. Genetic basis for HIV-1 transmission Resistance and disease progression. N.K Mehra. Funded by DBT for 3 years (2007–2010). Funds: Rs 60 lakh.
10. Hematopoietic stem cell transplantation and Genetics of HIV infection. Tata Innovation Fellowship. N.K Mehra. Funded by DBT, 3 years (October 2007–2010). Funds: Rs 22.20 lakh.
11. Studies on T cell mediated suppression of immunity in visceral Leishmaniasis patients. D.K. Mitra. Funded by DBT for 3 years (2006–2009). Funds: Rs 79.29 lakh.
12. Efficacy of oral zinc administration as an adjunct therapy in category I pulmonary tuberculosis along with assessment of immunological parameters (Double-blind, Randomized, placebo-controlled, multicenter clinical trial). D.K. Mitra. Funded by DBT for 3 years (2006–2009). Funds: Rs 23.18 lakh.
13. Role of oral Vitamin D as an adjunct therapy in category I pulmonary tuberculosis along with assessment of immunological parameters. D.K. Mitra. Funded by DBT for 3 years (2006–2009). Funds: Rs 20.64 lakh.
14. Impact of HIV infection on latent TB among patients with HIV-TB coinfection. D.K. Mitra. Funded by DBT, ICMR for 3 years (2007–2010). Funds: Rs 134 lakh.
15. Early Detection of Polarized cytokine producing alloreactive T cells and the role of chemokines in their selective homing among patients undergoing renal transplantation. D.K. Mitra. Funded by DST for 3 years (2007–2010) Funds: Rs 28.37 lakh.
16. Study of NKT cells in polarized immunity among Leprosy patients. D.K. Mitra. Funded by ICMR for 3 years (2007–2010). Funds: Rs 30.91 lakh.
17. Impact of HIV infection on latent TB among patients with HIV-TB co-infection. D.K. Mitra. Funded by ICMR-DBT for 3 years (2007–2010). Funds: Rs 1,38,21,000.

PUBLICATIONS

Journals

1. Kaur G, Kumar N, Szilagyi A, Blasko B, Fust G, Rajczy K, *et al.* Autoimmune associated HLA-B8-DR3 haplotypes in Asian Indians are unique in C4 complement gene copy numbers and HSP-2 1267A/G. *Human Immunol* 2008;**69**:580–7.

2. Kaur G, Mehra NK. Genetic determinants of HIV-1 infection and progression to AIDS: Susceptibility to HIV infection. *Tissue Antigens* 2009;**73**:289–301.
3. Kumar N, Kaur G, Mehra NK. Genetic determinants of type 1 diabetes: Immune response genes. *Biomarkers in Medicine (Future Medicine Ltd)* 2008;**3**:153–73.
4. Kumar N, Kaur G, Tandon N, Mehra NK. Allotyping human complement factor B in Asian Indian type 1 diabetic patients. *Tissue Antigens* 2008;**72**:517–24.
5. Mitra DK, Sharma PK. Tuberculosis Vaccine: Immunology, Strategies and Status. *Adult Immunizations, J Assoc Physicians India* 2009;**1**:182–91.
6. Nakajima T, Kaur G, Mehra NK, Kimura A. HIV-1/AIDS susceptibility and copy number variation in CCL3L1, a gene encoding a natural ligand for HIV-1 co-receptor CCR5. *Cytogenet Genome Res* 2008;**123**:156–60.
7. Saha P, Sharma P, Saxena A, Sharma S, Ghosh B, Mitra D. CXCR3, CCR5 dual positive T cells are markers for the severe form of tuberculosis disease. *Clinical Immunology* 2008;**127 (Suppl. 1)**:S131–2.
8. Sanghera DK, Nath SK, Ortega L, Gambarelli M, Kim-Howard X, Singh JR, *et al.* TCF7L2 polymorphisms are associated with type 2 diabetes in *Khatri* Sikhs from North India: Genetic variation affects lipid levels. *Annals Hum Genet* 2008:1–11.
9. Sanghera DK, Ortega L, Han S, Singh JR, Ralhan SK, Wander GS, *et al.* Impact of nine common type 2 diabetes risk polymorphisms in Asian Indian Sikhs: PPARG2 (Pro12Ala), TCF7L2 and FTO variants confer a significant risk. *BMC Med Genetics* 2008;**9**:59.
10. Sanghera DK, Been L, Ortega L, Wander GS, Mehra NK, Aston CE, *et al.* Testing the association of novel meta-analysis-derived diabetic risk genes with type II diabetes and related metabolic traits in Asian Indian Sikhs. *J Human Genet* 2009:1–7.
11. Manju S, Rai AK, Saxena A, Singh A, Raina V, Seth T, *et al.* Acute Leukemia: Diagnosis improved by flow cytometry in addition to morphology. *Asia-Pacific J Clin Oncol* 2009;**5**:55–65.
12. Singh P, Kaur G, Sharma G, Mehra NK. Immunogenetic basis of HIV-1 infection, transmission and disease progression. *Vaccine* 2008;**26**:2966–80.
13. Shamis V, M Tuen, T Wu, T Starr, TO Cameron, R Thompson, *et al.* HIV-1 envelope gp120 induces a stop signal and virological synapse formation in non-infected CD4 T cells. *Virology* 2008;**82(19)**:9445–57.

Chapters in book

1. Singh M. Genetic Susceptibility Parameters in Tuberculosis. In: Sharma SK, Mohan A (eds). *Tuberculosis*. Vol. 2. New Delhi: Jaypee Brothers; 2009:P124–42.
2. Mehra NK, Panigrahi A. Transplant Immunogenetics, In: Gupta DK, Sharma S, Richard G, Khan A (eds). *Paediatric Surgery–Diagnosis and Management*. Vol. 2., New Delhi: Jaypee Brothers; 2009:P969–87.

3. Ozawa M, Terasaki PI, Castro R, Alberu J, Morales-Buenrostro L, Alvarez I, *et al.* 14th International HLA and Immunogenetics Workshop Prospective chronic rejection project: A three year follow up analysis. In: Cecka JM, Terasaki PI (eds). *Clinical Transplants 2007*. California: Terasaki Foundation Laboratory, Los Angeles; 2008:255–60.
4. Sood P, Bindra MS, Kumar N, Mehra NK. Immunogenetic aspects of recurrent spontaneous abortions. In: Bandivdekar AH, CP Puri (eds). *Current Paradigm of Reproductive Immunology*. Trivandrum: Research Signpost Publishers; 2009:121–46.
5. Panigrahi A, Siddiqui JA, Rai A, Margoob A, Khaira A, Bhowmik D, *et al.* Allosensitization to HLA and MICA is an important measure of renal graft outcome. In: Cecka JM, Terasaki PI (eds). *Clinical Transplants 2007*. California: Terasaki Foundation Laboratory, Los Angeles; 2008:211–17.
6. Panigrahi A, Rai A, Siddiqui JA, Margoob A, Bhowmik D, Tiwari SC, *et al.* Post transplant antibody development predicts renal graft loss: A case report. In: Terasaki PI (ed). *Clinical Transplants 2007*, California: Terasaki Foundation Laboratory, Los Angeles; 2008.

PATIENT CARE

Laboratory services

Transplantation

HLA matching	Recipients	Donors	Total
Renal Transplant Patients	250	285	535
Bone Marrow Transplant patients Leukemia	15	23	38
Aplastic anemia	41	86	127
Acute Leukemia	46	66	112
Thalassemia	38	63	110
Others	63	106	169
Total	203	342	545

Cadaver donor organ transplantation

Cadaver Donor	15
Kidney recipients	10
Heart recipients	0

Cross match test

Serology	450
Flowcytometry	120
Panel reactive antibody (PRA) screening	625
Flow PRA	20
ELISA PRA	350

Diagnostics

Spondyloarthropathies	610
Other diseases	
Chimerism studies in BMT	
Immunophenotyping of Leukemia Patients	250
Unrelated Donor search for BMT	325

A total of 325 requests for search of unrelated HLA matched donor from the Asian Indian Donor Marrow Registry' for bone marrow transplantation (BMT) were received. These included 135 from USA, 72 from Europe, 80 from various Asian countries and 38 from India.

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Professor N.K. Mehra was awarded the 'Four Decades Trust Oration of the SMS Medical College, Jaipur for the year 2008; 'Honorary Professorship, Guru Nanak Dev University, Amritsar; Member ,; Indian delegation to Hungary to sign the DST's Collaborative agreement on Science and Technology between two countries, May 2008; Plenary Speaker , JACIN 2008 (Jakarta Allergy and Clinical Immunology Network), Scientific Conference at Jakarta, Indonesia, June 2008; 'Symposium Speaker' at XVII Lancefield International Symposium on Streptococci and Streptococcal diseases, Porto Heli, Greece, June 2008; 'invited speaker' 4th FIMSA Congress of Immunology, Taipei, Taiwan (October 2008) and at the Type 1 Diabetes Genetics Consortium (T1DGC) Investigators meeting at Washington DC; October 2008; as 'Chair' of the 'MHC and Infection Disease' study of the 15th International Histocompatibility and Immunogenetics Workshop (15IHIWC), Buzios, Brazil; September 2008; 'Invited International Speaker', 15IHIW Conference, Rio de Janeiro, Brazil; September 2008; 'Vice President' of the Federation of Immunological Societies of Asia Oceania (FIMSA), and 'International Councillor' for the Australasian and South East Asian Tissue Typing Association (ASEATTA); Member, ICMR Expert Group on Stem Cell Research; ICMR Special Review Committee on North East projects; Expert Group on Human Resource Development, Technical Committee of the ICMR; Task Force on Immunology; Expert Group on Study on Camel Milk; Steering Committee of ICMR Advanced Centre on Type 1 Diabetes; Project Review Committee of ICMR on Cellular and Molecular Biology, Allergy and Biochemistry, Immunology, Organ Transplantation and Physiology; Expert Group on Diabetes, Expert Group on Creation of Primate Breeding Facility at NIRRH, Mumbai; Expert Group on creation of Centre for Molecular Medicine at SMS Medical College, Jaipur and Expert Group on creation of Modern Biology Facility at Guru Nanak Dev University, Amritsar.

Professor Mehra was a Member, Scientific Advisory Committee of: (i) National Institute of Immunology, New Delhi (ii) Institute of Cytology and Preventive Oncology, Noida (iii) Central JALMA Institute for Leprosy and other Mycobacterial Diseases, Agra, (iii) Tuberculosis Research Centre, Chennai (iv) Institute of Immunohaematology, Mumbai, (v) LV Prasad Eye Institute, Hyderabad (vi) Research Advisory Council of the Institute of Life Sciences, Bhubaneswar (vii) National AIDS Research Institute, Pune; (viii) Institute of Pathology, Safdarjung Hospital, New Delhi; Professor Mehra is a Member of the Biomedical Research Board of the ICMR and Scientific Advisory Group of the Basic Medical Sciences and of the Non-Communicable Disease Division; Member of various committees of the Department of Biotechnology: (i) Task Force on Stem Cell Research and

Regenerative Medicine, (ii) Inter Disciplinary Research Committee (IDRC), (iii) Expert Group on Indo-German Research Projects; (iv) Expert-cum-monitoring group on MW projects and Chair of MW Research Group on Immunological studies.

Professor Mehra was a Member of the Selection Committee of the National Institute of Immunology and an Expert for PGIMER, Chandigarh; Member, Selection Committee for selection of Scientists in the Institute of Cytology and Preventive Oncology, (ICMR), Noida; Member, Selection Committee to select faculty for Punjab University, Chandigarh and Member of the DST Expert group on International Research projects and cooperation.

He was a Member of the Core Assessment Committee of the ICMR and Selection Committee and of the Guru Nanak Dev University, Amritsar for faculty posts; Jury Member, Ranbaxy Science Foundation Awards; Member, CSIR Travel Grant Award Committee; Member, Editorial Board of Several International journals—Tissue Antigens: Immune Response Genes (Australia); *Journal of Clinical Immunology* (USA); *Modern Rheumatology* (Japan); *Open Immunology Journal* (Bentham Science Publishers); *Asia Pacific Journal of Allergy and Immunology* (Thailand); *International Journal of Human Genetics* (India); *Open Pathology Journal* and Member, Editorial Board of 'Current Science'. Professor Mehra was invited as 'Guest Speaker' in several national and international meetings.

Dr Uma Kanga, Scientist-II spent a period of six months under the Commonwealth Academic Staff Fellowship at the Anthony Nolan Research Institute, Royal Free Hospital, London, UK; October 2008–March 2009. She continued as the 'Councillor' for the Australasian and South East Asian Tissue Typing Association (ASEATTA).

Dr Arundhati Panigrahi (Scientist I) received the 'Best paper presentation award' at the Annual meeting of Indian society of Organ Transplantation, Ludhiana; October 2008; visited Fort Collins, Colorado, USA to attend the Advanced Training for Mo Flo XDP, High Speed Cell Sorter; 10–24 January 2009.

VISITING SCIENTISTS

- i) Delegation from Hungary (Professor Miklos Zrinyi and Dr Ildiko); 29 July 2008.
- ii) Professor Vijay Kuchroo, Harvard Medical School, Boston, USA; 18 August 2008.
- iii) Dr Mark Allen, Vice Dean, Bostaon University, USA; 1 October 2008.
- iv) Professor Csaba Nyakas, Semmelweiss University, Budapest, Hungary; 20 November 2008.
- v) Professor Ronald Covly and team from Boston University, USA; 13 January 2009.
- vi) Dr Eckart Wurznner, Mayor of the City of Heilderberg, Germany and team, Germany; 2 April 2009.

9.36 Urology

Professor and Head

N.P. Gupta

Professors

A.K. Hemal
(Long term leave since 30.9.07)

P.N. Dogra

Additional Professor

Amlesh Seth

Associate Professor

Rajeev Kumar

Assistant Professors

A.P. Bhalla
Jyotsna Punj
Rashmi Ramachandran

Vanlal M. Darlong
R. Pandey

Rani Sunder
Anjolie Chhabra

EDUCATION

The department imparted lectures for the undergraduates and nursing students. 11 postgraduates were trained for the degree of MCh in Urology over a period of 3 year.

The department had observers and postgraduate students in Urology from various Indian Medical Colleges and abroad to observe and learn Robotics, Endourology, Laparoscopy, Robotic and Microsurgery in Urology.

The faculty of the department continued to be examiners for NBE and MCh. Urology in various universities and Inspector for the Medical Council of India and National Board for recognition of standard of examination and facilities for Urology postgraduate courses. The faculty also participated as experts in various committees of Government of India.

Continuing Medical Education

Conducted by the department

- The department organized the 9th Asian Congress of Urology; 1–5 October 2008 and live operative Workshop, AIIMS, New Delhi; 1 October. This was the largest Urological meeting held in India and was attended by over 1500 faculty and delegates from 49 countries.

Professor NP Gupta

- Pre-Congress (9th ACU) Live Operative Workshop, AIIMS, New Delhi; 1 October 2008.
- ‘Complications of robotic surgery’ in CME, NZC-ASICON 2009.

Dr Rajeev Kumar

- Joint Andrology Workshop, Erectile function and dysfunction.

New Delhi; 27–28 December 2008

- Panelist: Robotics in paediatric urology International Symposium on Paediatric Urology, AIIMS, New Delhi; 14 December 2008..
- Annual Conference of North Zone Chapter of Urological Society of India, Live operative demonstration: Laparoscopic Nephrectomy.
- Allahabad, India; 28–30 November 2008.
- Chairperson: Videos presentations.
- 9th Asian Congress of Urology, New Delhi; 2–5 October 2008

National and International Conference

Lectures delivered during Conferences

Professor N.P. Gupta

- Development of robotics in surgery', Ministry of Commerce and Information Technology, April 2008.
- Genitourinary tuberculosis, 9th Annual Meeting of Japanese Urological Assoc; 25–27 April 2008.
- Robotic surgery in urology, South Zone Chapter-USICON 2008; 11–13 July 2008.
- Robotic surgery in Urology. Surgery Update 2008; 22–27 September 2008.
- Advances in TURP and Robotic urological surgery, AIIMS. International conference of Urology Nephrology and Transplant, Karachi; 23–26 October 2008.
- Advances in GUTB. Syrian Urological Society, Damascus; 29 October–1 November 2008.
- Advances in renal stones and Advances in GUTB. 60th Western Section of Urological Assoc Conference, Japan; 6–8 November 2008.
- Advances in GUTB. Annual Meeting of Hong Kong Urol Assoc, 8–9 November 2008.
- Building of robotic urologic surgery programme in developing countries. International Robotic Urology Symposium, Las Vegas; 12–14 January 2009.
- Dr Himadari Sarkar Memorial Oration on Transition from open to laparoscopic to robotic surgery. USICON 2009, Indore; 22–25 January 2009.
- Complications of robotic surgery. NZC-ASICON, New Delhi; 22–25 January 2009.
- Advances in GUTB and Robotic Urologic Surgery. 31st CUE, Indonesian Urol Assoc, Batam; 12–14 February 2009.

Professor PN Dogra

- Role of Laser in management of urethral stricture disease. 9th Asian Congress of Urology, New Delhi; 2–5 October 2008.

Dr Rajeev Kumar

- ‘Pathophysiology of ED’, Surgical management of erectile dysfunction and urinary incontinence following radical pelvic surgery: Rationale and techniques, Annual Meeting, American Urological Association, Orlando, USA; 17–22 May 2008.
- ‘Complications of non-RP pelvic surgery related to sexual dysfunction’, Surgical management of erectile dysfunction and urinary incontinence following radical pelvic surgery: Rationale and Techniques, Annual Meeting, American Urological Association, Orlando, USA; 17–22 May 2008.
- ‘Controversies in management’, Surgical management of erectile dysfunction and urinary incontinence following radical pelvic surgery: Rationale and techniques, Annual Meeting, American Urological Association, Orlando, USA; 17–22 May 2008.
- ‘Male infertility: Recent advances’, 25th Annual Conference of ISOPARB, New Delhi; 21–23 March 2009.
- ‘Effects of tobacco consumption on male sexuality and fertility’, 14th World Congress on Tobacco or Health, Mumbai; 8–12 March 2009.
- ‘Algorithmic approach to azoospermia’, 9th Asian Congress of Urology, New Delhi; 2–5 October 2008.

RESEARCH

Funded Projects

Ongoing

1. Evaluation of oxidative stress as a cause for idiopathic male infertility and the role of Addyzoa in its treatment randomized, double blind placebo controlled trial: Extramurally. Dr Rajeev Kumar.

Departmental Projects

Completed

1. Evaluation of various types of intussusception techniques of microsurgical vasoepididymostomy

Ongoing

1. Discordant clinical and FNAC findings in suspected obstructed azoospermia: Surgical and pathological correlation
2. Causes of negative surgical explorations in men with obstructive azoospermia
3. Simplified two-layer vasoepididymostomy for vasectomy reversal: Evaluation of a new technique
4. Superior calyceal access in paediatric PCNL: safety and efficacy
5. Role of Laser in post-traumatic obliterative urethral strictures
6. Urethroplasty for anterior and posterior urethral strictures, different techniques

7. Role of PET CT in Urooncology
8. Evaluation of TRUS and TRUS guided biopsy for early diagnosis of carcinoma prostate.
9. Evaluation of TUVRP and Holmium laser prostatectomy for BPH
10. Evaluation of Robotic Radical Prostatectomy
11. Evaluation of Robotic Reconstructive Surgery for Upper Urinary Tract
12. Evaluation of Robotic Radical Cystectomy

Collaborative Projects

Completed

1. 3-dimensional Chemical shift imaging and Diffusion weighted imaging using Proton MRS in the diagnosis of carcinoma prostate (with Department of NMR)
2. CFTR gene mutations in obstructive azoospermia (with Paediatrics)

Ongoing

1. Mitochondrial genes and Y chromosome deletions in male infertility (with Anatomy).

PUBLICATIONS

Journals

1. Gupta NP, Hemal AK, Mishra S, Dogra PN, Kumar R. Outcome of retroperitoneoscopic nephrectomy for benign nonfunctioning kidney: A single-center experience. *J Endourol* 2008;**22**:693–8.
2. Gupta NP, Mishra S, Dogra PN, Hemal AK, Seth A, Kumar R. Does a previous end-to-end urethroplasty alter the results of redo end-to-end urethroplasty in patients with traumatic posterior urethral strictures? *Int J Urol* 2008. [Epub ahead of print]
3. Gupta NP, Mishra S, Suryawanshi M, Seth A, Kumar R. Comparison of standard with tubeless percutaneous nephrolithotomy. *J Endourol* 2008;**22**:1441–6.
4. Gupta NP, Sharma N, Kumar R. Nuclear matrix protein 22 as adjunct to urine cytology and cystoscopy in follow-up of superficial TCC of urinary bladder. *Urology* 2009;**73**:592–6.
5. Gupta NP, Kolla SB, Seth A, Dogra PN, Hemal AK, Kumar R, *et al*. Radical cystectomy for bladder cancer: A single centre experience. *Indian J Urol* 2008;**24**:54–9.
6. Nayyar R, Kumar R, Kumar V, Jagannathan NR, Gupta NP, Hemal AK. Magnetic resonance spectroscopic imaging: Current status in the management of prostate cancer. *BJU Int* 2009; 26. (Epub ahead of print)
7. Kumar A, Gupta NP, Hemal AK. A single institution experience of 141 cases of laparoscopic radical nephrectomy with cost reductive measures. *J Endourol* 2009;**23**:445–9.

8. Jain D, Sharma MC, Epari S, Gupta NP, Kolla SB. Hemangioendothelioma of urinary bladder: Report of rare case. *Urology* 2009;19. (Epub ahead of print)
9. Wadhwa S, Wadhwa P, Dinda AK, Gupta NP. Differential expression of potassium ion channels in human renal cell carcinoma. *Int Urol Nephrol* 2009;**41**:251–7.
10. Hemal AK, Singh A, Gupta NP. Whether adrenal mass more than 5 cm can pose problem in laparoscopic adrenalectomy? An evaluation of 22 patients. *World J Urol* 2008;**26**:505–8.
11. Hemal AK, Kumar A, Gupta NP, Seth A. Retroperitoneal nephroureterectomy with excision of cuff of the bladder for upper urinary tract transitional cell carcinoma: Comparison of laparoscopic and open surgery with long term follow-up. *World J Urol* 2008;**26**:381–6.
12. Nayyar R, Dogra PN. Anteriorly placed midline intraprostatic cyst. *J Endourol* 2009;**23**:595–7.
13. Sharma N, Dogra PN, Mathur S. Functional adrenal oncocytoma: A rare neoplasm. *Indian J Pathol Microbiol* 2008;**51**:531–3.
14. Kumar R, Nayyar R, Kumar V, Gupta NP, Hemal AK, Jagannathan NR, *et al.* Potential of Magnetic Resonance Spectroscopic Imaging in Predicting Absence of Prostate Cancer in Men with Serum Prostate-Specific Antigen Between 4 and 10mg/mL: A Follow-up Study. *Urology* 2008;**72**:859–63.
15. Nehra A, Kumar R, Ramakumar S, Myers RP, Blute ML, McKusick MA. Pharmacoangiographic evidence of the presence and anatomical dominance of accessory pudendal artery(s). *J Urol* 2008;**179**:2317–20.
16. Mitra A, Dada R, Kumar R, Gupta NP, Kucheria K, Gupta SK. Screening for Y-chromosome microdeletions in infertile Indian males: Utility of simplified multiplex PCR. *Indian J Med Res* 2008;**127**:124–32.
17. Kumar R, Tanwar M, Ammini AC, Kumar R, Gupta NP, Sharma RK, *et al.* Robertsonian translocation and their role in pathogenesis of recurrent in- vitro fertilization failure. *Med Sci Monit* 2008;**14**:CR617–20.
18. Jagannathan NR, Kumar V, Kumar R, Thulkar S. Role of magnetic resonance methods in the evaluation of prostate cancer: An Indian perspective. *MAGMA* 2008. [Epub ahead of print]
19. Kumar V, Jagannathan NR, Kumar R, Thulkar S, Gupta SD, Hemal AK, *et al.* Evaluation of the role of magnetization transfer imaging in prostate: A preliminary study. *Magn Reson Imaging* 2008;**26**:644–9
20. Yadav R, Gupta NP, Gamanagatti S, Yadav P, Kumar R, Seith A. Supra-Twelfth Supracostal Access: When and Where to Puncture? *J Endourol* 2008;**22**:1209–12.
21. Nayyar R, Gupta NP, Hemal AK, Kumar R. Two concomitant robot-assisted procedures in one anesthesia session: our experience. *J Endourol* 2009;**23**:263–7.
22. Kumar R. Reproductive tract tuberculosis and male infertility. *Indian J Urol* 2008;**24**:92–5.

23. Shamsi MB, Kumar R, Bhatt A, Bamezai R, Kumar R, Gupta NP, *et al.* Mitochondrial DNA mutations in etiopathogenesis of male infertility. *Indian J Urol* 2008;**24**:150–4.
24. Kumar A, Kumar R. Is lap nephrectomy superior to open? A randomized trial. *Indian J Urol* 2008;**24**:591.
25. Kumar R. Partial nephrectomy for small renal tumors may prevent chronic kidney disease. *Indian J Urol* 2008;**24**:275–6.
26. Suryavanshi M, Kumar R. Urethral reconstructive surgery: Which catheters are better? *Indian J Urol* 2008;**24**:272.
27. Shamsi MB, Venkatesh S, Tanwar M, Talwar P, Sharma RK, Mukherjee, *et al.* Sperm DNA integrity analysis and correlation with seminal antioxidant levels in men with idiopathic infertility: Importance of prescreening in couples opting for ART. *Obs Gynae Today* 2008;**13**:388–90.

Book

1. Hemal AK, Kumar R. Role of Patient Side Surgeon in Robotics. In: Smith JA, Tewari A (eds). *Robotics in Urologic Surgery*. Saunders, Philadelphia; 2008:31–6.

PATIENT CARE

OPD and Specialty Clinics

Surgical procedures

Open	338
Endourology	960
Lower tract	656
Upper tract	304
Percutaneous renal surgery	183
Ureterorenoscopy	121
Microsurgery	52
Laparoscopic surgery	27
Robotic Surgery	77
Radical prostatectomy	34
Pyeloplasty	23
Radical cystectomy	05
Others	15
Minor OT	
Cystoscopy	1,745
Minor cases	3,584
Extra corporeal Shock Wave Lithotripsy (ESWL)	
New cases	317
Re-do cases	523

Urodynamic procedures

Uroflowmetry	3,273
CPE + DJR	1,839
Minor cases	3,826
CMG	318
Open cases	36

Ultrasound procedures

USG KUB	42
Suprapubic cystostomy	56
Percutaneous nephrostomy	75
Kidney biopsy	1
TRUS biopsy prostate	118
Total	292

AWARDS AND HONOURS

Professor N.P. Gupta

1. Awarded *Lok Vigyan Samman* by Gunjan Kala Sadan, Jabalpur; September 2008;.
2. Chairman 9th Asian Congress of Urology, New Delhi; 1–5 October 2008;.
3. President, Urological Association of Asia; 4 October 2008.

Dr Rajeev Kumar

1. Appointed Chief Editor-The Asian Urology-official publication of the Urological Association of Asia.
2. Course faculty, Annual Meeting, American Urological Association, Orlando, USA; 17–22 May 2008.
3. Live operative demonstration, laparoscopic nephrectomy: Annual Conference of North Zone Chapter of Urological Society of India, Allahabad, India; 28–30 November 2008.
4. Served as organizing secretary, 9th Asian Congress of Urology.
5. Appointed core-member: Education Cell; Urological Society of India.

COMMUNITY SERVICE

The faculty of department of Urology participated in the following community service:

Professor NP Gupta participated in the Live TV programme of Delhi Doordarshan on Diseases of Prostate Gland; Programmes on Urological diseases in Doordarshan and All India Radio.

10.1 Cardiothoracic Sciences Centre

Chief

A. Sampath Kumar

CARDIOTHORACIC AND VASCULAR SURGERY

Professor and Head

A. Sampath Kumar

Professor

Balram Airan

Additional Professors

U.K. Chowdhury

S.K. Choudhary

A.K. Bisoi

Assistant Professors

Sachin Talwar*

V. Devagourou

Milind Hote

*Dr Sachin Talwar is abroad on fellowship for one year and will join back in May 2009.

CARDIOLOGY

Professor and Head

V.K. Bahl

Professors

Anita Saxena

S.S. Kothari

Balram Bhargava

K.C. Goswami

Additional Professors

R. Juneja

R. Narang

Associate Professors

S. Mishra

S. Seth

Rakesh Yadav

N. Naik

Assistant Professors

G. Karthikeyan

Gautam Sharma

S. Singh

Ambuj Roy

S. Ramakrishnan

CARDIAC ANAESTHESIA

Professor and Head

Usha Kiran

Professor

Sandeep Chauhan

Associate Professors

Neeti Makhija

Poonam Malhotra

Minati Choudhary

Assistant Professors

Shambhu Nath Das

Parag Gharde

Vishwas Mallik

BLOOD TRANSFUSION SERVICES (CARDIAC NEURO CENTRE)

Senior Chief Medical Officer

Rama Bhasin

Chief Medical Officer

Anjali Hazarika

Senior Technical Officer

Kalpana Misra

Technical Officers

Bijay Majhi
G.S. Chauhan

Suresh Kumar
Avdesh K. Tangri
Anita Rani

Gulshan Mehta
P.S. Rajput

Technical Assistants

Shanti Kumar

Sushma Rani

Laboratory Technicians

Jeevan Singh Bisht
Sanjay Tiwari
Chitra Sharma

William R. Mashi
Santosh Kumar

B.S. Bisht
Upender Singh
Rahul Gautam

Staff Nurses

Louly Jacob

Vandana Dhawan
Kuldeep Kaur

Sarla

Medical Social Service Officer

Veena Belani

Social Guide

Rajni Sharma

Anita Pandey

Upper Division Clerk

Mariamma M.A.

Laboratory Attendants

Dalbir Singh
Om Prakash
Dinesh

Raghubir Singh
Narender
Sanjeet

Hari Om
Munna Lal
Ashok

CARDIAC BIOCHEMISTRY

Associate Professor

R. Lakshmy

CARDIAC PATHOLOGY

Professor
Ruma Ray

CARDIAC NUCLEAR MEDICINE

Assistant Professor
Chetan D. Patel

EDUCATION

Cardiothoracic and Vascular Surgery

- Dr Peter Aseyo Sore from Nairobi, Kenya trained in Cardiac Surgery
- Dr Sachin Kuthe joined Short Term Trainee for 2 weeks
- Four physiotherapist: Observers from Jamia Hamdard, New Delhi. Master of Physiotherapy (Cardiopulmonary) curriculum
- One Physiotherapist: Observer from out campus. Jamia Hamdard, New Delhi Master of Physiotherapy (Cardiopulmonary) curriculum.

Cardiac Anaesthesia

DM Cardiac Anaesthesia

- In DM Cardiac Anaesthesia Programme: Four new candidates were selected for postdoctoral training including one sponsored. One DM candidates passed the examination successfully in July 2008 and two in December 2008. At present nine are pursuing DM Cardiac Anaesthesia course with ICU training as well. Three of the nine DM students are sponsored candidates, two of them are Lt. Col. from the Army.

Postgraduate training

- Six postgraduate students from the Department of General Anaesthesia, AIIMS were posted for a period of 2 months each for training in cardiac anaesthesia from 1 April 2006 to 31 March 2007.

Short-term superspeciality training

- One faculty member Dr Jimmie member from Kenya, Africa underwent 'Hands on' training in cardiac anaesthesia

MSc perfusion technology and classes coordinated by faculty

- New candidates joined for perfusion technology MSc and 3 candidates have undertaken practical training (internship) for six months in perfusion technology.

Cardiac Biochemistry

- Two students are pursuing PhD in the department
- Co-guide for Seven MD/DM students

Cardiac Nuclear Medicine

- No. of Postgraduate students: 3 (training of post graduates on rotational basis in Nuclear Cardiology)
- No. of Thesis/research papers completed: 3
- No. of lectures for postgraduate students: 10
- Moderator in Journal Club/Seminars: 10
- No. of lectures for undergraduate/paramedical: 0
- No. New thesis started: 3

Stem Cell Facility

Under-graduate, post-graduate and paramedical

- The Department participates in PhD programme.

Short-term and long-term training

- Eleven graduate and post-graduate students have underwent short term training.

Continuing Medical Education (CME)

Cardiology

Organized by the department

- Second consensus meeting on 'Management of congenital heart diseases in India', AIIMS; 13 September 2008.
- Second Medical Technology Submit under the Stanford India Biodesign Programme, New Delhi; 2008.

Lectures delivered

Balram Bhargava

- 'Burden of CVD in India: The epidemic is already here', Silver Jubilee CME on Cardiac Sciences, Apollo Hospitals, New Delhi; 2008.
- 'Evolution of Coronary Stenting', Indo-US Workshop on the Frontiers of Engineering/Science, Irvine, CA, USA; 2008.
- 'Mitral stenosis: Historical perspectives in the management', CME in Cardiology, Ludhiana, India; 2008.
- 'Cardiovascular needs and priorities', Indo-US workshop on low cost diagnostic and therapeutic medical technologies, Hyderabad, India; 2008.
- 'Prevention of heart disease: A recipe for a lifetime', Invited Public Lecture, the India International Centre, New Delhi, India; 2009.

Rakesh Yadav

- Recent advances in biventricular pacing and AICD—,CME ,‘Recent Advances in Rhythm Disorders’, PGI, Chandigarh; 14–15 March 2009.

Ambuj Roy

- Invited faculty at core committee workshop on ‘Drafting cardiovascular assessment and management guidelines booklet for India’, Department of Cardiology, RML on behalf of Ministry of Health and Family Welfare (MHFW), GoI and WHO, India.
- Faculty for Workshop on training Medical officers under the National Programme for Prevention and Control of diabetes, Cardiovascular diseases and Stroke (NPDCS) organized by MHFW, GoI in collaboration with PHFI, WHO India and CCDC.
- ‘Polypill–Do we need it now?’, Medicine Update 2008, MAMC, New Delhi.

S. Ramakrishnan

Long and short QT Syndrome—in CME on ‘Recent Advances in Rhythm Disorders’, PGI, Chandigarh; 14–15 March 2009.

Cardiac Radiology

- Conducted a CME on ‘Essentials of cardiac imaging’, teaching activity for the postgraduates. AIIMS; 18 October 2008.
- Conducted the 11th Annual Registry meeting cum CME of ISVIR, AIIMS; 25–26 April 2009.

Guest lectures

Dr Sanjiv Sharma

- 31st Annual Academic Sessions of Kandy Society of Medicine, Sri Lanka, Kandy; 11–17 February 2009. Sri Lanka and visited the department of radiology and interventional radiology at Kandy General Hospital for two days afterwards.
- Faculty for the International Critical Care Congress 2009 and 15th Annual Conference of Indian Society of Critical Care Medicine, Agra; 22 February 2009.
- Guest speaker , department of Radiology, New University of Lisbon, Portugal, 26–28 March 2009.
- Chief Guest in Annual Academic Sessions of Sri Lanka College of Radiologists, Colombo; 4–6 July 2008, and 7–8 July 2008.
 - Interventional Radiology: An overview
 - Recent advances in the interventional management of critical limb ischemia
 - Endovascular treatment of cervical carotid artery stenosis
 - Endovascular repair of aortic aneurysms and dissections.

- ISVIR Midterm CME-2008, Vellore; 30 August 2008. Lectured on:
 - Recent advances in preventing deep venous reflux
 - IVC filters, when and why
- 8th Chinese Society of Interventional Radiology Meeting (2008 CSIR).
- European Congress of Cardiovascular and International Radiology, Copenhagen, Denmark; 13–17 September 2008.
- Participated in workshop (live case) on Endovascular Interventions, SGPGI, Lucknow; 27 September 2008.
- Guest Faculty for the 60th Annual Conference of the Cardiological Society of India and delivered a scientific talk on ‘Hemoptysis management’, Chennai; 4 December 2008.
- Faculty of Dr Mahadevan Pillai Memorial Workshop-2008, Trivandrum; 3 October 2008. Topics covered
 - Cyanotic congenital heart disease
 - MR of cardiac masses
 - Cardiomyopathies
 - Imaging in aortic dissection and aneurysm, role of MR in endovascular therapy
- External Examiner, MSc Medical Tech (Radiodiagnosis) part-II and *viva voce* examination, PGI, Chandigarh; 1 May 2009.
- External Expert, meeting of the Core Technical Committee ‘A’ scheduled, PGIMER, Chandigarh; 16 January 2009.

Dr Gurpreet S. Gulati

- ‘Embolotherapy in pulmonary arterio—venous malformations’, Papworth Hospital, University of Cambridge, UK; 5 June 2008.
- ‘Interventions in Budd-Chiari Syndrome’, Wednesday Forum in Addenbrooke’s Hospital, University of Cambridge, UK; 18 June 2008.
- ‘How to perform a cardiac MRI?’, CME on ‘Essentials of cardiac imaging’, Auspices of the Cardiovascular and Interventional Radiology Research and Education Foundation of India, AIIMS, New Delhi; 18 October 2008.
- ‘Imaging in ischaemic heart disease’, CME on ‘Essentials of Cardiac Imaging’ organized under auspices of the Cardiovascular and Interventional Radiology Research and Education Foundation of India, AIIMS, New Delhi; 18 October 2008.
- ‘Contrast agents and contrast induced nephropathy’, Annual conference of the Indian Society of Vascular and Interventional Radiology, Mumbai; 31 October–3 November 2008.

- ‘Chest X-ray in heart disease’, 62nd Annual National conference of the Indian Radiological and Imaging Association, Patna, Bihar; 7–10 January 2009.
- ‘Overview of cardiac imaging’. Workshop on Chest and Cardiac Imaging. Organized by the faculty of Medicine, Kuwait University, Kuwait; 25–26 January 2009.
- ‘Normal and anomalous cardiac anatomy’, Workshop on Chest and Cardiac Imaging. Organized by the faculty of Medicine, Kuwait University, Kuwait; 25–26 January 2009.
- Current status of coronary CT angiography. Workshop on Chest and Cardiac Imaging. Organized by the faculty of Medicine, Kuwait University, Kuwait; 25–26 January 2009.
- ‘Looking beyond the coronaries’, Workshop on Chest and Cardiac Imaging. Organized by the faculty of Medicine, Kuwait University, Kuwait; 25–26 January 2009.
- ‘Evolving trends in cardiac MRI’. Annual conference of Department of Nuclear Magnetic Resonance, AIIMS, Delhi; 29 March 2009.

Dr Priya Jagia

- ‘Evidence against EVAR in management of AAA’, CME and Registry meet of the Indian Society of Vascular and Interventional Radiology, AIIMS, New Delhi; 26–27 April 2008.
- ‘Complications during PTRR’, CME and Registry meet of the Indian Society of Vascular and Interventional Radiology, AIIMS, New Delhi; 26–27 April 2008.
- ‘How to perform a Cardiac CT?’, CME ‘Essentials of cardiac imaging’, Auspices of the Cardiovascular and Interventional Radiology Research and Education Foundation of India, AIIMS, New Delhi; 18 October 2008.
- Imaging in Cardiomyopathies. CME ‘Essentials of cardiac imaging’, Auspices of the Cardiovascular and Interventional Radiology Research and Education Foundation of India, AIIMS, New Delhi; 18 October 2008.
- ‘Interventional radiology, management of non-atherosclerotic disease of aorto-iliac segment’
- . Annual conference of the Indian Society of Vascular and Interventional Radiology, Mumbai; 31 October–3 November 2008.
- Interventional radiology, management of non-atheromatous renal artery stenosis’
- , Annual conference of the Indian Society of Vascular and Interventional Radiology, Mumbai; 31 October–3 November 2008.
- ‘MR in evaluation of congenital heart disease’, Annual Radiology CME held by Haryana branch of Indian Association of Radiology, Rohtak Medical College, Rohtak; 29 March 2009.

Cardiac Biochemistry

- Invited speaker at the World Conference on Tobacco OR Health (WCTOH), Mumbai, India from 8–12 March 2009 ;Presented a paper entitled ‘Tobacco related biomarkers for cardiovascular disease’, 14th.

- Member of Technical advisory committee for fast HPV project conducted by ICPO in collaboration with PATH supported by Milinda and Bill Gates foundation.

National and International Conference

Cardiothoracic and Vascular Surgery

Professor A. Sampath Kumar

- Live Surgery Workshop organized by Jayadeva Institute of Cardiology, Bangalore; April 2008.
- attended the launch of the WHO surgical safety list, WHO Headquarters, Washington; May 2008
- attended Sri Jayadeva Surgical Oration, Indian College of Cardiology, Cochin, Kerala; October 2008.
- 7th International Cardiovascular Conference 2008 (ICC2008), Jeddah, Saudi Arabia; November 2008.
- attended 17th Annual Meeting of Asian Society for Cardiovascular and Thoracic Surgery, Taipei; March 2009.
- attended 1st Rheumatic Mitral Valve summit at Bangkok, Thailand and demonstrated technique on mitral valve repair, March 2009.
- delivered lecture on 'Mitral valve reconstruction', 17th Annual Meeting of Asian Society for Cardiovascular and Thoracic Surgery, Taipei, March 2009.
- delivered a lecture on mitral valve repair at 1st Rheumatic Mitral Valve summit, Bangkok, Thailand; March 2009.

Professor Balram Airan

- Participated in STICH Investigator Meeting, Munich, Germany.
- Invited and delivered 'Professor K.V. Naidu Memorial Oration' during AP CSI 16th Annual Conference, Hyderabad.
- Invited and participated as an expert in Health Programme live telecast by Doordarshan News, New Delhi; 'Heart Transplant'.
- Invited and delivered a guest lecture on 'Cardiac Surgical ICU', SASHCON-2008, AIIMS, New Delhi.

Professor U.K. Chowdhury

- lecture 45th Annual Meeting of Society of Thoracic Surgeons, San Francisco, California USA; 26-28 January 2009.
- Delivered guest lecture on 'Lactate concentration gradient and noninvasive haemodynamic management in cardiac surgical patients' during Annual ISA Conference, Delhi Branch; 2008.

- Delivered guest lecture on Janak Mehta Award Paper session—‘Comparative study of Lactate, Pyruvate and Lactate Pyruvate ratio as Markers of myocardial Ischemia in Adult patients undergoing open heart surgery’ during Annual ISA Conference, Delhi Branch; 2008.
- Delivered guest lecture on ‘Role of inhaled versus intravenous nitroglycerin in pulmonary hypertension in valvular heart surgery’ ,Annual SCA conference, Delhi Branch; 22 March 2009.

Dr S.K. Choudhary

- Member, PCSI task force which discussed guidelines for post-operative drug therapy following surgery in children.

Dr Sachin Talwar

- ‘Surgical management of congenital heart diseases’, the CME in Pediatrics organized by SMS Medical College, Jaipur; April 2008.
- Invited speaker in the Panel discussion ‘Indications for surgery in Pulmonary hypertension’, the 10th Annual Conference of the Paediatric Cardiac Society of India, Kochi; 7–8 November 2008.
- Invited speaker in the Panel discussion ‘Training pediatric Cardiac Surgeons for the future’, the 10th Annual conference of the Paediatric Cardiac Society of India, Kochi; 7–8 November 2008.

Dr V. Devagourou

- conducted a workshop on mitral valve reparative surgery, Pune; March 2009.

Cardiology

Lectures Delivered

V.K. Bahl

- Infective endocarditis guidelines : Are they applicable in developing countries?, European Society of Cardiology (ESC 2008), Munich, Germany.
- Pharmacological management of heart failure, American College of Cardiology (ACC 2009), Orlando, USA.

Anita Saxena

- Invited lectures at World Congress of Cardiology, Buenos Aires, Argentina.

S.S. Kothari

- Training of cardiologists in India-Quantity and Quality. 60th Annual Conference of Cardiological Society of India (CSI), Chennai; 2008.
- Evaluation of operability of children with pulmonary hypertension and shunt lesion. 10th Annual Conference of Pediatric Cardiac Society of India, Kochi; 2008.

Balram Bhargava

- ‘Hypertension and lifestyle diseases’, 9th Medical Conference cum Seminar for the Border Security Force, New Delhi; 2008.
- ‘Evolution of coronary stenting’, National Academy of Sciences Meeting, Chandigarh, India; 2008.
- ‘Alcohol ablation in hypertrophic cardiomyopathy’, National Conference of the Cardiological Society of India, Chennai, India; 2008.
- ‘Stem cell therapy for acute MI: Where are we at present?’, National Conference of the Association of Physicians of India, Noida, India; 2009.

K.C. Goswami

- ‘Echocardiography in acute rheumatic fever’, 60th Annual Conference of Cardiological Society of India (CSI), Chennai 2008

R. Juneja

- ‘ECG in congenital heart disease: Role and relevance’, 60th Annual Conference of Cardiological Society of India (CSI), Chennai; 2008.
- ‘Thrombolysis for pyopericardium’, Presented at European Society of Cardiology (ESC 2008), Munich, Germany.

Sandeep Mishra

- ‘Intermediate outcome of PCI for single remaining Coronary artery’, World Congress of Cardiology, Buenos Aires, Argentina.
- ‘Time course of angiogenesis, arteriogenesis and peripheral conductance after plasmid VEGF delivery in rat model of hind limb ischemia’, World Congress of Cardiology, Buenos Aires, Argentina.
- ‘Hot to do LIMA interventions’, China Intervention Therapeutics; 2009.

S. Ramakrishnan

- ‘Global epidemiology of rheumatic fever and rheumatic heart disease’, 60th Annual Conference of Cardiological Society of India (CSI), Chennai; 2008.
- ‘Prosthetic heart valve thrombosis in children’, European Society of Cardiology (ESC 2008), Munich, Germany.
- ‘Nocturnal hypoxemia in patients with Eisenmenger syndrome’, American College of Cardiology (ACC 2009), Orlando, USA.

Cardiac Anaesthesia

Lectures delivered

Usha Kiran

- Invited to participate as a penalist in Penal discussion ‘Transformation in medical profession my contribution’, 15th National Conference of Mind Body, Medicine; 26–30 July 2008.
- Chaired a session 3rd World Congress of Clinical and Preventive cardiology ,20 September 2008 on the topic from sick care to health care—a need for paradigm shift, 19 September 2008.
- Chaired a session in CME on ‘Emergenices in anaesthesia on topic cardio neuro emergences’, Safdarjung Hospital VMMC in collaboration with Indian College of Anaesthetist and ISA Delhi; 22 November 2008.
- Lecture on ‘Assessing diastolic ventricular functions what is the perioperative significance’, 50th Annual Conference of Indian Society of Anaesthesia, ISACON, Jodhpur; 28 December 2008.
- ‘Post operative visual loss’, Annual Conference of RSACPCON 2008. Research Society of Anaesthesiology and clinical Pharmacology, Kolkata; 15 November 2008.
- Chaired a session on ‘Physical therapy in Parkinson’s disease’, 2nd Asian Occian Parkinson’s Disease and Movement disorder Congress, 15 February 2009.
- Guest lecture on ‘Anaesthesia in the Cath Lab’, CME, Bangalore; 7 September 2008.

Sandeep Chouhan

- ‘Anaesthesia in the Cath Lab’, CME, Bangalore; 7 September 2008.
- ‘ECMO is an important device for India’, PCSI, Kochi; 8 September 2008.
- ‘Pre operative ECMO’, 25th Children’s National Medical Centre Symposium. Keystone Colando, USA; 24 February 2009.

Neeti Makhija

- ‘Intracardiac masses and transesophageal echocardiography’, 3rd Annual Perioperative and Critical Care Transesophageal Echocardiography Workshop, PGI, Chandigarh; 27 February–1 March 2009.
- ‘Echocardiography of congenital heart disease’, 3rd Annual Perioperative and Critical care Transesophageal Echocardiography Workshop, Chandigarh; 3 February 2009.
- ‘Anaesthesia for non—cardiac surgery in a cardiac patient’, First Conference of Society of Cardiac Anaesthesiology, Delhi and NCR Branch, AIIMS, New Delhi; 22 March 2009.

Poonam Malhotra

- ‘Can’t give heparin—then what?’, IACTA Conference; 2008

- ‘Arterial wave form audits interpretation’; ‘Flotrac and its uses in cardiac Surgery’; ‘Early goal directed therapy in moderate to high risk cardiac surgical patients’; ‘Predictors of myocardial function in adult patients undergoing open heart; surgery myocardial lactate vs plasma lactate’, Delhi Heart Lung Institute, Delhi; 11 April 2008.
- ‘Paediatric cardiac surgery’ and ‘TEE for off pump CABG’, 2nd TEE Annual Conference, Bangalore; 13–15 October 2008.
- ‘Newer and costlier inhalational agents are better than the older one–PRO’, RSACP Conference, Calcutta; November 2008.
- ‘Haemodynamic monitoring in cardiac surgical patients’ and ‘Role of TEE in ischaemic heart disease’, Cardiac Anaesthesia, Kolkata; 13–15 December 2008.
- ‘Perioperative non invasive cardiac output monitoring’, First meeting of Society of Cardiac Anaesthesiology Delhi and NCR Branch Conference, Delhi; 22 March 2009.

Miniti Choudhry

- ‘Mechanical ventilation’ and ‘Microbiology and Intensive Care’; ‘Newer modes of Ventilation’—Diagnosis and management of Arrhythmia, Mixed Venous oxygen saturation and invasive ventilation, ISAJAC 1008 NEIGRIHMS, Shillong; 12–14 September 2008.
- Teaching and training of Pulmonologist, Intensivist and Anaesthesiologist. Regarding mechanical ventilation, anaesthesia for cardiac surgery, haemodynamic monitoring, arrhythmia management and arterial blood gas analysis, IGH, Rourkela; 7–12 October 2008.
- ‘ECG and Anaesthesiologist’, 56th Annual Conference of Indian Society of Anaesthesia, Jodhpur; 26–29 December 2008.
- ‘Prosthetic heart valve and TEE’, 3rd Annual Perioperative and Critical Care transesophageal echocardiography workshop, PGIMER, Chandigarh; 27–1 March 2009.
- ‘Robotic CABG’ SCA Delhi NCR Branch; 22 March 2009.

Sambhunath Das

- ‘Anaesthetic management and outcome of arterial switch operation’, 10th National Annual Conference of the Pediatric Cardiac Society of India, Cochin; 7–9 November 2008.
- Panel member for discussion on cardiac patients for non cardiac surgery in Ist Conference of Society of Cardiac Anaesthesiologist, Delhi and NCR; 22 March 2009.

Dr Parag Gharde

- Participated in Workshop on Intra operative TEE for valve surgery, 7–8 March 2009.
- Panelist for discussion on Cardiac patient for non cardiac surgery in Ist Conference of Society of Cardiac Anaesiologist, Delhi and NCR; 22 March 2009.

Vishwas Mallik

- Panelist for discussion on ‘Cardiac patient for non cardiac surgery’, 1st Conference of Society of Cardiac Anaesiologist, Delhi and NCR; 22 March 2009.

Stem Cell Facility

Conferences, Seminars, Workshops

* Workshop on ‘Stem cell enumeration’, Flow Cytometer, 15 September 2008.

Lectures delivered

- AIIMS Department of Paediatric Surgery, New Delhi; 16–17 August 2008.
- Indian Academia of Social Science, Jamia Millia, Islamia; 20 December 2008.
- Bio-Asia 2009 Conference, Hyderabad; 3 February 2009.
- 12th Asian Oceania Congress of Neurology and 16th Annual Conference of the Indian Academy of Neurology (AOCN-IANCON 2008).
- Stem cell Voice of India Medifeast, 6 December 2008.
- Medicine Update–2008 Department of medicine, Maulana Azad Medical Collage and Associated Hospitals, New Delhi; 13 December 2008.

RESEARCH

Cardiothoracic and Vascular Surgery

Funded projects

Ongoing

- STICH Trial; for treatment of congestive cardiac failure—an international multicentric trial study
- FREEDOM Trial—an International study project
- CORONARY—international multi-centric study comparing Off Pump vs On Pump CABG
- Role of stem cell injection in patients with ischemic cardiomyopathy in patients undergoing CABG. Funded by DBT.
- Genetic polymorphism in patients suffering from coronary artery disease: A comparison between diabetic versus nondiabetic patients (ICMR Grant)
- Imbalance between Endothelin-1 and Nitric oxide products influences the clinical outcome in children suffering from congenital heart disease and pulmonary arterial hypertension

Departmental Projects

Ongoing

- Long term follow up of patients undergoing valve replacement
- Comparison of two antibiotic regimens in Open Heart Surgery
- AML length in Mitral valve repair
- Comparison of Carpentier ring vs. Teflon felt, a prospective double blind study for mitral valve repair technique
- Aortic valve replacement with autologous pericardium
- Tissue valves as substitutes in young patients
- Allopurinol in cardiac valve surgery
- Pentoxiphyllin in open heart surgery
- Aortic valve morphology in normal population
- Remote ischemic preconditioning of the myocardium using sphygmomanometer cuff in patients undergoing CABG
- Measurement of plasma and vascular asymmetric dimethylarginine (ADMA), tetrahydrobiopterin (BH4) and oxidized BH4 levels in patients undergoing coronary artery bypass grafting and their correlation with oxidative stress (ICMR Funded Project)
- Mitral valve replacement with and without chordal preservation in a rheumatic population: Assessment of left ventricular ejection fraction and regional wall motion using magnetic resonance imaging and dynamic radionuclide study
- Evaluation of flow dynamics in Fontan circuits using magnetic resonance imaging
- Histopathology and morphometry of the pulmonary vasculature in patients undergoing bi-directional Glenn and total cavopulmonary connection
- A prospective study of individual pulmonary vein size and survival in patients with totally anomalous pulmonary venous connection: How small is too small for survival after surgical correction of totally anomalous pulmonary venous connection?
- Comparison of clinical and angiographic outcome in patients undergoing on pump CABG with radial artery graft pretreated with phenoxybenzamine vs. papaverine
- Histopathology of the ascending aorta and the risk factors related to histopathological conditions and aortic dilatation in patients undergoing corrective surgery for cyanotic congenital heart diseases
- Functional tricuspid regurgitation with and without tricuspid valve annuloplasty: Serial echocardiographic assessment of tricuspid valve and right ventricular function.
- Congenital left atrial appendage aneurysms: Collective review.
- Mitral valve replacement using bioprosthetic valves in patients with rheumatic heart diseases aged below 40 year.

- Role of positron emission tomography in the patients with chronic constrictive pericarditis and restrictive cardiomyopathy
- Short and long-term prognostic value of coronary sinus derived- Cardiac Troponin I, Creatine kinase- MB, Lactate, Pyruvate and Lactate- Pyruvate Ratio in adult patients undergoing open heart surgery
- Postoperative assessment of univentricular repair by multislice computed tomographic angiography
- Evaluation of early thromboembolism and valve thrombosis in patients with rheumatic heart disease undergoing mitral tissue valve replacement in the presence of atrial fibrillation with or without left atrium / left atrial appendage clot
- Comparative study of Lactate, Pyruvate and Lactate Pyruvate ratio as Markers of myocardial Ischemia in Adult patients undergoing open heart surgery
- A comparative study of acute effects of inhaled Nitroglycerin with intravenous dobutamine on haemodynamic and oxygenation in adult patients with pulmonary arterial hypertension undergoing valve surgery under cardio pulmonary bypass
- Efficacy of lactate concentration gradient from right atrium to pulmonary artery in goal-directed haemodynamic management in cardiac surgical patients
- Brain natriuretic peptide, stroke volume variation and E/A ratio as non-invasive markers of diastolic dysfunction in patients undergoing pericardiectomy
- Comparison of phenoxybengamine vs papaverine use for radial artery conduit during coronary artery bypass grafting
- FloTrac and its use as non-invasive cardiac output monitor in cardiac surgical patients.
- Comparison of Tranexamic acid and Trasylo1 in tetralogy of Fallot patients

Cardiology

Funded Projects

Ongoing

1. Intravascular Ultrasound for severe pulmonary artery hypertension in congenital heart diseases. R. Juneja, Department of science and technology
2. Non-invasive detection of sub-clinical disease activity in patients with established rheumatic valvular heart disease. G. Karthikeyan. Funding by DBT (2006–2008). Funds: Rs 22 lakh

Completed

1. Evaluation of NT-pro-BNP levels in the differentiation of constrictive pericarditis from restrictive cardiomyopathy. S. Ramakrishnan. Funding by Faculty research grant (2006–2007). Funds: Rs 55,000

Departmental Projects

Ongoing

1. Brain Natriuretic peptide level (BNP) estimation in chronic constrictive pericarditis and restrictive Cardiomyopathy
2. DPG PET imaging in chronic constrictive pericarditis and restrictive Cardiomyopathy
3. Inflammatory markers in Eisenmenger syndrome
4. Strain and Tissue Doppler Imaging in TGA
5. Strain and Tissue Doppler Imaging in normal neonates
6. Initial study of safety and Efficacy of Betablockers in Eisenmenger Syndrome
7. Tissue Doppler and strain rate imaging in patients with acute hypertensive heart failure
8. Propranolol in children with VSD and Heart Failure (VSD PHF Study)
9. Acute hemodynamic effects of tobacco chewing
10. Sleep study in Eisenmenger syndrome

Completed

1. Multicentric Clinical Evaluation of an Indigenous Paclitaxel-eluting Stent in De-novo Coronary Artery Stenosis
2. Preliminary evaluation of the current 3-weekly penicillin prophylaxis

Collaborative Projects

1. SPIRIT V: The SPIRIT Clinical Trial Programme consists of six studies evaluating the XIENCE™ V Everolimus Eluting Coronary Stent System for the treatment of coronary artery disease. V.K. Bahl. Funded by Abbot Vascular Inc., USA
2. Evaluation of Ivabradine in patients with chronic stable angina. V.K. Bahl. Funded by Institute de Recherches Internationales Servier, France.
3. ReMeDi Study: Clinical validation of a low cost Telemedicine equipment at a tertiary care hospital V.K. Bahl. Funded by Neurosynaptic communications Pvt. Ltd., Bangalore.
4. RED HF study: A double blind randomized placebo-controlled, multicentre study to assess the efficacy and safety of Darbepoetin alfa treatment on mortality and morbidity in Heart failure (HF) subjects with symptomatic left ventricular systolic dysfunction and Anaemia. V.K. Bahl. Funded by Amgen Technology Pvt. Ltd.
5. TOPSS trial. V.K. Bahl. Funded by EuroCOR.
6. INDICOR Trial. V.K. Bahl. Funded by B. Braun.

7. BIPPS Study (Bivalirudin monotherapy in patients with STEMI undergoing a primary PCI strategy). V.K. Bahl. Funded by Sun Pharma Inc. India.
8. CVD Biomarker profiling in acute coronary events by antibodies and antigen array. V.K. Bahl. Funded by ICMR.
9. STITCH (Surgical Treatment of Ischemic Heart Failure) trial. V.K. Bahl. Funded by NIH, Bethesda, MD, USA.
10. RELEASE T Study. V.K. Bahl.
11. FREEDOM trial: Future Revascularization Evaluation in patients with Diabetes mellitus: Optimal management of Multivessel disease (FREEDOM) Trial. Clinical trial comparing multivessel DES versus CABG in diabetics. Balram Bhargava .Funded by NIH, Bethesda, MD, USA.

Cardiac Anaesthesia

Funded Projects

Completed

1. Role of coenzyme Q10 and alpha lipoic acid in attenuating the oxidative stress and systemic inflammatory response in patients undergoing coronary artery bypass graft surgery. Neeti Makhija.
2. Myocardial preconditioning against infarction in patients undergoing coronary artery bypass surgery: A comparison of Isoflurane and sevoflurane. Poonam Malhotra Kapoor.
3. Imbalance between plasma endothelin and nitric oxide synthase in the clinical outcome of congenital cardiac surgical children suffering from severe pulmonary artery hypertension: A clinico biochemical correction. Minati Choudhary.

Ongoing

1. Genetic polymorphism in patients undergoing coronary bypass grafting. Minati Choudhury.

Departmental Projects

Completed

1. A comparative study of acute effects of inhaled Nitroglycerin with intravenous dobutamine on haemodynamics and oxygenation in adult patients with pulmonary arterial hypertension undergoing valve surgery under cardio pulmonary bypass
2. Comparative study of Lactate, Pyruvate and Lactate Pyruvate ratio as Markers of myocardial Ischemia in Adult patients undergoing open heart surgery
3. Role of nitroglycerin inhalation in adult valvular surgery. Does it reduce pulmonary hypertension?
4. The role of transthoracic echocardiography as a monitoring tool during induction of anaesthesia in cardiac surgical patients
5. Nosocomial infections in children under two years undergoing cardiac surgery.

6. Effects of two different rewarming strategies on Neuropsychological function in patients undergoing CABG with CPB
7. Effects of two different rewarming strategies on Neuropsychological function in patients undergoing TOF correction with CPB
8. Role of transthoracic echocardiography during induction of anaesthesia in cardiac surgical patients
9. Role of intravenous amiodarone in patients undergoing mitral valve replacement
10. Role of coenzyme Q10 and alpha lipoic acid in attenuating the oxidative stress and systemic inflammatory response in patients undergoing coronary artery bypass graft surgery

Ongoing

1. Efficacy of lactate concentration gradient from right atrium to pulmonary artery in goal-directed haemodynamic management in cardiac surgical patients
2. Brain natriuretic peptide, stroke volume variation and E/A ratio as non-invasive markers of diastolic dysfunction in patients undergoing pericardiectomy
3. Comparison of phenoxybenzamine vs papaverine use for radial artery conduit during coronary artery bypass grafting
4. Flotrac and its use as non-invasive cardiac output monitor in cardiac surgical patients
5. Functional tricuspid regurgitation with and without tricuspid valve annuloplasty: Serial echocardiographic assessment of tricuspid valve and right ventricular function.
6. Comparison of various doses of aprotinin in atrial switch operation
7. Role of magnesium in arrhythmia prevention in infants undergoing cardiac surgery
8. Validation of Euro Score in Indian population
9. Comparison of thiopentone Etomidate propofol and milrinone in patients undergoing coronary artery bypass grafting
10. Comparison of inhaled nitroglycerine inhaled milrinone in children suffering from severe pulmonary artery hypertension
11. Comparison of magnesium versus magnesium plus Vitamin C in atrial fibrillation prophylaxis in patients undergoing coronary artery bypass grafting
12. Evaluation of prophylactic Vasopressin in patients on the angiotensin Converting Enzyme Inhibitor ramipril undergoing Coronary Artery Bypass Surgery
13. Rectal diclofenac suppository in postoperative pain relief in adult cardiac surgical patients.
14. Etomidate for children in cathlab diagnostic procedure
15. Role of prognostic markers in complex congenital cardiac surgery

16. Comparative study of Lactate, Pyruvate and Lactate Pyruvate ratio as Markers of myocardial Ischemia in adult's patients undergoing open heart surgery
17. Relation between plasma endothelin level and quality of sleep in patients undergoing coronary bypass grafting

Cardiac Radiology

Ongoing

1. 'Induction of therapeutic angiogenesis in critical limb ischemia by intra-arterial delivery of autologous bone-marrow derived stem cells'. Ethically cleared pilot project under financial grant from the Department of Biotechnology, Ministry of Science and Technology, Government of India.
2. 'MRI for *in vivo*-tracking of iron oxide labeled mesenchymal stem cells in a rat model of heart failure'. Under financial grant from the Department of Biotechnology, Ministry of Science and Technology, Government of India.
3. MD thesis 'Correlation of Clinical Disease Activity with Imaging Modalities in Takayasu Arteritis'
4. MCh (CTVS) research project: 'Role of Nicorandil in patients undergoing coronary artery bypass surgery using radial artery'
5. MD (Radiodiagnosis) Thesis: 'Utility of Cardiac MRI in RV function evaluation in health and disease'.
6. MD (Medicine) Thesis: 'Prevalence of co-morbidities in patients with chronic obstructive pulmonary disease'.
7. DM (Cardiology) project: 'Atherogenesis and altered endothelial function in cyanotic congenital heart disease: Role of hypoxic preconditioning'
8. DM (Cardiology) project: 'Value of Dual Source Computed Tomography in Assessment of Chronic Total Occlusion of Coronary Arteries'
9. MS (Surgery) Thesis: 'The effect of Renal Transplantation on coronary artery calcification and carotid intima-medial thickness in renal recipients'
10. DM (Cardiology) project: 'Study of clinical characteristics and MRI features of restrictive cardiomyopathy (RCMP) and to devise MRI criteria for diagnosis of EMF'
11. MD (Medicine) Thesis: 'Evaluation of effect of CPAP on cardiovascular markers in patients with obstructive sleep apnea'

Completed

1. MD (Medicine) thesis: 'Assessment of atherosclerosis by carotid intimomedial thickness in patients with rheumatoid arthritis'
2. MD (Medicine) thesis: 'Role of 18-FDG PET-CT scan in diagnosis and assessment of disease activity of primary systemic necrotising vasculitis'

3. DM (Cardiology) project: 'Detection of pericardial inflammation by F-18 FDG PET-CT in chronic constrictive pericarditis'
4. MD (Pharmacology) project: 'Effects of Atorvastatin and Pioglitazone on endothelial dysfunction in non-diabetic normolipidemic coronary artery disease (CAD) patients'
5. Mch (CTVS) project: 'To study the effect of continuous pulmonary perfusion and low tidal volume ventilation on lung function in patients undergoing cardiopulmonary bypass'
6. MP Th (Cardiopulmonary) research project: 'Compare the efficacy of PNF techniques and conventional breathing exercises for pleural effusions after CABG with LIMA as one of the grafts'

Cardiac Biochemistry

Funded Projects

Completed

- LDL particle heterogeneity and its association with other established risk factors for CHD in an Indian industrial population: Role of CETP gene. Funded by ICMR for 3 years (2005–2008). Funds: 8.5 lakh.

Ongoing

- Relation of APOA-V gene variants to serial changes in childhood body mass index and coronary artery disease risk factors in young adulthood. Funded by ICMR for 3 years (2005–2010). Funds: Rs 35 lakh.
- Role of Telomere shortening and Telomerase activity on EPC senescence in premature CAD patients and controls (2008–2010) DBT. Funds: Rs 28 lakh.
- Lab coordinator in 'Low dose magnesium sulphate regimen for management of eclampsia—a randomized controlled trial'. Funded by ICMR for 3 years (2007–2010). Funds: Rs 2.5 lakh.
- Serum fatty acid levels and their correlation with other CVD risk factors in Industrial population from Delhi and Trivandrum. Funded by ICMR for 3 years (2005–2009). Funds: Rs 14 lakh.
- Evaluation of HDL₂, HDL₃ and apolipoprotein A1 levels in a large Indian industrial population: Association with genetic variants in CETP, LCAT, hepatic lipase and LPL gene. Funded by DST for 3 years (2007–2010). Funds: Rs 65 lakh.
- Study of relationship between waist circumference and dyslipidemia amongst high income group adolescent school children (SRF project). Funded by ICMR for 2 years (2007–2009).

Collaborative Research

- Role of Homocysteine in Coronary Artery Disease: Genetic and Epigenetic studies (with Cardiology and Institute of Genomics and Integrated Biology)

- Rural-urban migration: Effects on obesity and diabetes in Indians (with Cardiology and University of Bristol)
- Prevalence of obesity and associated diseases amongst children in 5–18 years of age in the National Capital territory of Delhi (with Human Nutrition Unit)
- Auditing of early goal direct therapy in patients undergoing cardiac surgery. (with Cardiac Anesthesia)
- Paraoxonase and its gene variants in relation to coronary artery disease. (with Biochemistry)
- Role of oral coenzyme Q10 in patients undergoing coronary artery bypass graft surgery with Cardiac (with Cardiac Anesthesia)
- Non-invasive detection of sub clinical disease in patients with established rheumatic valvular heart disease (with Cardiology)
- Relationship of Growth in Infancy and Childhood to Adult Endothelial Function and Body Composition; the New Delhi Birth Cohort (with Endocrinology)
- Effect of diets rich in omega-3 fatty acids and sterol esters on the composite risk profile of dyslipidemic adults (with Cardiology)
- Development of long acting penicillins for rheumatic fever prophylaxis: Preliminary evaluation of the current 3 weekly schedule in terms of disease control. (with Cardiology)
- Nutritional challenges, abdominal adiposity and type 2 diabetes in Indians. Funded by Wellcome trust (with Centre for chronic disease control [CCDC])

Cardiac Pathology

Departmental projects

- Histopathological and morphometric evaluation of surgically excised specimens of thoracic aortic aneurysms

Collaborative projects

- Histomorphometric analysis of intrapulmonary vessels in patients undergoing Bi-Directional Glenn and total cavopulmonary connection.
- Left ventricular muscle biopsy in patients with Transposition of great arteries with prepared and regressed left ventricle.

Cardiac Nuclear Medicine

Funded projects

Completed

1. 'International Atomic Energy Agency' project 'Role of radionuclide techniques in diagnosis of early dementia'. (2003–2008). Funded by International Atomic Energy Agency for 5 years (2003–2008). Funds: Euro 1700 for 2007–2008.

Ongoing

1. 'Detection of myocardial ischemia in asymptomatic diabetes' with Tc99m-MIBI myocardial perfusion scintigraphy'. Funded by International Atomic Energy Agency for 3 years (2006).
2. 'Use of autologous bone marrow stem cells for myocardium regeneration'. Funded by Department of Biotechnology (2006).
3. Labeling of stem cells with Technetium-99m hexamethylene propylene amine oxine (Tc99m HMPAO) and to detect the homing of stem cells in the myocardium after intra coronary injection. Applied for Institute fund (2007).
4. Evaluation of anthracycline induced cardiotoxicity in childhood malignancies. Comparison of echocardiography and radionuclide ventriculography. Institute funded project (2008).
5. 'Efficacy of stem cells in improvement of left ventricular function in patients with acute myocardial infarction'. Funded by Department of Biotechnology (2008).

Collaborative Projects

Completed

1. Correlation between cardiovascular autonomic function and indicators of myocardial ischemia in patients presenting anginal symptoms. PhD thesis in Physiology (with Physiology, Nuclear Medicine and Cardiology)
2. Prevalence of symptomatic and asymptomatic coronary artery disease in stroke patients. DM research paper (with Neurology, Cardiology and Nuclear Medicine)
3. Role of F-18 FDG PET in cardiomyopathies. DM research paper (with Cardiology and Nuclear Medicine)

Ongoing

1. F-18 FDG in detecting ischemia at rest in patients with known coronary artery disease (with Nuclear Medicine and Cardiology)

Guide for Thesis

Collaborative projects

Completed

1. Correlation between cardiovascular autonomic function and indicators of Myocardial ischemia in patients presenting anginal symptoms. Co-guide in PhD thesis of Rita Khadka (with PhD, Physiology)
2. Prevalence of symptomatic and asymptomatic coronary artery disease in stroke patients. Co-guide in DM research paper of Kapil Agarwal (with DM Neurology)
3. Role of F-18 FDG PET in cardiomyopathies. Co-guide in DM research paper of Sameer Mehrotra (with DM Cardiology)

Ongoing

1. Role of PET-CT in initial staging and post therapy assessment in patients of carcinoma ovary– Chief Guide in MD thesis of Dr G.R.M. Reddy (with Nuclear Medicine MD)
2. Role of F-18 FDG PET/CT in prognostication and restaging of locally recurrent cancer cervix. Co-guide in MD thesis of Dr Sagar Maharjan (with Nuclear Medicine MD, 2008–2010)
3. Role of PET/CT in initial staging of locally advanced breast cancer and comparison with conventional modalities. Co-guide in MS thesis of Dr Sanjay Kumar (with MS Surgery, 2008–2010)
4. Tumor Burden Estimation by F-18 FDG PET/CT using Phantom and its application in pediatric lymphoma for treatment response evaluation. Chief Guide in thesis of Arun Gupta. (with Nuclear Medicine MSc student, 2008–2010)

Stem Cell Facility

Funded projects

Ongoing

- Isolation and expansion of Mesenchymal stem cells (MSC) from human bone marrow/umbilical cord and evaluation of its cardiomyogenic and neurogenic differentiation potential. Sujata Mohanty. Funded by ICMR for 3 years. Funds: Rs 20 lakh.
- Transplantation of Mesenchymal Stem Cell in animal models of Myocardial Infraction and Parkinson's disorder. Sujata Mohanty. Funded by DBT. Funds: Rs 44.45 lakh.

Departmental projects

Completed

- Expression status of HLA II molecules on undifferentiated and differentiated Mesenchymal Stem Cells-an in vitro study. Sujata Mohanty.

Collaborative Research

- Use of autologous bone marrow stem cells for myocardium regeneration. Balram Airan. Funded by DBT for 3 years. Funds: Rs 98.234 lakh.
- Efficacy of Stem Cell in improvement of left ventricular function in patients with acute myocardial infraction. Balram Bhargava. Funded by DBT for 1.5 years. Funds: Rs 26.397 lakh.
- DBT Centre of Excellence for Stem Cell Research: Basic and Transplantation (Core Grant), Balram Airan. Funded by DBT for 5 years. Funds: Rs 867.90 lakh.
- Culture of limbal stem cell for ocular surface reconstruction in stem cell deficiency disorder. Radhika Tandon. Funded by DBT for 3 years. Funds: Rs 27 lakh.
- Induction of therapeutic angiogenesis in critical limb ischemia by intra-arterial delivery of autologous bone marrow derived stem cells. Sanjiv Sharma. Funded by DBT for 9 months. Funds: Rs 23.097 lakh.

- Use of Autologous Bone Marrow Derived Stem cells For Rehabilitation of patients with Dry Age Related Macular Degeneration and Retinitis Pigmentosa: A Phase-I Clinical Trial. Atul Kumar. Funded by ICMR for 3 years. Funds: Rs 20.61 lakh.
- Intravenous Autologous bone marrow stromal or mononuclear cells for patients with acute ischemic stroke: A Multi Institutional project. Rohit Bhatia. Funded by DBT for 3 years. Funds: Rs 75 lakh.
- Safety and Efficacy of Autologous Stem Cell in prevention of amputation in patients with chronic critical limb ischemia. Anita Dhar. For 2 years. Funds: Rs 50.65 lakh.
- To study the role of bone marrow derived pluripotent cells in peripheral nerve repair in adult rats. Vaishali Suri. Funded by ICMR. Funds: Rs 30 lakh.
- Effect of bone marrow stromal cells transplantation and magnetic stimulatiosory in the secondary motor functional recovery of spinalised rats. Dr Rashmi Mathur. Funded by ICMR for 3 years. Funds: Rs 17 lakh.
- MRI for in- vivo tracking of iron oxide labeled Mesenchymal stem cells in a rat model of heart failure. Gurpreet Gulati. Funded by DBT for 5 years. Funds: Rs 28.15 lakh.
- Development of a potential biopolymer to serve as an alternative substrate of human amniotic membrane for ex–vivo expansion of corneal epithelial cell. Radhika Tandon. Funded by DBT for 3 years. Funds: Rs 23.69 lakh.
- Exploring the role of MHC and co-stimulatory molecules in the immune evasion mechanism of glioma stem cells. S. Vivekanandhan. 3 years, 22.15 lakh.
- To evaluate the potential role of bio-polymer to support the culture of corneal epithelial cells. Namrata Sharma. (Institute Project).
- Molecular Characterization of Fanconi Anemia: A pilot study. (Institute project).

PUBLICATIONS

Cardiothoracic and Vascular Surgery

1. Talwar S, Sharma AK, Kumar AS. Tissue heart valve implantation in India: Indications, results and impact on quality of life. *Indian J Thorac Cardiovasc Surg* 2008;**24**:10–4.
2. Talwar S, Choudhary SK, Airan B, *et al.* Reducing the costs of surgery for surgical correction of congenitally malformed hearts in developing countries. *Cardiolo Young* 2008;**18**:363–71.
3. Talwar S, Choudhary SK, Kumar AS. What is the ideal patch material for ASD closure? *Ann Thorac Surg* 2008;**86**:693.
4. Talwar S, Choudhary SK, Kumar AS. Permanent pacemaker implantation after isolated aortic valve replacement: Incidence, indicators and predictors. *Ann Thorac Surg* 2008;**86**:1403.
5. Talwar S, Choudhary SK, Saxena A, Kothari SS, Juneja R, Airan B. Unidirectional Valved patches for closure of septal defects in patients with severe pulmonary hypertension. *Ann Pediatr Cardiolo* 2008;**1**:114–19.

6. Talwar S, Choudhary SK, Airan B. Reoperation after relief of congenital subaortic stenosis. *Eur J Cardiothorac Surg* 2008;**34**:700.
7. Talwar S, Choudhary SK, Airan B. Selected summaries. *Ann Pediatr Cardiol* 2008;**1**:153–5.
8. Talwar S, Choudhary SK, Airan B. Modified Blalock-Taussig Shunt in neonates. *Heart Lung Circulation* 2009;**18**:62–3.
9. Talwar S, Gupta A, Choudhary SK, Airan B. Absent left pulmonary artery and double aortic arch in tetralogy of Fallot: Reconstruction using homograft saphenous vein or iliac artery. *Interact Cardiovasc Thorac Surg* 2009;**8**:277.
10. Talwar S, Choudhary SK, Reddy S, Saxena A, Kothari SS, Juneja R, *et al.* Total anomalous pulmonary venous drainage beyond childhood. *Interact Cardiovasc Thorac Surg* 2008;**7**:1058–61.
11. Talwar S, Choudhary SK, Shivaprasad MB, Saxena A, Kothari SS, Juneja R, *et al.* Tetralogy of Fallot with total anomalous pulmonary venous drainage. *Ann Thorac Surg* 2008;**86**:1937–40.
12. Kumar AS, Talwar S, Gupta A. Mitral valve replacement with the pulmonary autograft—mid-term results. *J Thorac Cardiovasc Surg* 2008. (In Press).
13. Malankar D, Talwar S, Makhija N, Sharma S, Choudhary SK. Surgical management of univentricular heart with total anomalous pulmonary venous drainage and intrapulmonary vertical vein. *J Cardiac Surg* 2009. (In Press)
14. Talwar S, Shivaprasad MB, Kothari SS, Choudhary SK. Arterial switch operation for transposition of great arteries with dextrocardia, situs inversus, inverted origin of circumflex and right coronary arteries. *Texas Heart Institute J* 2009. (In Press).
15. Talwar S, Choudhary SK, Airan B. Selected summaries. *Ann Pediatr Cardiol* 2009 (In Press).
16. Talwar S, Choudhary SK, Airan B. Surgery for Complete Atrio-ventricular septal defect: Is a uniform strategy applicable? *Ann Pediatr Cardiol* 2009. (In Press)
17. Talwar S, Sandeep AJ, Choudhary SK, Gulati GS, Airan B. Tetralogy of Fallot with anomalous systemic and pulmonary venous drainage, anomalous coronary artery pattern and abnormal development of diaphragm. *Congenital Heart Dis* 2009;**4**:21–4.
18. Talwar S, Mishra A, Choudhary SK, Airan B. Homograft saphenous vein for facilitating arterial cannulation in a neonate. *Ann Thorac Surg* 2009;**87**:969–70.
19. Talwar S, Sharma P, Kumar TKS, Choudhary SK, Gharde P, Airan B. Bidirectional Superior Cavo-pulmonary anastomosis without cardiopulmonary bypass. *Indian J Thorac Cardiovasc Surg* 2008;**24**:269–76.
20. Talwar S, Choudhary SK, Sandeep AJ, Malik V, Kothari SS, Gulati GS, *et al.* Atrial switch operation in a patient with dextrocardia, bilateral superior Vena cavae, left atrial isomerism and unroofed coronary sinus. *Ann Thorac Surg* 2008. (In Press).

21. Talwar S, Sharma P, Choudhary SK, Saxena A, Kothari SS, Juneja R, *et al.* Outcomes following surgery for Supraaortic stenosis. *Indian J Thorac Cardiovasc Surg* 2008;**24**:221–6.
22. Talwar S, Choudhary SK, Airan B. Single-stage versus 2-stage repair of coarctation of the aorta with ventricular septal defect. *J Thorac Cardiovasc Surg* 2008;**136**:1390–1.
23. Gupta A, Talwar S, Airan B. Eustachian Valve as a cardiovascular patch. *Heart Lung Circulation* 2008. (In Press)
24. Bishnoi AK, Talwar S, Choudhary SK, Hote M, Velyoudham D, Saxena A, *et al.* Homograft saphenous vein versus polytetrafluoroethylene graft for modified Blalock-Taussig shunt. *Indian J Thorac Cardiovasc Surg* 2008;**24**:227–32.
25. Hasija S, Makhija N, Kiran U, Choudhary SK, Talwar S, *et al.* Nosocomial infections in children and infants after cardiac surgery. *Indian J Thorac Cardiovasc Surg* 2008;**24**:233–9.
26. Chaturvedi V, Talwar S, Airan B, Bhargava B. Interventional cardiology and cardiac surgery in India. *Heart Surg Forum* 2008;**94**:268–74.
27. Choudhary SK. Working Group on Management of Congenital Heart Diseases in India Consensus on timing of intervention for common congenital heart disease. *Indian Pediatr* 2008;**45**(2):117–26.
28. Makhija N, Sendasgupta C, Kiran U, Lakshmy R, Hote MP, Choudhary SK, *et al.* The role of oral coenzyme Q10 in patients undergoing coronary artery bypass graft surgery. *J Cardiothorac Vasc Anesth* 2008;**22**(6):832–9.
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30. Das SN, Singh R, Hote M, Kumar AS, Kiran U. Cardiopulmonary bypass for removal of bullet in the posterior pericardium. A case report. *Indian J Thorac Cardiovasc Surg* 2008;**24**(2): 138–140.
31. Chowdhury UK, Rizvi A, Sheil A, *et al.* Successful Surgical Correction of a Patient with Congenital Coronary Arteriovenous Fistula between Left Main Coronary Artery and Right Superior Cavo-Atrial Junction. *Hellenic J Cardiol* 2009;**50**:73–8.
32. Pericardiectomy for Chronic constrictive pericarditis via left anterolateral thoracotomy (Invited article from Frederick Crawford, MD, Editor). *Operative Techniques in Thoracic and Cardiovascular Surgery*, 2008; 13: 14-25.
33. Chowdhury UK, Mishra AK, Ray R, Kalaivani M, Reddy SK, Venugopal P. Histopathological changes in ascending aorta and the risk factors related to histopathological conditions and aortic dilatation in patients with tetralogy of Fallot. *J Thorac Cardiovasc Surg* 2008;**135**:69–77.
34. Chowdhury UK, Mishra AK, Kabra M, Ray R, Kalaivani M, Raghu, *et al.* Role of fibrillin-1 genetic shifts and polymorphism in aortic dilatation in patients undergoing intracardiac repair of tetralogy of Fallot. *J Thorac Cardiovasc Surg* 2008;**136**:757–66.

35. Chowdhury UK, Malik VK, Yadav R, Seth S, Ramakrishnan L, Kalaivani M, *et al.* Myocardial injury in coronary artery bypass grafting: On-pump *versus* off-pump comparison by measuring heart-type fatty acids- binding protein release, creatinine kinase- MB and cardiac troponin I, heat stable C reactive protein (ICMR funded project). *J Thorac Cardiovasc Surg* 2008;**135**: 1110–19.
36. Chowdhury UK, Kothari SS, Patel C, Malhotra P, Mishra AK, Venugopal P. An alternative technique of transfer of anomalous left coronary artery from the pulmonary artery in children and adults using autogenous aortic and pulmonary arterial flaps. *Cardiol Young* 2008;**18**: 165–76.
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41. Chowdhury UK, Kothari SS, Malhotra PK, Mishra AK, Mittal CM, Raghu G. Successful lobectomy for pulmonary arteriovenous malformation causing recurrent massive hemoptysis. *Heart Lung Circ* 2008 (In press).
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45. Kapoor PM, Hasija S, Chowdhary UK, Kiran U. Management of adult ALCAPA repair. (In press).
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Cardiology

Journals

1. Bhargava B, Karthikeyan G, Shankar PB, Seth S, Singh S, Pr U, *et al.* Preclinical and early clinical experience with a biodegradable polymer-based, rapamycin-eluting, Indian drug-eluting coronary stent: The BIO-RAPID study. *Indian Heart J* 2008;**60**:228–32.
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3. Chaturvedi V, Talwar S, Airan B, Bhargava B. Interventional cardiology and cardiac surgery in India. *Heart* 2008;**94**:268–74.
4. Chowdhury UK, Malik V, Yadav R, Seth S, Ramakrishnan L, Kalaivani M, *et al.* Myocardial injury in coronary artery bypass grafting: On-pump versus off-pump comparison by measuring high-sensitivity C-reactive protein, cardiac troponin I, heart-type fatty acid-binding protein, creatine kinase-MB, and myoglobin release. *J Thorac Cardiovasc Surg* 2008;**135**:1110–19, 1119.e1–e10.
5. Chowdhury UK, Seth S, Govindappa R, Jagia P, Malhotra P. Congenital left atrial appendage aneurysm: A case report and brief review of literature. *Heart Lung Circ* 2008. [Epub ahead of print]
6. Gulati GS, Singh S, Arepalli CD, Sharma S, Kothari SS, Airan B, *et al.* Superior vena caval obstruction after complete resolution of cardiac tuberculoma. *Clin Radiol* 2008;**63**:605–9.
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8. Karthikeyan G, Bhargava B. Taking Interventional Cardiology forward: Hindsight, foresight and insight. *Eurointervention* 2008 (Published).
9. Kothari SS. Assessing operability in congenital heart disease in pulmonary hypertension. Howarth S, Kumar K (eds.) *Elsevier* 2008.

10. Kothari SS. Estimating mean pulmonary artery pressure from systolic pressure: A caveat? *Chest* 2008;**134**:1108.
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Cardiac Anaesthesia

Journals

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Chapters in book

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Cardiac Pathology

Journals

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Cardiac Nuclear Medicine

Abstracts

1. Patel CD, Nadig MR, Chawla M, Dhanapathi H, Mohapatra TK, Ahmed S, *et al.* Is there a role of F-18 FDG PET in detection of ischemic myocardium at rest in patients with known CAD? Preliminary results. *Indian J Nucl Med* 2008;**23**:208.
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Stem Cell Facility

Journals

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Abstracts

1. Sharma S, Mohanty S, Sen S, Roychoudhary A, Teotia P, Sushmita B, *et al.* Ex vivo expansion of oral mucosal epithelial stem cells (OMESC) and comparison from native oral mucosal epithelial cells. *Asia-ARVO meeting on Research in Vision and Ophthalmology*. In: Hyderabad, 2009.
2. Mohanty S, Sushmita B, Kumar A, Kanthaiyah YV, Sharma S, Jain KG, *et al.* Surface Marker Profiling of Human Bone Marrow Derived Mesenchymal Stem Cells (hBM-MSC) during in vitro Expansion. *International Society for Stem Cell Research*. In: Philadelphia, USA; 2008.

PATIENT CARE

Cardiothoracic and Vascular Surgery

Total operations performed Open heart surgery 2,589

Closed heart surgery 878

Total operations 3,477

34,738 patients have attended and were seen in the Cardiothoracic and Vascular surgery.

Cardiology

	Total numbers
New OPD cases	27,167
Old cases	65,758
Patient Services	
TMT	2,497
Holter	1,980
Echocardiography	21,379
Fetal echocardiography	270
ECG (OPD)	26,747
Ambulatory BP	26
Event Recorder	24

Cath Lab Services

Diagnostic

Coronary angiograms	2,254
Catheterization studies	1,700

Interventions

Coronary Interventions	905
Mitral valve dilatations	285
Device closures	65
Pacemakers	216
ICD/BiV/Combo	41
Other interventions	238

Cardiac Anaesthesia

Operation Theatre

7-operation theatres work from 8 a.m.–5 p.m. Monday - Friday and. on Saturday upto 2 p.m.

CT Angio

CT Angiography of children in multi-slice CT scanner room under monitored anaesthesia care/ general anaesthesia/sedation in 64 slice multi scanner room.

Pre-anaesthesia Round

Pre anaesthesia round from 6.30–8.30 pm for all the patients scheduled for operation.

Cath Laboratory

- General anaesthesia/LA/MAC for children undergoing ASD/VSD/PSD closure.
- In adults GA/LA monitored anaesthesia care for adult Automated cardiovertor device implantation (AICD) and dual chamber pace maker implantation.

Aortic Stent

- Placement in cath lab, for patient of Aortic aneurysm under general anaesthesia MAC.

MRI Angio

- In MRI angiography room under general anaesthesia and/or monitored anaesthesia care. All MRI compatible equipment is kept inside.

Stress Management Programme

- Stress management programme for patients and their family ,for patients admitted in CT3 CT4 CT5 ward, Health education in CT5 Ward Meditation Room.
- Relaxation therapy by mind body interaction for hospital staff every day 1–2.30 pm in CT 5 meditation room.

Emergency Services

- Emergency services by the residents and faculty for emergency surgery.

Resuscitative and Ventilatory Management

- Resuscitative and ventilatory management in CCU, CTVS, ICU-A and ICU-B and CT5 and recovery room.

Blood Transfusion Services (Cardiac Neurosciences Centre)

Blood units collected

Replacement donors	17,879
Voluntary donors in the department	111
through blood mobiles	941
Blood received from IRCS	46
Blood received from Hospital Blood Bank, AIIMS	99
Blood received from other hospitals	500
Total No. of Blood units collected	19,576

Blood units issued

Blood units issued to CTVS/NS	21,950
to Hospital Blood Bank, AIIMS	1,192
to JPNATC BB	3,114
to IRCS	1
to other hospital	844
HIV/HBsAg/HCVreactive units discarded	467
Total blood units issued	27,568

Laboratory Procedures

Total Blood grouping (ABO)	76,766
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Number of Rh grouping	57,190
Number . of cross- matching done	75,623
<i>Infectin markers tested</i>	
HIV	23,487
HBV	23,799
HCV	24,066
VDRL	21,869
MP	6,000
CMV	312
HBV confirmatory tests	525
Total	1,00,058
<i>Blood Components</i>	
Fresh Frozen Plasma (FFP)	16,838
Platelet Rich Plasma (PRP)	151
Platelet Concentrate	15,625
Recovered plasma	1,599
Cryoprecipitate	571
Packed red blood cells	17,409
Total	52,193
<i>Special procedures</i>	
Single donor plateletpheresis	10
Cardiac Radiology	
Total number of cine-angiography done for.	
Cine fluoroscopy	
Vascular catheter procedures	5,718
Ultrasound/Doppler	1,912
CT	1,636
MRI	475
OPD Data: Routine X-ray for CTVS and Cardiology	61,093

Cardiac Biochemistry

The cardiac biochemistry laboratory is externally validated by BIRMINGHAM, UK through quality control programmes for clinical chemistry.

The various tests being carried out in Cardiac Biochemistry Lab for patients include:

Name of the investigation

Routine chemistry analysis

Routine haematology

PT, APTT, FDP, Protein C and Protein S, Fibrinogen

CK, CK-MB, LDH

Lipid Profile

Cholesterol-total

Cholesterol-HDL

Cholesterol-LDL

Cholesterol-VLDL

Triglycerides

Specialized investigations

Name of the investigation

Digoxin

Cyclosporine

Thyroid hormones-T₃, T₄, TSH

ASLO

CRP

Homocystiene

Vitamin B12 and Folate

Lipoprotein(a)

Apo(a)

Apo(b)

RA factor

Catecholamines (plasma and urine)

VMA (urine)

Glycosylated haemoglobin

LDL subfraction

HLA-A, B, C, DR, DQ

Cardiac Pathology

Cardiac Pathology

Routine	236 cases
Research	156 cases
Poly. L Lysine Coated slides	20,026 slides
HE	232 slides
Special stains	312 slides
Unstained	126 slides

Cardiac Nuclear Medicine

The department is equipped with a dual head SPECT Gamma camera catering to patients referred for cardiac studies from CN centre and other departments of the hospital. Both thallium and tetrofosmin gated SPECT myocardial perfusion studies are performed. The department also performs MUGA studies for assessment of left ventricular function in CAD patients referred from the centre and from IRCH for cardiac evaluation in patients receiving chemotherapy.

Total Number of patients investigated in Nuclear Cardiology from 1 April 2008–31 March 2009.

Stress Thallium	892
Stress Tetrofosmin	452
MUGA study	1,565
Misc	34
Total	2,943

Stem Cell Facility

Stem cell transplantations under various clinical trials:	95
• Corneal surface reconstruction:	
—Limbal stem cell transplantation:	18
—Oral Mucosal Transplantation:	7

- Cord blood stem cell Cryopreservation: 7
- Bone Marrow stem Cryopreservation: 14

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Cardiothoracic and Vascular Surgery

- Professor A. Sampath Kumar elected as Editorial Board member of Annals of Thoracic Surgery, USA.
- Professor Balram Airan is elected as Vice President (North) for Heart failure Society of India;
- Member ,Inspection team for accreditation of Heart Transplant Programme, Sir Ganga Ram Hospital, New Delhi and Research and Referral Army Hospital, New Delhi;
- Member, Editorial Board, Annals of Paediatric Cardiology, the official publication of Paediatric Cardiac Society of India;
- honoured as Professor K.V. Naidu Orator by AP CSI.
- Dr U.K. Chowdhury Awarded the best paper for original research. Entitled ‘Relationship between internal jugular venous oxygen saturation and pump flow rates in children and adults undergoing corrective cardiac surgery under cardiopulmonary bypass’. Presented at the 8th Association of Indian Society of Extracorporeal Technology Conference, 22–23 February 2008.
- Dr Sachin Talwar, Assistant Professor of CTVS was awarded ‘the prestigious Ewart’s A Memorial Graham fellowship’ by the American Association of Thoracic Surgery for the year 2008–2009 for training in Paediatric Cardiac Surgery.

Cardiology

V.K. Bahl president of Cardiological Society of India (CSI) 2008–2009; Chairman, Scientific committee of 60th Annual meeting of Cardiological Society of India (CSI 2008), Chennai. Awarded FACC (Fellow of American College of Cardiology). Associate Editor of Asian Heart Journal, a publication of BMJ group. Editor of Cardiology Update 2008.

Anita Saxena visiting Professor to University of Manitoba, Canada.

S.S. Kothari Member, Editorial Board of JACC Imaging and Images in Paediatric Cardiology.

Balram Bhargava awarded Fellowship of the Royal College of Physicians (FRCP), Glasgow, UK. Vasvik award for Biomedical Technology Innovation 2008.

Ambuj Roy selected as a Fellow to the ‘41st Ten day Teaching seminar in cardiovascular disease epidemiology and prevention’ organized by International Society of Cardiovascular disease epidemiology and prevention at Oxford UK (2008) amongst several International applicants.

S. Ramakrishnan awarded ‘Nanada Young Investigator award’ for best Echocardiography paper at CSI 2008, Chennai.

Cardiac Anaesthesia

Dr Usha Kiran, Professor Head, life time Achievement award bestowed upon by ‘Her Excellency’ Ms Prabha Singh Patil, Hon’ble President of India, President House; 22 September; continued Vice President of ‘PRAN’. Parkinson Related Awareness Network; Member, reviewing of the articles of Indian Journal of Anaesthesia. Editorial Board Member for International Journal of Biosciences. Contributed a chapter ‘Healing Head and Heart in the book titled ‘Spirituality and Mental Health edited by Dr Awdesh Sharma published by Indian Psychiatry Society.

Dr Sandeep Chauhan, Professor elected as Associate Vice President of IACTA.

Dr Neeti Makhija, Co author in paper ‘Echocardiography in congenital heart disease—interesting cases’, 3rd Annual Perioperative and Critical Care Transesophageal Echocardiography Workshop, Chandigarh; 1–3 February 2009. The paper was judged as the best paper presented.

Dr Poonam Malhotra, nominated as Treasurer of India. Association of Cardiac Anaesthesiologists continuing as member of the Editorial Board of Annals of Cardiac Anaesthesia. The National Journal of IACTA, nominated as Secretary of ‘The Society of Cardiac Anaesthesiology, Delhi and NCR Branch’, Translated in Hindi, Co-Authored and Co-Editor of book entitled ‘Care and Safety of OT Equipment—Our responsibility’ written and Edited the souvenir for the 1st Conference of ‘The Society of Cardiac Anaesthesiology—Delhi and NCR Branch’ written and Edited two issues (August 2008 and January 2009) of Newsletters of IACTA.

Dr Minati Choudhary, invited member in the review board of International Journal of Medical Monitors and Journal of Clinical Anaesthesia.

Dr Sambhunath Nath Das, received Nanda Young Investigation Award in National Conference of Cardiology Society of India, Chennai; December 2008. Book in Hindi ‘Care and Safety of OT equipment co-edited by all the faculty of the Department.

Cardiac Radiology

Dr Gurpreet S. Gulati

1. Visiting Faculty, Workshop on ‘Chest and cardiac imaging’, Organized by the faculty of Medicine, Kuwait University, Kuwait; 25–26 January 2009.
2. Reviewer for Heart, Journal of Cardiovascular Magnetic Resonance, Cardiovascular and Interventional Radiology, Post Graduate Medical Journal, Indian Heart Journal, Indian Journal of Thoracic and Cardiovascular Surgery and the Indian Journal of Radiology and Imaging.

Dr Priya Jagia

1. Selected for ‘Commonwealth scholarship’, UK; 2009.
2. Reviewer for *Pediatric Radiology*, *Eastern Journal of Medicine*, *Indian Journal of Radiology and Imaging*.

Blood Transfusion Services (Cardiac Neuro Centre)

Dr Rama Bhasin was assigned as an Expert by NACO to inspect Stand alone Blood banks in private sector in the states of UP and Delh; attended the NABH assessors course for Blood Bank Accreditation from 18–22 August 2008 following which She successfully passed the written examination; appointed Assessor, NABH ,Blood Bank Accredition; invited by National AIDS Control Organization (NACO) to be a resource person during training programme on Blood Banks for Medical officers, RML Hospital; February 2009.

Dr Anjali Hazarika, was Secretary of Indian Society of Blood Transfusion and Immunohaematology, Delhi Chapter and organized several academic meets, workshops and national seminars in the field of transfusion medicine; he was Organizing Secretary of National CME on ‘Basics of transfusion medicine’ organized, AIIMS; 5 April 2008; presented a lecture on ‘Problem of Impersonation in Blood Transfusion Services’, the CME; was resource person during ‘Programme for Training in Blood Safety’ for medical officers and technicians, organized by National Aids Control Organization in RML Hospital; 11 January–23 February 2009. Gave presentation on ‘Impersonation by Blood Donors—A Threat to Blood Safety’ and ‘Relevance of Leucoreduction in Transfusion Practice’.

Staff Members

Following staff members attended National Training Programme on Blood Safety organized by NACO:

1. Ms. Chitra Sharma Technician
2. Mr. Rahul Gautam Technician

Stem Cell Facility

The Department of Biotechnology, Government of India approved the establishment of ‘Centre of Excellence’ in the field of Stem Cell, Stem Cell Facility, AIIMS.

FACILITY AVAILABLE

Stem Cell Facility

- Stem cell isolation
- Stem cell enumerations by flow cytometer
- Cryopreservation of stem cells

FOREIGN VISITORS

Cardiothoracic and Vascular Surgery

1. Dr Taweesak Chotivatanapong, Head, Department of Cardiovascular Surgery, Chest Disease Hospital, Bangkok visited AIIMS, New Delhi and delivered a guest lecture on ‘Ross procedure’.
2. Dr Naren Vyavahare from Clemson University visited AIIMS, New Delhi and delivered a guest lecture on ‘Anti Calcification Treatment on Tissue Valve’.

Cardiac Radiology

Dr Gurpreet S Gulati

1. Presented 'MRI including delayed enhancement technique in the evaluation of suspected arrhythmogenic right ventricular dysplasia (ARVD)'. UKRC, Birmingham, UK; 2–4 June 2008.
2. Organizing Secretary and presented 2 talks 'CME on essentials of cardiac imaging', All India Institute of Medical Sciences, New Delhi; 18 October 2008.
3. Presented a talk. Annual conference of 'the Indian Society of Vascular and Interventional Radiology', Mumbai; 31 October–3 November 2008.
4. Presented 3 papers and Chaired a Session 'Carotid Artery Disease', 5 December. 60th Annual Conference of 'Cardiological Society of India', Chennai; 3–7 December 2008.
5. Presented lecture, 62nd Annual conference of the 'Indian Radiological and Imaging Association', Patna, Bihar; 7–10 January 2009.
6. Presented 4 lectures 'Workshop on Chest and Cardiac Imaging'. Organized by the faculty of Medicine, Kuwait University, Kuwait; 25–26 January 2009.

Dr Priya Jagia

1. Presented 2 lectures. CME and Registry meet of the Indian Society of Vascular and Interventional Radiology, AIIMS, New Delhi; 26–27 April 2008.
2. Organizing Secretary and gave 2 talks. CME on Essentials of Cardiac Imaging, All India Institute of Medical Sciences, New Delhi; 18 October 2008.
3. Gave 2 talks. Annual conference of the Indian Society of Vascular and Interventional Radiology, Mumbai; 31 October–3 November 2008.
4. Gave 1 lecture. Annual Radiology CME held by Haryana branch of Indian Association of Radiology, Rohtak Medical College, Rohtak; 29 March 2009.

10.2 National Drug Dependence Treatment Centre

Professor and Chief

Rajat Ray

Professors

B.M. Tripathi

Raka Jain

Rakesh Lal

Meera Vaswani

Associate Professor

Anju Dhawan

Assistant Professors

N. Kaw

Sonali Jhanjee

Atul Ambekar

Senior Research Officer

H.K. Sharma(Retd. October 2008)

Scientists

Anita Chopra

Hem Sethi

Medical Social Service Officer

Brahm Prakash

Deepak Yadav

Seema Yadav

Ratnesh Kumar

Finance and Accounts Officer

S.P. Mahla

(Additional Charge)

Administrative Officer

Ajay Kumar(July 2008)

Assistant Store Officers

Kishan Chand
(till July 2008)

Rakesh Sharma
(July 2008 onwards)

Medical Record Office

N. Bisht

Senior Pharmacist

Parveen Kumar

Pharmacist

Ruby Mishra

Secretarial Staff

Anita Gulati

Mahinder Pal

Meera Kaul

Suman Bhatia

EDUCATION

Undergraduate

During their posting in the Department of Psychiatry, they are posted for a day in the Centre.

Postgraduate

Residents doing MD (Psychiatry) are posted for 6 months during their entire course duration.

PhD and Postgraduate teaching

- *Journal discussion—weekly
- *Seminar—weekly
- *Case Conference—weekly
- *Faculty/Staff presentation—weekly
- Seminars—weekly (NDDTC, GZB)
- CCR and CGR two in every semester

***Note: These are conjoint activity of the department of Psychiatry and the Centre.**

Continuing Medical Education

Conferences, workshops, seminars, symposium, training courses organised by the Centre

- Sensitization meeting, 'Drug abuse among adolescents' for teachers from Delhi, Vasant Valley School, New Delhi; 8 April 2008.
- Annual Day Symposium, 'Role of nursing and paramedical professionals in management of substance use disorder'. Funded by WHO (India), NDDTC, AIIMS; 15 April 2008
- Training programme, 'Substance use disorder' for psychiatrists from Punjab. Funded by Government of Punjab. NDDTC, AIIMS; 28 April–3 May 2008.
- National Workshop, 'Alcohol: Revisiting the Current Situation and Planning Ahead'. Funded by WHO (India), NDDTC, AIIMS; 14–15 October 2008.
- National Workshop, 'Development of curriculum on agonist Maintenance'. Funded by WHO (India), NDDTC, AIIMS; 11–12 November 2008.
- Training Course, 'Agonist Maintenance' for doctors, funded by WHO (India), NDDTC, AIIMS; 24–28 March 2008.
- Workshop, 'Development of intervention for drug abuse among street children' Funded by WHO (India), NDDTC, AIIMS; 21 January 2009.
- Training by trainers' programme on 'Substance abuse disorder' for doctors, Funded by WHO (India), RIMS, Imphal; 11–12 November 2008.

Faculty, Senior Residents and Research Officer and Scientists delivered lectures in the aforesaid training courses

Lectures delivered

Dr Atul Ambekar

- ‘HIV and harm reduction’, Indian Red Cross Society, New Delhi; 2 April 2008.
- ‘Concept of drug abuse and dependence’, Vasant Valley School, New Delhi; 8 April 2008.
- ‘Role of outreach and peer education in substance use treatment’, Annual Day Symposium, NDDTC, AIIMS; 15 April 2008.
- ‘Strategies for drug abuse prevention’, Sensitisation Workshop for Judiciary and law.
- ‘Enforcement’, National Institute of Criminology, Ministry of Home Affairs, Government of India; 20 April 2008.
- Delivered lectures on multiple topics, ‘Training of psychiatrists’, Government of Punjab; 28 April–3 May 2008.
- ‘Minimum standards of care and potential problem in implementation of OST’, as a part of National Programme, Sensitization Training Programme on OST in the Prison Setting, New Delhi; UNODC-ROSA, 9 July 2008.
- Delivered lectures on multiple topics, ‘Training Programme for Doctors, the District Hospital, Meerut; 28 November 2008.
- ‘Overview of substance abuse treatment in India’, Training Programme for Doctors, Afghanistan, NDDTC; 20 November 2008.
- Delivered lectures on multiple topics on ‘Substance Use Treatment’, Training Programme for Medical Doctors at RIMS, Imphal; 3–4 December 2008.
- Delivered lecture on ‘Drug Abuse and related Harms’, in the Training Programme Organized by Delhi State AIDS Control Society, 10–11 December 2008.
- Delivered lecture on ‘Dependence Treatment a Rights Based Approach’, Workshop Organized by the Lawyers Collective HIV AIDS Unit and IHRN, New Delhi; 19 December 2008.
- Delivered lecture on ‘Overview of Drug Abuse and its Treatment’, the Training Programme Organized by SPYM, New Delhi; 22–25 December 2008.

Dr Sonali Jhanjee

- Delivered a talk to participants of Training Programme for Psychiatrists, Government of Punjab; 28 April–3 May 2008.

Dr Anju Dhawan

- ‘Magnitude and overview of adolescent drug abuse’, Sensitization meeting for teachers and principals of schools in Chandigarh, Government of Punjab, Art of Living Foundation and UNODC, Chandigarh; 2 April 2008.

- ‘Magnitude of Adolescent Drug Abuse’ in Sensitization meeting for teachers from Delhi, Vasant Valley School, New Delhi; 8 April 2008.
- ‘Training on Assessment and Management Issues in Oral Substitution with Buprenorphine’, Workshop on Training of staff from NGOs on Oral Substitution with Buprenorphine, UNODC (ROSA) and NISD, New Delhi; 16 April 2008.
- ‘Drug abuse among adolescents: An overview’, Sensitization workshop on Drug Abuse among Adolescents, Government of Jammu and International Association for Human Values, Jammu; 26 April 2008.
- ‘Magnitude and issues related to prevention of drug abuse’, Sensitization workshop on drug abuse among adolescents for teachers and principals of schools in Hanumangarh, Rajasthan, Government of Rajasthan and Art of Living Foundation; 30 July 2008.
- ‘Opioids Long-term pharmacotherapy: Emphasis on OST’, Training programme for doctors, NDDTC, AIIMS, District hospital Meerut; 28 November 2008.
- ‘Opioids Long-term pharmacotherapy: Emphasis on Naltrexone’, Training programme for doctors, NDDTC, AIIMS, District hospital Meerut; 28 November 2008.

Dr Rakesh Lal

- ‘Team Approach’, National Workshop of Curriculum Development for Para medical Personnel, NDDTC, Ghaziabad; 5–6 August 2008.
- ‘Treatment Principles’, Sensitization Training Programme on OST in the Prison Setting, UNODC-ROSA, New Delhi; 9 July 2008.

Dr Raka Jain

- ‘Role of Laboratory Services’, Annual Day, NDDTC; 15 April 2008.
- ‘Screening of drug of abuse in body fluids’, , Training Programme for Psychiatrists, Government of Punjab; 28 April–3 May 2008.
- ‘Screening of body fluids’, to participants of National Workshop on ‘Development of curriculum on agonist Maintenance’. Funded by WHO (India), NDDTC, AIIMS; 11–12 November 2008.
- ‘Role of screening of body fluids’, to participants of training course ‘Agonist Maintenance’ for doctors. Funded by WHO (India), NDDTC, AIIMS; 24–28 March 2008.

Dr Rajat Ray

- ‘Oral substitution treatment and other treatment options’, National Workshop on OST, workshop sponsored by UNODC and Ministry of Social Justice and Empowerment; 24 June 2008.
- ‘Modalities of delivery OST’ as a part of National Programme, Sensitization Training Programme on OST in the Prison Setting, UNODC-ROSA, New Delhi; 9 July 2008.
- ‘Current Drug Abuse Scenario National and International perspectives’, National Workshop on Drug Abuse Prevention, LNJNI National Institute of Criminology and Forensic Sciences, Delhi; 10 September 2008.

- ‘Drug abuse-social consequences’, Regional Training of Trainers Programme and the NACEN Campus, Faridabad; 23 October and 6 November 2008.
- ‘Oral substitution-Buprenorphine/Methadone Development of Curriculum’; 11–12 November 2008.

Seema Yadav

- ‘Alcoholism in workplace, workshop, ‘Prevention of Drug Abuse and Alcoholism in the workplace’, Society for all round development, Delhi; June 2008.

National Conferences\Workshops\Symposium\Seminars\Training Programmes

Dr Atul Ambekar

- Participated in training of field staff involved in mapping of HRG in Jammu and Kashmir, SPYM and NACO, Government of India; 18 May 2008.
- ‘Drug abuse and its treatment’, Sensitisation Workshop for BPO employees, SARD, New Delhi; 4 June 2008.
- ‘Vulnerabilities and resource mapping’, Workshop on SAARC Regional forum on Drug Abuse Prevention; 12–13 June 2008.
- Participated a National Seminar on ‘Drug Use and Treatment Options,’ SHARAN and Ministry of Social Justice and Empowerment (MSJE), Government of India, 24 June 2008.
- Presented the ‘Summary of discussion’, National Workshop of Curriculum Development for Para-medical Personnel, NDDTC, Ghaziabad; 5–6 August 2008.
- Participated in the National Workshop on ‘Alcohol; Revisiting the Current Situation and Planning Ahead’, AIIMS; 14–15 October 2008.
- ‘Drug abuse and related harms’, Training Programme of Punjab State AIDS Control Society, PGIMER, Chandigarh; 3 November 2008.
- Participated in a Symposium on ‘Pharmacological Treatment of Substance Use Disorder in Community Settings’, 16th National Conference in the Indian Association for Social Psychiatry, AIIMS, New Delhi; 28–30 November 2008.

Dr Sonali Jhanjee

- ‘Experiences of OST in various parts of the World’, National Programme, Sensitization Training Programme on OST in the Prison Setting, UNODC-ROSA, New Delhi; 9 July 2008.
- ‘Safeguards in OST’, National Programme, Sensitization Training Programme on OST in the Prison Setting, UNODC-ROSA, New Delhi, 9 July 2008.
- ‘Epidemiologic correlates of injectable drug users in a community setting’. (Jhanjee S, Sethi H), XVI National Conference of the Indian Association for Social Psychiatry, AIIMS, New Delhi; 28–30 November 2008.

- ‘Tobacco use Pattern and severity of dependence in drug dependent patients’ (Jhanjee S, Balhara Y.P), Sethi H., 61st Annual National Conference of Indian Psychiatric Society, Agra; 8–11 January 2009.

Dr Anju Dhawan

- ‘Oral substitution with buprenorphine’, CME North Zone Indian Psychiatric Society, Jammu; 27 April 2008.
- ‘Agonist maintenance treatment’, Regional Workshop on Development of a National Treatment Policy for Drug and Alcohol Use, Chandigarh Medical College; 18 October 2008.
- ‘Global alcohol database’, National Workshop on Alcohol: Revisiting the Current Situation and Planning Ahead, NDDTC, AIIMS; 14–15 October 2008.
- ‘Review of existing training programmes’, National workshop on Development of curriculum on agonist Maintenance, NDDTC, AIIMS; 11–12 November 2008.
- ‘Community-based treatment of substance use disorder—increased treatment seeking’, National Conference of the Indian Association for Social Psychiatry, AIIMS, New Delhi; 28–30 November 2008.

Dr Rakesh Lal

- ‘Team approach’, National Workshop of Curriculum Development for Para Medical Personnel, NDDTC, Ghaziabad; 5–6 August 2008.
- Participated in the National Workshop on ‘Development of Treatment Policy’, Guwahati, Assam; 26 April 2008.
- Participated in ‘CME on ethical and legal issues in medical practice’, AIIMS; 30 April 2008 (invited delegate).
- ‘Treatment Policies in substance abuse’, 39th Annual Conference, Indian Psychiatry Society, West Zone branch, Goa; 12 October 2008.
- ‘Nurses awareness programme’, 2nd year students, Safdarjung Hospital; 5 November 2008.

Dr Raka Jain

- ‘Role of nitric oxide synthase inhibitors in nicotine dependent rats’, National Symposium on Emerging Trends in Nitric Oxide Research, Vallabhai Patel Chest Institute, University of Delhi; 12 January 2009.
- ‘Compliance and detection of illicit drug use among opiate dependence subjects maintained on sublingual buprenorphine substitution therapy’, 41st Annual Conference of the Indian Pharmacological Society, New Delhi; 28–30 November 2008.
- Regional Advocacy Workshop on ‘Tobacco control law and measures,’ Chandigarh; 16–17 January 2009.

Dr Rajat Ray

- National Workshop, 'Development of treatment policy', Guwahati, Assam; 26 April 2008.
- workshop, 'Right to Information for PIOs', ISTM, Government of India; 3–4 April 2008.
- 'Oral substitution treatment and other treatment options,' National Workshop on OST, workshop sponsored by UNODC and Ministry of Social Justice and Empowerment; 24 June 2008.
- 'Current drug abuse scenario national and international perspectives', National Workshop on Drug Abuse Prevention, LNJNI National Institute of Criminology and Forensic Sciences, Delhi; 10 September 2008.
- Penal Discussion in the National Workshop 'Alcohol: Revisiting the Current Situation and Planning Ahead'; 14–15 October 2008.
- National Consultations on 'Education for drug demand and harm reduction in India'; 10 November 2008.
- 'Oral substitution—buprenorphine/methadone development of curriculum', 11–12 November 2008.
- Participated in 'Social psychiatry and clinical practice', 16th National Conference of Indian Association for Social Psychiatry, New Delhi; 28–30 November 2008.
- Participated in Regional Advocacy Workshop on 'Tobacco control law and measures', Chandigarh; 16–17 January 2009.

Seema Yadav

- 'Alcoholism in workplace', in workshop entitled 'Prevention of drug abuse and alcoholism in the workplace', Society for All Round Development, Delhi; June 2008.
- Participated in workshop, 'Different approaches to respond to drug use and HIV Issue', UNESCO, New Delhi; October 2008.

International Conferences

Dr Anju Dawn

- 'Impact of buprenorphine maintenance treatment on high-risk injection and sexual behaviours of opiate users', International Harm Reduction Conference, Barcelona, Spain; 11–15 May 2008.

Dr Meera Vaswani

- 'Epigenetic and genetics of alcoholism', International Association of Neuroscience (IAN), Cochin; December 2008 (invited speaker).
- 'Alcohol and brain: perspectives from epigenetic, genetics and neurochemical studies', International conference of Translational Pharmacology, Delhi; December 2008 (invited speaker).

- ‘Role of alcohol metabolizing genes in alcohol induced pancreatitis’, HUGO’s Genome meeting, Hyderabad; September 2008 (**invited speaker**).

Dr Raka Jain

- ‘Role of urine testing in evaluation of illicit drug use and ensuring compliance in opiate dependence subjects maintained on sublingual buprenorphine substitution therapy’, (Jain R, Balhara YP) 10th Annual Meeting of the International Society of Addiction Medicine, Cape Town, South Africa; 16–20 November 2008.
- Participated in ‘14th World Conference on Tobacco or Health’, Mumbai; 8–12 March 2009.

Dr Rajat Ray

- ‘Drug consumption’ in the international conference of jurists on terrorism, rule of law and human rights’, New Delhi; 13–14 December 2008.
- ‘OST-concept, effectiveness and need for agonist maintenance in prevention of transmission of HIV among drug users’, SAARC Countries Workshop organized by UNODC-ROSA and UNAIDS; 22–24 July 2008.

RESEARCH

Funded projects

Ongoing

1. Post marketing surveillance of Addnok-N (combination of Buprenorphine and Naloxone). R. Ray, M. Vaswani. Funded by Rusan Pharma for 2007. Funds: Rs 10 lakh.
2. Oral substitution treatment with buprenorphine. A. Dhawan, R. Jain, A. Chopra, S. Jhanjee. Funded by United Nations Office on Drugs and Crime, Regional Office for South Asia, New Delhi for November 2005. Funds: Rs 13 lakh.
3. Database on drug abuse and HIV/AIDS. RS Tyagi, A. Dhawan. Funded by United Nations Office of Drugs and Crime, Regional Office for South Asia, New Delhi for five years (2004–2009). Funds: Rs 10 lakh.
4. Oral substitution treatment in tihar prisons. S. Jhanjee, R. Jain, H.Sethi. Funded by UNODC-ROSA for October 2008.
5. Assessment of increased treatment seeking at Faridkot. A. Dhawan, D. Yadav. Funded by Ministry of Health and Family Welfare for 6 months (2008–2009). Funds: Rs 2 lakh.
6. Effectiveness of yoga in patients of opiate dependence. A. Dhawan, R.Jain, D. Yadav. Funded by AYUSH, MOH and FW. Funds: Rs 8 lakh.
7. Molecular genetics of alcohol dependence: Contribution of polymorphisms in Dopaminergic and Serotonergic pathway genes. M. Vaswani, A. Ambekar. Funded by ICMR (2008–2010). Funds: Rs. 15 lakh.

Departmental projects

Completed

1. Effect of nitric oxide synthase inhibitor 7-NI on sensitization to the operant decrement produced by naloxone in morphine treated rats. R. Jain. 2006–2008.
2. Evaluation of illicit drug use in the opioid dependent subjects maintained on sublingual buprenorphine: Role of urine screening. R. Jain, YPS Balhara. 2007–2008.
3. Screening of tobacco use among psychiatric disorders: A pilot study based on urinalysis and self-report. Jain R, YPS Balhara, S Shamsunder, R Sagar. 2008.

Collaborative Research

Ongoing

1. Polymorphism of alcohol metabolizing enzymes in alcoholic pancreatitis. Anoop Sraya, Meera Vaswani, Suman Kapur. Funded by ICMR for 2007–2010. Funds: Rs 46 lakh. (with Gastroenterology)
2. Molecular genetics of alcohol dependence: Contribution of polymorphisms in dopaminergic and serotonergic pathway genes. M. Vaswani, A. Ambekar. Funded by ICMR for 2008–2010. Funds: Rs 15 lakh.

Completed

1. Association of *ADH1B* and *ALDH2* Gene Polymorphisms with Alcohol Dependence. S.Kapur, M. Vaswani. Funded by ICMR for 2004–2007. Funds: Rs 30 lakh.

PUBLICATIONS

Journal

1. Balhara YP, Jhanjee S, Majumdar P. Relation of opioid use and the use of tobacco products. *Indian J Psychiatr* 2008;**50** (Suppl):14.
2. Balhara YP, Jhanjee, Verma R. Factors associated with initiation, maintenance and decision to quit in tobacco. *Indian J Psychiatr* 2008;**50** (Suppl):p14.
3. De Shantanu, Jain R, Ray R, Dhawan A, Varghese ST. Assessment of differential doses of buprenorphine for long-term pharmacotherapy among opiate dependent subjects. *Indian J Physiol Pharmacol* 2008;**52**:53–63.
4. Jain R, Mukherjee K, Mohan, D. Effects of nitric oxide synthase inhibitors in attenuating the nicotine withdrawals in rats. *Pharmacol Biochem Behav* 2008;**88**:473–80.
5. Jain R, Mukherjee K, Balhara YPS. The role of NMDA Receptor antagonists in nicotine tolerance, sensitization and physical dependence: A preclinical review. *Yonsei Med J* 2008;**49**:175–88.
6. Jain R. Book Review entitled 'WHO expert committee on drug dependence, thirty-fourth report'. *Indian J Med Res* 2008;**127**:96–7.

7. Jain R, Balhara YPS. Neurobiology of cannabis addiction. *Indian J Physiol Pharmacol* 2008;**52**:217–32.
8. Kapoor M, Sharad S, Saraya A, Vaswani M, Kapur S. Single nucleotide polymorphism in genes encoding for various alcohol metabolizing enzymes: correlation with alcohol induced tissue specific damage. *Alcoholism Clin Experimental Res* 2008;**32**:148.
9. Ray R. National drug abuse situation in Vietnam—how accurate are the projections? *Addiction* 2008;**103**:544–5.
10. Ray R, Chugh G. Commentary— portrayal of alcohol consumption in films-does it influence? *Addiction* 2008;**103**:1933–8.
11. Singhal A, Tripathi BM, Pal HR, Jena R, Jain R. Effect of buprenorphine on psychomotor functions in patients on buprenorphine maintenance. *J Opioid Management* 2008;**4**:41–7.
12. Sreeja I, Gupta S, Lal R, Mamta BS. Comparison of burden between family caregivers of patients having schizophrenia and epilepsy. *Internet J Epidemiol* (ISSN:1540–2614).
13. Vaswani M, Kapur S. The importance of ALDH2 and ADH2 loci for alcohol dependence among Indian alcoholics. *Alcoholism Clin Experimental Res* 2008;**32**:280.
14. Vaswani M, Prasad P. Role of ADH1B and ALDH2 Gene polymorphisms with alcohol dependence. *Ann Neurosci* 2008;**15**:24–5.
15. Vaswani M, Prasad P, Kapur S. Association of ADH1B and ALDH2 gene polymorphisms with alcohol dependence. *Human Genomics* 2009;**3**:213–220.

Books\Chapters in Books\ Reports\Proceedings

1. Dhawan A (Technical Ed). *School Modules on life skills for Prevention of Drug Abuse*. In: project sponsored by UNODC- ROSA; 2008.
2. Ambekar A, Sinha Deb K. *Substance Use Disorder*. Chapter submitted to IGNOU New Delhi as a part of Course material for Post-graduate diploma in Family Counselling, 2008.
3. Ambekar A, Tripathi BM, Dzuovichu B. *Vulnerability and Impact of IDU among Spouses and Children of IDUs*. Draft Report submitted to the Society for Promotion of Youth and Masses. In: New Delhi and Planned International, India, 2008.
4. Ambekar A, Vaswani M. *Drug abuse–related HIV/AIDS epidemic in India: Situation and responses*. International series on Addiction: 2(1) USA, in Editor, In: Praeger-Greenwood Greenwood Publishing Group, Greenwood Publication; 235.
5. Sood M, Vaswani M. *Compulsive buying disorder*. In: Angela Browne-Miller (eds.).USA: The Praeger International Collection on Addictions, Praeger Publishers 2009;**4**:81–96.
6. Vaswani M, Ambekar A, Pattanayak R. *Historical Aspects of Alcohol Use in India: Role of Culture and Gender*. International series on Addiction 1(2) USA. In: Praeger-Greenwood (eD). Publishing Group. In: Greenwood Publication; 2009:19.

7. Yadav A, Dhawan A. Planning psycho-social intervention. In: Murthi P (ed). *Journal psychosocial interventions for persons with substance abuse: Theory and Practice*. Bangalore: National Institute of Mental health and Neurosciences 2008;**64**:4–14.

PATIENT CARE

General information

Total number of beds	50
General ward beds	50
Private ward beds	Nil
OPD attendance (NDDTC,	37,471
Trilokpuri Community	27,662
Sundar Nagri Mobile Clinic)	9,044
EHS patient attendance	1,484
Admission	867
Discharge	867

OPD and specialty clinics attendance	New cases	Old cases	Total
General OPD	2,874	32,004	34,878
Specialty Clinic			
Tobacco use cessation clinic	36	761	797
Adolescent clinic	34	27	61
Dual diagnosis clinic	44	207	251
EHS (NDDTC)	1,484	1,484	
Total	2,988	34,483	37,471

Trilokpuri Community Clinic	163	27,499	27,662
Sundar Nagri Mobile Clinic	35	9,009	9,044

Laboratory investigations for patient care

a) Total number of drugs of abuse screened in urine samples	18,665
Drug	Number
Morphine	2,354
Codeine	2,160
Buprenorphine	2,160
Dextropropoxyphene	2,160
Pentazocine	607
Naltrexone	115
Naloxone	438
Pheniramine (Avil)	1,611
Nitrazepam	2,217
Diazepam	2,217
Chlordiazepoxide	2,217
Canabinoids	109
Cotinine	300
b) Biochemical investigations	17,500
c) Hematological investigations	5,700
d) HIV screening	323

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Dr Sonali Jhanjee acted as a resource person for Sensitization Workshop on ‘Drug abuse among adolescents’, Vasant Valley School, New Delhi, 8 April 2008; Resource Person for Sensitization meeting on Oral Substitution Treatment (OST) in Prison, Hotel Ashoka, New Delhi, 9–10 July 2008; Resource Person for Training on Oral Substitution Treatment (OST) in the Prison setting on at Tihar prisons and community clinic, Trilokpuri, New Delhi, 15–16 September 2008; nominated by Ministry of Health and FW to participate in Regional Advocacy Workshop on Tobacco Control Law and measures, Chandigarh, 16–17 January 2009 hosted by PGIMER, Chandigarh in collaboration with MOH&FW, GoI with the broad objectives of preparation of state wise enforcement action plan for effective implementation of Tobacco control laws and sensitization of stakeholders; attended Massive Awareness campaign (Health Mela) against Tobacco, Female Foeticide, Alcohol, and Drugs and Junk Food, Amritsar, 21 February 2009, Ministry of Health and Family Welfare (MOH and FW).

Dr Anju Dhawan prepared a ‘Draft report on outcome of treatment in Government De-Addiction Centres’ for submission to the parliamentary committee. Also did technical editing of the school modules on life skills for prevention of drug abuse as part of project G86, developed by UNODC (ROSA); coordinated WHO Biennium activities on Substance Use Disorder; prepared project proposal

for Global Funds on Harm Minimization in Substance Use Disorder with UNODC (ROSA); prepared handout for Paramedical personnel on 'Need for Treatment'. published 'Treatment of inhalant abuse' in Newsletter-news and views, NDDTC, AIIMS.

Dr Meera Vaswani was awarded Travel grants from International Society of Biological research on Alcoholism (ISBRA) for delivering symposia lecture in Washington DC, USA; **invited to Chair Scientific Sessions in APA meeting in Washington DC;** **nominated for** Membership on the BOARD OF DIRECTORS in recognition of contributions to advancement of Science by virtue of the Authority of the University and Nomination of Scientific Council of Skibbereen University, United Kingdom (UK); participated in a Programme of National Importance on 'National Convention on Testing and Evaluation' from National Testing Service-India, a Central Scheme of Ministry of Human Resource Development (MHRD).

Dr Raka Jain was recipient of NIDA-ISAM travel award fellowship to attend X Annual Scientific Meeting of ISAM, Cape Town, South Africa, 28–30 November 2008; chaired the symposium on 'Substance use disorder' of XVI National Conference of the Indian Association for Social Psychiatry, AIIMS, New Delhi, 28–30 November 2008; chaired the Poster Session 5 of the International Conference of Translation Pharmacology and 41st Annual Conference of Indian Pharmacological Society, AIIMS, New Delhi, 18–20 December 2008; nominated by MoH and FW, GoI to participate in '14th World Conference on Tobacco or Health', Mumbai, 8–12 March 2009 and also honoured to chair the Session entitled 'Health Effects, Screening and Biomarkers'; nominated by Ministry of Health and FW to participate in Regional Advocacy Workshop on Tobacco Control Law and measures at Chandigarh, , hosted by PGIMER, Chandigarh in collaboration with Ministry Of Health and Family Welfare, GoI with the broad objectives of preparation of state wise enforcement action plan for effective implementation of Tobacco control laws and sensitization of stakeholders, 16–17 January 2009.

Dr Rakesh Lal was appointed as coordinator of 'National Treatment Policy for Drug and Alcohol Abuse' for various institutions, Central Institute of Psychiatry, Ranchi, 28 March 2008; Department of Psychiatry, Medical College, Guwahati; 25–26 April 2008; Department of Psychiatry, KEM hospital, Mumbai, 30 July 2008; Department of Psychiatry, Government Medical College, Chandigarh, 19 October 2008; appointed as expert for selection of Professor and HoD, Psychiatry, BPKIHS, Dhahran; 23 October 2008; appointed as MD (Psychiatry) examiner, AIIMS, 10–11 December 2008 and PG examiner for Central Institute of Psychiatry, Ranchi, 28–29 April 2008; Organizing committee member IASP, AIIMS, New Delhi, 28–30 November 2008.

Dr Rajat Ray was appointed as member Expert Advisory Panel to Punjab State Planning Board; 21 May 2008; Member, Expert Advisory Body for the 61st session of WHO Regional Committee, South East Asia; July 2008; Became a member of the Expert Committee for selection of SRA-Scientist-II, CSIR; July 2008; Became a member of the Committee constituted by the Ministry of Statistics and Programme Implementation, GoI to carry out a National Survey on Drug Abuse, July 2008; participated and chaired a Theme Symposium on 'Social Psychiatry and Clinical Practice', 16th National Conference of Indian Association for Social Psychiatry, New Delhi, 28–30 November 2008.

The centre has initiated and carried out the various activities as part of WHO Biennium Activities (2007–2008) as part of National Drug Abuse Control Programme (Rajat Ray, BM Tripathi, Rakesh

Lal, Anju Dhawan, Atul Ambekar, Deepak Yadav). Funded by WHO (India) for 2 years (2008–2009). Funds: Rs 27.5 lakh.

- Development of a Manual; Minimum Standards of Care for Drug Users. Funds: Rs 1.3 lakh.
- Symposium on Alcohol—Revisiting the current situation and planning ahead. Funds: Rs 3.7 lakh.
- Training Programme on ‘Agonist Maintenance for Substance Use Disorder’ at AIIMS and RIMS. Funds: Rs 4.12 lakh.
- Management of Substance Use Disorder in Primary Care Setting- A Demonstration Project. Funds: Rs 5 lakh.
- Assessment of Substance Abuse among Out of School Adolescents. Funds: Rs 8 lacs.
- Drug Abuse Monitoring System-District Based Activity.
- Training of Trainers on ‘Substance Use Disorder’ at RIMS and Srinagar Medical College. Funds: Rs 2.01 lakh.

The faculty of the centre participated in Training of Medical Doctors (Assam Government) on Substance use and HIV, NDDTC, AIIMS and the District Administration, Moregaon, Assam; 22–25 April 2008. (Dr A. Ambekar, Dr R. Lal)

1. The faculty of the centre participated in the Workshop on the launch of the project, ‘Managing Alcohol and Drug Dependence in Primary Care Setting,’ Meerut; 2 August 2008. Dr R. Ray, Dr R. Lal, Dr A. Dhawan.
2. Consultation on Public private partnership on Methadone Substitution Project, GTZ Office; 25 November 2008.
3. The faculty visited several sites (visits to De-addiction centres in various states; Manipur, Mizoram and Nagaland) to assess outcome of patients with Drug Dependent Disorder following their treatment. A report to be forwarded to the Parliamentary Committee. Dr A. Ambekar.
4. The centre organized a Training Programme for Psychiatrists from the State of Punjab; 28 April–3 May 2008.
5. Study Tour, visit by delegation from Maldives on OST, project supported by UNODC-ROSA; 15 July 2008.
6. Study Tour, visit by delegation from Pakistan on OST, project supported by UNODC-ROSA; 22 July 2008.
7. Three weeks project training in ‘Drug Abuse Testing’ was imparted to one 2nd year student of B-Tech Biotechnology.
8. The centre (Ed. Dr B.M. Tripathi, Dr A. Ambekar) published two (Half-yearly) newsletters on ‘Drug abuse: *News and views*’, ‘Alcohol use and harm reduction’, December 2008 and ‘Street children and substance use’, March 2009.

10.3 Centre for Dental Education & Research

Chief

Naseem Shah

Professor

O.P. Kharbanda

Additional Professor

Ritu Duggal

Associate Professor

Ajoy Roychoudhury

Veena Jain

Assistant Professor

Ongkila Bhutia

Dr. Vijay Prakash Mathur

Dr. Ajay Logani

EDUCATION

Undergraduate

The centre conducted the teaching programme of MB,BS undergraduate students during their clinical posting.

Postgraduate

At present the centre is conducting postgraduate programme in Orthodontics, Conservative Dentistry and Endodontics, Prosthodontics and Oral and Maxillofacial Surgery.

Short-term training

The centre provided short-term (6 months) training to 19 graduate and postgraduate candidates from various Dental Institutions of the county.

Four Dental Surgeons from North Korea got training in the Centre as WHO fellows for 3 months.

Continuing Medical Education

Conferences, seminars, workshops

- 'Comprehensive oral rehabilitation strategies – A Perio-Endo-Prostho (PEP) talk!' in collaboration with Sri Govind Tricentenary Dental College and University of Detroit Mercy School of Dentistry Michigan, USA, 22 March 2009
- Update in Orthodontics 'Six Thinking Hats Course' ,Department of Orthodontics in collaboration with Orthodontic Study Group of Delhi, 14–15 September 2008.
- 'Full Mouth Rehabilitation: Enigma Simplified', 11th national Postgraduate Student Convention of Indian Prosthodontic Society, New Delhi , 26 February –1 March 2009.

Lectures delivered

Professor Naseem Shah

- ‘Regenerative endodontics: Inducing apexogenesis/apexification in non-vital, infected immature teeth’, Stem Cell Symposium, Department of Paediatric Surgery, AIIMS; August 2008.
- ‘Managing infected, non-vital teeth by revascularization’, Group Endodontics, New Delhi; August 2008.
- ‘Role of Dental Professionals in Tobacco Cessation’, Regional Advocacy Workshop on ‘Tobacco Control Laws and Measures’, in collaboration with Ministry of Health and Family Welfare, Government of India; PGI, Chandigarh, 16–17 January 2009.
- ‘Comprehensive management of the traumatized tooth – an endodontic perspective’, Symposium on comprehensive oral rehabilitation strategies, CDER, AIIMS; 22 March 2009.

Professor Kharbanda

- ‘Cleft Maxilla’ during mid year convention, Indian Orthodontic Society, Bangalore; 2 August 2008.
- ‘Mid Face Deficiency and Cleft Deformities’, organized by Kalka Dental College in collaboration with Delhi and NCR Chapter of Association of Oral and Maxillofacial Surgeon of India and Orthodontic Study Group of Delhi, Kalka Dental College, Meerut 30 September 2008.
- ‘Applied Orthodontics’, Subharti Dental College, Meerut; 12–13 October 2008.
- ‘Smile characteristics of orthodontically treated patients: A preliminary study’, 43rd Indian Orthodontic Conference, Mumbai; 19 December 2008.
- ‘Current perspectives of orthodontic for general dental practitioner’, 62nd Indian Dental Association Conference, Nagpur; 12 February 2009.
- Symposium, ‘maxillary expansion in Cleft maxilla’, INDOCLEFTCON 2009, Pondicherry; 14–15 February 2009.
- ‘Anchorage control with microplates: When is it justified? Can we do without it?’, 13th Postgraduate Students’ Convention, Indian Orthodontic Society, Davangere, Karnataka; 1 March 2009.

Dr Ajoy Roychoudhury

- ‘Mandibular lateral body and angular fractures’, AO principles course on Craniomaxillofacial, New Delhi; May 2008.
- ‘Mandibular fractures management’, during mid-term conference of Association of Oral and Maxillofacial Surgeons of India, Ahmedabad; June 2008.
- ‘Principles of treatment of mandibular fractures’, Annual conference of Association of Oral and Maxillofacial Surgeons of India, Lucknow; December 2008.

Dr Vijay Mathur

- ‘Dentistry against tobacco: Awareness, education and implementation’, 14th World Conference on Tobacco, Mumbai, 8 March 2009.

Dr Ajay Logani

- ‘Effect of varying positions of the lip clip on the accuracy of two ratio based apex locators’, National Indian Endodontic Society Conference, Chandigarh; 21 November 2008.
- ‘Comprehensive management of the traumatized tooth—an endodontic perspective’, symposium on comprehensive oral rehabilitation strategies, CDER, AIIMS; 22 March 2009.

International Conferences

Paper presented

Professor Naseem Shah

- ‘Teaching, learning and assessment: Researching models of practice’, Special symposium on geriatric oral health educational issues, 82nd General Assembly of the International Association of Dental Research, Toronto, Canada; 2–5 July 2008.

Dr Ritu Duggal

- ‘Detection of apoptosis in human periodontal ligament during orthodontic tooth movement’, Federation Dental International Annual World Dental Congress, Stockholm, Sweden; 24 September 2008.

Dr Ajoy Roychoudhury

- ‘Overview of Oral and Maxillofacial Surgery at AIIMS, New Delhi’, Advanced Craniomaxillofacial Forum: Global Board Members meeting, Paris; November 2008.
- ‘Biomechanics, classification and diagnosis of midface fractures and condylar fractures’, AO principles course on craniomaxillofacial (CMF), Davos, Switzerland; December 2008.

Dr Vijay Mathur

- ‘Oral health primary preventive module for prevention of dental caries in schoolchildren’, Federation Dental International Annual World Congress, Stockholm, Sweden; 24 September 2008.

Dr Ajay Logani

- ‘Contrary electrode positions and its effect on the accuracy of apex’, Federation Dental International Annual World Dental Congress, Stockholm, Sweden; 24 September 2008.
- ‘Labial access opening in mandibular anterior teeth—rule rather than exception’, Asia Pacific Dental Congress, Bangkok, Thailand; 6 May 2008.

Paper presented by residents under faculty's guidance

Sarita B.

- 'Traumatic injuries to anterior teeth', Case series, 9th National Federation Operative Dentistry of India and Indian Endodontic Society Postgraduate Students' Convention, Goa; May 2008.

Singh A.

- 'Ex-vivo study evaluating and comparing the retention of chair-side fabricated fiber reinforced composite (FRC) posts to that of prefabricated metal and FRC posts before and after cyclic loading', 9th National Federation Operative Dentistry of India and Indian Endodontic Society Postgraduate Students' Convention, Goa; May 2008.

Gupta A.

- 'Restorative and endodontic consideration in geriatric patients', 9th National Federation Operative Dentistry of India and Indian Endodontic Society Postgraduate Students' Convention, Goa; May 2008.
- '*Vitro* evaluation of the effect of temperature on micro hardness of mineral trioxide aggregate', Indian Endodontic Society Conference, Chandigarh; 21 November 2008.

Singhla M.

- 'Effect of chlorhexidine on microleakage using self etch primer', 9th National Federation Operative Dentistry of India and Indian Endodontic Society Postgraduate Students' Convention, Goa; May 2008.
- 'Hidden treasures in apical papilla', Indian Endodontic Society conference, Chandigarh; 21 November 2008.

Sinha N.

- 'Importance of spiral computed tomography in accurate determination of canal morphologies – two case reports', Indian Endodontic Society Conference, Chandigarh; 21 November 2008.

Dharmani U.

- 'Controversies in Endodontics', Indian Endodontic Society conference, Chandigarh; 21 November 2008.

Vilas Samrit

- Was awarded **Best Poster** titled 'Does bone density affect the success of temporary anchorage device?', 13th Indian Orthodontic Society Postgraduate Students' Convention, Davangere, Karnataka; 1 March 2009.

Poonam Chaudhary

- Poster presented – Research category, 'Evaluation of changes in the dimensions of masseter muscle during various stages of Twin Block Appliance Therapy – MRI Study', 13th Indian Orthodontic Society Postgraduate Students' Convention, Davangere, Karnataka; 1 March 2009.

Gupta Anand

- ‘Aneurysmal bone cyst of face–spectrum and its variants’, mid-term conference of Association of Oral and Maxillofacial Surgeons of India, Ahmedabad; June 2008.

Sikka S.

- ‘Custom Ocular Prosthetics–The overlooked skill in Prosthodontics’, 11th National Convention of Prosthodontics Postgraduate Students, New Delhi; 26 February 2009.

Nanda A.

- ‘Implant supported auricular prosthesis’, 11th National Convention of Prosthodontics Postgraduate Students, New Delhi; 26 February 2009.
- ‘Bone anchored auricular prosthesis – A case report’, 36th Indian Prosthodontic Society Conference, Bangalore, Karnataka; 4 November 2008.

Singhal N

- ‘Mandibular removable guide flange device for corrective mandibular movement’, 11th National convention of Prosthodontics Postgraduate Students, New Delhi; 26 February 2009.

Arora N.

- ‘Clinical considerations for the prosthodontic management of velopharyngeal (VP) dysfunction patients’, 11th National convention of Prosthodontics Postgraduate Students, New Delhi; 26 February 2009.
- ‘Speech aid prosthesis for the management of velopharyngeal dysfunction–case report’, 36th Indian Prosthodontic Society Conference, Bangalore, Karnataka; 4 November 2008.

Kumar P.

- ‘Hybrid denture abutments–Case reports’, 11th National convention of Prosthodontics Postgraduate Students, New Delhi; 26 February 2009.

Kumar G.

- ‘Management of oligodontia patients with ectodermal dysplasia’, 11th National convention of Prosthodontics Postgraduate Students, New Delhi; 26 February 2009.

Purthi G.

- ‘Different methods to retain an orbital prosthesis a review’, 11th National convention of Prosthodontics Postgraduate Students, New Delhi; 26 February 2009.
- ‘Orbital prosthesis plugged into bulb of maxillary obturator – a case report’, 36th Indian Prosthodontic Society Conference, Bangalore, Karnataka; 4 November 2008.

RESEARCH

Funded Projects

Completed

1. 'Dentofacial development of cleft lip and palate patients', in collaboration with the University of Manchester, UK, O.P. Kharbanda, March 2008.
2. Detection of apoptosis in human periodontal ligament during orthodontic tooth movement. Ritu Duggal. Funded by ICMR (2008). Funds: Rs. 2.6 lakh.
3. A randomized, double-blind placebo-controlled study of efficacy of Lactobacillus CD2 lozenges in patients with chronic periodontitis. Ajoy Roychoudhury. Funded by CD pharma India (2006–2008). Funds: Rs 98,891.

Ongoing

1. Agreement for performance of work entitled study 'To frame policy guidelines for Oral Health Promotion and Interventions for Handicapped Population'. Naseem Shah. Funded by WHO-GoI (2008–2009). Funds: Rs 2 Lakh.
2. A new endodontic treatment protocol of inducing natural apical seal (Bio-seal) and healing for pulp and periapically involved teeth. Naseem Shah. Self Study (December 2008).
3. Development of visual analog scale for smile characteristics following orthodontic treatment and its correlation with the treatment outcome. O.P. Kharbanda. Funded by ICMR (2007–2008). Funds: Rs 424,875.
4. Assessment of safety profile for dental procedures in India. Rita Duggal. Funded by Ministry of Health and Family Welfare (2008–2010). Funds: Rs 65.23 lakh.
5. To develop an indigenous bite force measuring appliance and to test in patients with different clinical conditions. V Jain. Funded by Department of Biotechnology (2008–2010). Funds: Rs 7.82 lakh.
6. Oral health status of drug-addicts attending a de-addiction centre. Naseem Shah. Self Study (2008).
7. Evaluation of atraumatic restorative treatment (ART) for dental caries in geriatric patients in a resettlement colony of Delhi. A Logani. Funded by AIIMS (Intramural, 2008–2010). Funds: Rs 3 lakh.

Departmental Projects

1. Effect of different design preparation on flexural and fracture strength of fiber reinforced composite fixed partial dentures: an *in-vitro* study.
2. Effectiveness of home bleaching agents on the color change and surface characteristics of direct composite veneering materials and discoloration. SEM Study.

3. Preliminary *ex-vivo* and an animal model evaluation of ocimum sanctum (holy basil) essential oil extract for its proposed use as an intracanal medicament.
4. A new endodontic treatment protocol of inducing natural apical seal (Bio-seal) and healing for pulp and periapically involved teeth.
5. 3D finite element study of stress distribution and displacement of various craniofacial structures following application of transverse force in cleft lip and palate patients.
6. A clinical and cephalometric study of temporary anchorage device (TAD) supported anchorage in the management of maximum discrepancy extraction cases.
7. A comparative evaluation of ultra sonographic dimension of masseter muscle with electromyographic activity prior and subsequent to twin blocks therapy.
8. Levels of Interleukin-1 α in gingival crevicular fluid after active orthodontic treatment.
9. Temporomandibular joint adaptations following Functional appliance therapy: A clinical and MRI study.
10. Equivalence randomized controlled trial of bioresorbable plates and titanium plates in the osteosynthesis of mandibular fracture: A pilot study.
11. Lamotrigine vs pregablin in the management of trigeminal neuralgia refractory to carbamazepine: An open label, randomized active-comparator controlled crossover trial.
12. Effect of distraction osteogenesis on blood oxygen saturation level in retrognathic patients.
13. Comparison of single tube vs two tube technique of submental intubation.
14. To evaluate the facial nerve morbidity for the management of condylar neck and subcondylar fractures through retromandibular transparotid approach: A longitudinal study.
15. An evaluation of restoration of lost vertical on EMG activity of masseter and temporalis muscle in patients with generalized attrition of teeth.
16. An *in-vitro* pilot study to evaluate the effect of incorporation of sapphire (ceramic) whiskers and silver fillers on the thermal and mechanical properties of denture base resins.
17. An *in-vitro* comparative evaluation of marginal adaptation and fracture resistance of fiber-reinforced and all – ceramic crowns.
18. Speech analysis in maxillectomy patients with full bulb and reduce bulb height of hollow bulb obturator.

Collaborative Projects

1. Ocular surface reconstruction with alternative autografts of non-ocular surface origin. Funded by DST (with RP Centre).

PUBLICATION

Journals

1. Shah N, Logani A, Bhaskar U, Aggarwal V. Efficacy of revascularization to induce apexification/apexogenesis in infected, non-vital, immature teeth – A pilot clinical Study. *J Endod* 2008; **34**:919–25.
2. Aggarwal V, Logani A, Shah N. Effect of cyclic loading on marginal adaptation and bond strength in direct vs indirect class II restorations. *J Operative Dentistry* 2008;**33**:587–92.
3. Aggarwal V, Logani A, Shah N. The evaluation of computed tomography scans and ultrasounds in the differential diagnosis of periapical lesions. *J Endod* 2008;**34**:1312–5.
4. Aggarwal V, Singla M, Logani A, Shah N. Endodontic management of a maxillary first molar with two palatal canals with the aid of spiral computed tomography: A case report. *J Endod* 2008;**34**:1312–5.
5. Logani A, Shah N. Apically extruded debris with three contemporary Ni-Ti instrumentation systems: An *ex-vivo* comparative study. *Indian J Dent Res* 2008;**19**:182–5.
6. Kumar P, Kharbanda OP. Treatment effects of mini-implants for en-masse retraction of anterior teeth (Letter to editor). *Am J Orthod Dentofacial Orthop* 2009;**135**:5–6.
7. Wadhawan N, Kumar S, Kharbanda OP, Duggal R, Sharma R. Temporomandibular joint adaptations following two-phase therapy: An MRI study. *Orthod Craniofac Res* 2008; **11**:235–50.
8. Bhutia O, Roychoudhury A. Hemangiopericytoma of mandible. *Indian J Oral Maxillo Facial Pathology* 2008;**12**:26–8.
9. Mathur VP, Sharma A. Impact factor and other standardized measures of journal citation: A perspective. *Indian J Dent Res* 2009;**20**:81–5.

Chapter in Books

Kharbanda OP. Current perspectives of orthodontics vis-a-vis Orthodontics in India. *The changing face of Indian Dentistry in the New Millenium*. 1st Indian Ed. A Delta Publication; 2009;33–39.

AWARDS AND HONOURS

Professor Kharbanda took over as President of the Indian Orthodontic Society on 21 December 2008; President of the Indian Society for Cleft Lip Palate and Craniofacial Anomalies in February 2009; Member, Board of Studies in Banaras Hindu University, Varanasi and Aligarh Muslim University; Member, International Editorial Board, *American Journal of Orthodontics and Dentofacial Orthopedics*, *British Journal of Orthodontics* and *Australian Orthodontic Journal*; Co-editor, *Journal of Clinical Paediatric Dentistry*, and member, board of *Indian Orthodontic Society Journal* and *Journal of Pierre Fauchard Academy*.

Vijay Mathur received travel grant from AIIMS for attending Federation Dental International (FDI) World Dental Congress ,Stockholm, Sweden.

SIGNIFICANT EVENTS

Professor Naseem Shah was a member of UGC Experts Committee for assessing XI Plan (2007–12) requirement and Review of X Plan; As a UGC Expert she visited Dr Ram Manohar Lohia Avadh University, Faizabad (UP) 24–25 October 2008 and University College of Medical Sciences (UCMS) 9–10 August 2008; Member, Board of Postgraduate Studies of Pt B.D. Sharma University of Health Sciences, Rohtak; member, Advisory Board of MGM University of Health Sciences, Navi Mumbai; nominated by the Ministry of Health and Family Welfare, (Government of India) to participate in the 14th World Congress on ‘Tobacco or Health’ Mumbai 8–12 March 2009; chaired a scientific session, 23rd Federation Operative Dentistry of India and 16th Indian Endodontic Society Conference, Chandigarh, 21–23 November 2008; Guest of Honour, 20th Annual Dental Conference Faridabad, 7 December 2008, Indian Dental Association, Faridabad Branch.

Professor Kharbanda has been invited as a Visiting Professor at the Department of Orthodontics, Dental School, University of Connecticut, Connecticut USA. He was invited by ICMR as subject expert to review the research projects in the field of Oral Health and Advisory Committee to the research grant to the postgraduates. He served as an expert in the field of Biomedical Engineering in the Department of Biotechnology. He also served as an expert to the Selection Committee for the posts of faculty to Punjab University, Chandigarh and Aligarh Muslim University, Aligarh, University of Delhi, Delhi, Maulana Azad Medical College, New Delhi and HRD Ministry for the selection of Commonwealth Fellowship. He was invited by the DD News to participate in ‘Oral Hygiene and Dental Health’ on 25 January 2009 and again invited to participate in ‘Total Health’ at DD News on 8 February 2009. He advised Dental Council of India on framing Screening Test Regulation, 2008 u/s 20 of the Dentists Act, 1948 for the purpose of recognition of foreign degrees.

Dr Ritu Duggal was invited as an expert in a meeting of Global Child Dental Health Task Force, New Delhi, 11 April 2008; appointed by the Dental Council Inspector for approval of M.D.S courses at various Dental colleges in India.

Dr Ajoy roy choudhury hosted a Phone- in- programme on dental health in Lok Sabha TV.

Dr Vijay P. Mathur was appointed by the Ministry of Health and Family Welfare, Government of India to conduct inspection of the facilities available as per BDS/MDS course regulations 2007 and for starting BDS/MDS courses in various Dental Colleges. He was a member in a meeting of Global Child Dental Health Task Force – India Section held at Maulana Azad Institute of Dental Sciences, New Delhi, 11 April 2008. He was a panelist in a day-long forum ‘addressing the Global Epidemic of Childhood Caries’ at Stockholm, Sweden on 24 September 2008. He was a rapporteur for Pedodontics Update 2008: Continuing Dental Education Programme, held at ITS Dental College and Hospital, Murad Nagar, 9 August 2008; chaired a free paper session at 62nd Indian Dental Conference, Nagpur, January 2009; invited as a panelist in Commonwealth Asia Symposium, Migration of Health Workers, Faridabad, 17 November 2008.

VISITING SCIENTISTS

Dr Ravi Nanda, Head Craniofacial Sciences, Dental School University of Connecticut CT USA, 14–15 September 2008.

Professor Leon Dogon, Professor of Restorative Dentistry and Director of Dental Health Education, Harvard School of Dental Medicine visited the Centre, 27 March 2009.

10.4 Dr. B.R. Ambedkar Institute Rotary Cancer Hospital

Professor and Chief

G.K. Rath(Radiation Oncology)

Professors

P.K. Julka
(Radiation Oncology)
Subhash Chander
(Radiation Oncology)

N.K. Shukla
(Surgical Oncology)
Rajive Kumar
(Laboratory Oncology)
Lalit Kumar
(Medical Oncology)

Vinod Raina
(Medical Oncology)
B.K. Mohanti
(Medical Oncology)

Additional Professor

Sidhartha Satpathy
(Hospital Administration)

Associate Professors

S.V.S. Deo
(Surgical Oncology)
Atul Sharma
(Medical Oncology)

Sanjay Thulkar
(Radiodiagnosis)

Sushma Bhatnagar
(Anaesthesiology)
Sameer Bakhshi
(Medical Oncology)

Assistant Professors

Pratik Kumar
(Medical Physics)
D. N. Sharma
(Radiation Oncology)

Seema Mishra
(Anaesthesiology)
Sushmita Pathy
(Radiation Oncology)

Suman Bhaskar
(Radiation Oncology)
Ritu Gupta
(Laboratory Oncology)

EDUCATION

Anaesthesiology

The following activities are conducted:

- IRCH Seminar - Every Monday and Thursday at 8.15 a.m.
- Unit Seminar - Every Monday at 2.30 p.m.
- Unit Journal Club - Every Saturday at 10:00 a.m.
- Unit Radio Conference - Every Saturday at 9:00 a.m.

Laboratory Oncology

- Department provides training to students of MD Pathology and DM Medical Oncology

Medical Oncology

Undergraduate

- The department participated in the undergraduate teaching programme

Postgraduate

DM Programme

- Medical Oncology is running a DM programme under which there are 13 regular students

PhD training

- Five students underwent PhD training
- Others
- Dr Kunjahari Medhi, Senior Research Associate (Pool Officer), CSIR
- 10 Research Officers on various projects

Short-term and Long-term training

- Dr Kapil Garg, Assistant Professor, SMS Medical College, Jaipur, underwent two weeks training in Paediatric Medical Oncology; February 1–15 2009

Medical Physics Unit

Undergraduate and Postgraduate training

- The Medical Physics unit has actively participated in imparting education in the field of radiation protection, radiation physics and quality in radiological imaging to the students doing MD Radiology, MBBS, BSc (Hons) Nursing, BSc (Hons) Radiography. In addition, the unit has 2 PhD students undergoing training

Radiation Oncology

Under Graduate and Post graduate training

- The department is involved in undergraduate, postgraduate, BSc Nursing and PhD teaching programmes.

Short-term training

- Dr Ashutosh Mukherji, Senior Resident, Department of Radiotherapy, Maulana Azad Medical College and Lok Nayak Hospital
- Dr Sunil Kumar, Dr Shagun Misra, SGPGI, Lucknow
- Dr Anita Malik, Resident, Department of Radiotherapy, SG Government Cancer Hospital, MRH Hospital, Indore.
- Dr Rakesh Mahawar, Resident, Department of Radiotherapy, Government Cancer Hospital, MGM Medical College, Indore.
- Dr Vikash Kumar, Senior Resident, Department of Radiotherapy, Lok Nayak Hospital, New Delhi.
- Monica and Lokesh Yadav, two medical undergraduate students of AIIMS received observership exposure to clinical audit in radiotherapy.

Surgical Oncology

Undergraduate

The faculty were involved in undergraduate teaching by giving didactic lectures and participating in and moderating seminars on topics in oncology

Postgraduate

The faculty were involved in teaching and training of 12 surgical oncology senior residents, DM medical oncology residents, MD radiotherapy junior residents by giving didactic lectures, moderating seminars, journal clubs, etc. and clinical teaching during ward rounds and in special cancer clinics of IRCH. Dr Shukla acted as Co-guide and Co-supervisors in DM medical oncology thesis, MD radiation oncology thesis and PhD students from different Department of IRCH and AIIMS.

Paraclinical

The faculty were involved in the teaching of the BSc nursing students

Short-term training

Dr N. Panda, Surgical specialist from Government Medical College, Kolkatta under went short-term training in Surgical Oncology for a period of three month; 1 December 2008 – 28 February 2009.

Delhi Cancer Registry

The registry has an active teaching and training programme being imparted to the Medical Social Service Officers (MSSO's) and other staff of the cancer Registry by Dr B.B. Tyagi and Mr N. Manoharan regarding the working of cancer registry, technical guidance in interviewing the cancer patients from various departments viz. radiotherapy, pathology and medical records of all collaborating hospitals.

Field staff were also trained in cancer registration methodology, diagnostic and treatment methods available for cancer, cancer epidemiology and coding of cancer patients data as per International Classification of Diseases for Oncology (ICD.O) third edition and International Classification of Diseases (ICD.10) tenth revision.

Continuing Medical Education (CME)

Anesthesiology

- Organized 16th International Conference on Indian association of Palliative Care; 13–15 February 2009.
- Organized 8th Foundation Course on 'Palliative care', for Medical Practitioners and Nursing Staff treating cancer patients in and around Delhi; 15–16 January 2009.
- Nodal centre for IAPC certificate course in Palliative Care, Dr B.R.A. IRCH.

Medical Physics

The faculty and staff of Medical Physics Unit delivered guest lectures for imaging personnel in workshops and CME organized for radiologists, radiographers and Physicists.

Radiodiagnosis

- ‘Imaging in malignant lesions of stomach and small intestine’, 3rd AIIMS-MAMC-PGI Imaging course on Gastrointestinal and hepatobiliary Imaging, AIIMS, New Delhi; 25–26 October 2008.
- ‘Recent advances in image guided breast biopsy’, CME, ‘Advancements in breast biopsy’, Sir Ganga Ram hospital, New Delhi; 5 March 2009.
- ‘Ovarian Cancer: Radiologists view’, Symposium on Ovarian Cancer, AIIMS, New Delhi; 26–27 March 2009.

Radiotherapy

- Department organized following CME programmes:
- Department of Radiation Oncology, 1st SAARC and XI National conference of Association of Radiation Therapy Technologists of India (AARTICON), AIIMS, New Delhi, India; 5–7 October 2007.

Surgical Oncology

Department took part in following CME programmes

Dr N.K. Shukla

- Attended and chaired a session ,Indian Breast Cancer Initiative Congress 08, Artemis Health Institute, Gurgaon; 12 April 2008.
- Attended ATLAS collaborators meetion, Clinical Trial Service Unit, University of Oxford, UK; 26–27 April.
- participated in the XXV National Continuing Medical Education Programme, Maulana Azad Medical College, New Delhi; Participated in a Panel Discussion on Locally Advanced Brest Cancer; 22 September 2008.
- participated in Symposium on Ovarian Cancer, and chaired a session on ‘Early Stage Epithelial Ovarian Cancer’, New Delhi; 27–28 March 2009.

National and International Conference

Anaesthesiology

Dr Sushma Bhatnagar

- ‘Interventional pain management’, ISACON, Jodhpur; 26–29 December 2008.
- ‘Care of elderly’, IAPC certificate course, Jaipur; 6–7 December 2008.
- ‘Cancer pain management’, IAPC certificate course, Dr B.R.A. IRCH, AIIMS; 13 November 2008

Dr Seema Mishra

- ‘Management of oncological emergencies’, AIIMS in IAPC certificate course, DrBRA, IRCH; 13 November 2008.

- ‘Interventional pain management: Need an hour’, Cadaveric Workshop, 16th International Conference on Indian Association of Palliative Care, AIIMS, Unit of Anesthesiologist, Dr B.R.A. IRCH, AIIMS; 12 February 2009.
- ‘Experience of paediatric cancer pain management’, IRCH, AIIMS 16th International Conference on Indian association of Palliative Care, AIIMS; 13–15 February 2009, Unit of Anaesthesiologist, Dr BRA, IRCH, AIIMS.
- Attended National Workshop of Faculty Group, Calicut; 31 October–1 November 2008.
- ‘Interventional palliation: Pharmacological, non-pharmacological and technical palliative intervention’, Workshop on ‘Clinical issues and trends in oncology nursing’, AIIMS, New Delhi; 23 November 2008.

Dr Sushma Bhtanagar

- ‘Pain management in lung cancer’, RGCON-2009, Hyatt, New Delhi; 27–29 March 2009.
- ‘Total freedom from cancer pain at tertiary care centre in India: A retrospective analysis of 3238 patients’, 27th annual Scientific Meeting of the American Pain society, Tampa, FL, USA; 8–10 May 2008.
- ‘Efficacy and safety of a mixture of ketamine, midazolam and atropine for procedural sedation in paediatric oncology: A randomised study of oral versus intramuscular route’, 23rd Annual Meeting, FL, USA; 1–4 May 2008 .
- ‘Ultrasound guided blocks in cancer patients’, 12th World Congress on Pain Glasgow, Scotland, UK; 17–22 Aug 2008.
- ‘Prevalence and management of neuropathic pain in cancer patients at tertiary care cancer patients: A retrospective analysis’, 5th World Conference, World Pain Institute, New York, USA; 13–16 March 2009.

Dr Deepak Gupta

- ‘Ultrasonography guided neurolysis: Bedside interventional palliation of gastrointestinal cancer pain’, American Society of Anaesthesiologist (ASA). Annual Meeting, Orlando, FL, USA; 18–22 October 2008.

Dr Gaurav N. Goyal

- ‘A prospective analytical study of peripherally inserted central catheters in surgical patients’, American Society of Anaesthesiologist (ASA), Annual Meeting, Orlando, FL, USA; 18–22 October 2008.

Delhi Cancer Registry

Training Programme/Meetings Attended

- Dr B.B. Tyagi and Mr N. Manoharan attended UICC ICRET Training Workshop on ‘Cancer Registration, Epidemiology and Analysis of Time Trends’, Tata Memorial Hospital, Mumbai; 22–27 September 2008.

- Dr B.B. Tyagi and Mr. N. Manoharan attended the XXIV Pre-Annual Review Meeting Workshop and XXIV Annual Review Meeting of National Cancer Registry Programme, Cancer Hospital, Agartala, Tripura; 14–17 October 2008.

Laboratory Oncology

Dr Rajive Kumar

- Invited to chair oral presentation session, XII International Myeloma Workshop Myeloma Workshop, Washington; 26 February–1 March 2009.

Dr Ritu Gupta

- Invited talk on ‘Flow cytometry for red blood cell disorders’, XV National CME, Haematology and Haemato-Oncology, Mumbai Hospital, Mumbai, India; January 2009.
- Invited talk on ‘Immunological risk factor determinants in cancer’, 21st Round table conference on ‘Life style and cancer’, AIIMS, New Delhi, India; 2008.

Medical Oncology

Professor V. Raina

- Investigators’ Meeting for NU07B1 (Weekly Paclitaxel + Sorafenib) Trial, Mumbai; August 2008.
- Steering Committee Meeting of unrelated donor registry for India, Udaipur; August 2008.
- Investigators’ Meeting, Goa; July 2008.
- Investigators Meeting, Barcelona, Spain; 23–24 June 2008.
- Investigators’ Meeting on ‘A multi-centre, randomized, double-blind, parallel group study to evaluate the effect of RWJ-800088 on the prevention of chemotherapy-induced anaemia and the prevention of chemotherapy-induced thrombocytopenia in subject with non-small cell lung cancer receiving gemcitabine and either carboplatin or cisplatin’, Mumbai; 2–3 May 2008.

Professor Lalit Kumar

- Allogeneic BM transplantation, SMS Medical College, Jaipur; 6 April 2008.
- How to write a good proposal for research grant, ICMR-Institute of Cytology and Preventive Oncology; 30 July 2008.
- ‘Basis of chemotherapy in Gynae malignancy AOGIN-India’, Department of Obstetric and Gynaecology, AIIMS; 27 August 2008.
- Chairperson: ‘Multiple myeloma: Management in Indian setting’, 49th Annual Conference of Indian Society of Hematology and Transfusion Medicine, ISHTM, JIPMER, Pondicherry; 19 September 2008.
- ‘Current concepts in the cancers—an update’ and ‘Management of gestational trophoblastic disease management of gynecological’, Narayan Medical College Nellore, AP, India; 20 September 2008.

- ‘BM failure syndromes: Role of haemopoietic stem cell transplantation’, Annual meeting of Indian Association of Clinical Medicine, Hyderabad; 21 September 2008.
- ‘Acute complications in Stem cell transplantation’, Army Hospital (R&R) Delhi Cantt., New Delhi; 05 October 2008.
- Workshop: ‘How to conduct PHOCON-2008, a randomized Clinical Trial’, Sir Ganga Ram Hospital, New Delhi; 07 November 2008.
- ‘Recent advances in Dharamshila Cancer Hospital Chemotherapeutic management of Advance stage ovarian cancer’, Noida, Delhi; 23 November 2008.
- ‘Recurrent ovarian cancer management’, AGOICON-2008, Hyderabad, AP India; 29 November 2008.
- ‘Progress in cancer’, National Medicos Organization, Agra; 30 November 2008.
- ‘Prognostic and predictive factors in multiple myeloma’, CSM Medical University; 16 December 2008.
- Meet the Professor Session Topic: Multiple Myeloma, APICON-09, Noida; 29 January 2009.
- ‘Non-Hodgkin’s lymphoma’, Biennial National Conference; 14 February 2009.
- Experience at AIIMS Indian Society of Medical and Oncology and Indian Society of Oncology, Chennai.
- Chairperson: During the session on Screening the Ovary and Endometrium 24th Annual AIICC Conference-09, Maulana Azad Medical College, New Delhi; 28 February 2009.

Dr Atul Sharma

- Participated as faculty during Best of ASCO 2008, Delhi; 13 July 2008.
- Conducted panel discussion on ‘Chemotherapy in head and neck cancer’. During Annual Meeting of Federation of Head and Neck Oncology, Cuttack; 5 December 2008.
- Participated in panel discussion during Asia Pacific Lung Cancer Conference, Hyderabad; 6–7 December 2008.
- ‘Ovarian metastases: Treatment and outcome’, 3rd Ovarian Cancer Symposium, AIIMS; 28 March 2009.
- Conducted the panel discussion on ‘Advanced esophageal cancer’, 8th Annual International Conference of RGCON; 29 March 2009.

Dr Sameer Bakhshi

- Faculty for National Training Project: Practical Pediatric Oncology, PHO Chapter of IAP at RGCI, New Delhi; 10–11 May 2008.

- ‘Paediatric acute lymphoblastic leukemia in India’, IAP-BPS and CHAFB Paediatric Oncology Update 2008, Command Air Force Hospital, Bangalore; 14 September 2008.
- Chairperson, ‘Paediatric Acute Lymphoblastic Leukemia’ Annual Conference of Indian Society of Haematology and Transfusion Medicine, JIPMER, Pondicherry; 19–21 September 2008.
- Presented a poster on ‘Outpatient consolidation therapy of paediatric acute myeloid leukemia: A paradigm shift’ at Annual Conference of International Society of Paediatric Oncology (SIOP), Berlin, Germany; 2–6 October 2008.
- Coordinated and chaired, ‘Protocol development of Wilms Tumour Management’ ‘Paediatric Oncology Workshop’ INCTR, Brussels, Belgium; 3–6 November 2008.
- ‘Paediatric soft tissue sarcomas’, PHOCON, New Delhi; 8–9 November 2008.
- ‘Current status of antifungal agents in childhood fungal infections’, PHOCON, New Delhi; 8–9 November 2008.
- ‘Current trends in haematopoietic stem cell transplantation’, Workshop on ‘Clinical trends and issues in oncology nursing’ AIIMS; 23 November 2008.
- Chaired, mini-symposium on ‘Anticancer drug development’, ‘International Conference on Translational Pharmacology, 41st Conference of Indian Pharmacological Society’, Department of Pharmacology, AIIMS; 18–20 December 2008.
- ‘Early complications of chemotherapy in paediatric cancer patient’, Evidence-based Medicine, Tata Memorial Hospital, Mumbai; 28 February 2009.
- Faculty for ‘Meet the Expert Session on Wilms tumor and Nasopharyngeal Carcinoma’, 8th INCTR Annual Meeting, Antalya, Turkey; 22–24 March 2009.
- Chaired, ‘Ovarian germ cell tumors’ and was a panelist in the same in Symposium on Ovarian Cancers, AIIMS, New Delhi; 27–28 March 2009.

Medical Physics

Dr Pratik Kumar

- ‘Radiation safety in diagnostic radiology’, Updates in radiological safety, defence laboratory’, Jodhpur; 18–22 August 2008.
- ‘Quality assurance of imaging in radiotherapy’, Proceedings of XXI UP chapter convention of the AROI and CME on genito-urinary cancer, S.N. Medical College, Agra; 1–2 November 2008.
- ‘Diagnostic and imaging’, International Conference on Medical Physics and 29th Annual Conference of Association of Medical Physicists of India, BARC, Mumbai; 26–29 November 2008.
- ‘Diagnostic imaging and radiation protection’, International Conference on Medical Physics, Radiation Protection and Radiobiology, SMS Medical College, Jaipur; 11–13 February 2009.

Radiation Oncology

Dr G.K. Rath

- Panelist in the panel discussion on 'Management of locally advanced oral cancer', the International Conference on Head and Neck Oncology (MCSCON 2008), Mahavir Cancer Sansthan, Patna; 5–6 April 2008.
- Chaired the Keynote Address by Professor K.A. Dinshaw, Director TMH,, Indian Breast Cancer Initiative, Artemis, Gurgaon; 11 April 2008.
- 'Success in cancer treatment is dependent on sufficient knowledge, training, and acquired clinical experience', Inauguration Ceremony of the Installation of Bhabatron II tele-cobalt radiotherapy machine, Agartala; 21 April 2008.
- Attended the project review and steering committee meeting of the Ministry of communication and information technology, Department of Information Technology, Government of India, to review the progress of 'Development of linacs under Jai Vigyan Project', SAMEER, Kharghar, Navi Mumbai; 23 April 2008.
- A key note address on 'Inverse planning in Brachytherapy', Workshop on High Dose Brachytherapy, Indian Brachytherapy Society, Hyderabad; 3 May 2008.
- Chief Guest at the inaugural function of the Workshop on 'High dose brachytherapy', The Indian Brachytherapy Society, Hyderabad; 3 May 2008.
- 'IGRT/IMRT/HDR Brachytherapy' Workshop on High Dose Brachytherapy, Indian Brachytherapy Society, Hyderabad; 4 May 2008.
- 'IGRT in ca prostate' Indian College of Radiation Oncology, of Association of Radiation Oncologists of India, Gokula Curie Cancer Centre, Bangalore; 7–8 June 2008.
- An invited lecture on 'Current concepts on the role of radiotherapy in adult and paediatric brain tumours', Current concepts in the management of brain tumours, J.K. Cancer Institute, Kanpur; 26 July 2008.
- 'The status of brachytherapy in India', National workshop, 'Calibration of HDR Brachytherapy source', Chennai; 5–6 September 2008.
- Attended the RCC Directors meeting for implementation of National Cancer Control Programme in 11th five year plan, Thiruvananthapuram; 29–30 September 2008.
- Chaired a panel discussion on 'Making cancer a notifiable disease in the state of Tripura', the XXIV Annual review meeting of National Cancer Registry Programme of ICMR, Agartala; 16–17 October 2008.
- A video session, 'Brachytherapy in Gynae Oncology', Second Indo Scandinavian Gynaecologic Oncologists Conference, VMMC and Safdarjang Hospital, New Delhi; 18 October 2008.
- 'Overview of radiotherapy in breast conservation', 5th ICRO/AROI Teaching course, GCRI, Ahmedabad; 19 October 2008.

- ‘Planning and designing of Radiotherapy facility: Special consideration from a clinical perspective’, the South Asian conference and CME on synergy in health care (SASHON-2008), AIIMS, New Delhi; 3–6 November 2008.
- ‘Recent advances in management of cancer with radiotherapy’ International conference on medical physics- ICMP 2008, BARC, Mumbai; 26–29 November 2008.
- Chaired ‘PACT Programme and its impact’, AROICON 2008, Mumbai; 28 November 2008.
- Chaired ‘Role of IAEA in upgrading radiation therapy facilities in developing countries’, AROICON 2008, Mumbai; 28 November 2008.
- ‘Newer technologies: Promises and pitfalls’, AROICON 2008 conducted, Mumbai; 28 November 2008.
- ‘Regulatory issues’, AROICON 2008, Mumbai; 28 November 2008.
- ‘Recent advances in radiation oncology’, World Health Organization-Expert Committee workshop on Patterns of care and survival and studies on breast cancer, cancer cervix and head and neck cancers at the National Institute of Advanced Studies (NIAS), Indian Institute of Science campus, Bangalore; 1–2 December 2008.
- ‘National cancer control programme’, 8th national conference of foundation for head and neck oncology (FHNO), Cuttack; 7 December 2008.
- 3rd Asia Pacific lung cancer conference (APLCC), Hyderabad; 5–7 December 2008.
- ‘Principles of Image guided radiation therapy and its clinical relevance including the role of nuclear imaging’ Recent advances in molecular imaging and radiation oncology (RAMIRO) of the Indian Nuclear Society, TMH, Mumbai; 16 January 2009.
- ‘PET based treatment planning in radiotherapy-a new standard’ Conference on Recent advances in molecular imaging and radiation oncology (RAMIRO) of the Indian Nuclear Society at Bangalore; 18–19 January 2009.
- ‘Recent advances in oncology’, the meeting of the Association of Radiation Oncologists of India, Gujrat and Rajasthan Chapter, SMS Medical College, Jaipur; 25 January 2009.
- ‘Status of Oncology services in IndiaPast, present and future’ ONCON 2009 conference, Jaipur; 25 January 2009.
- ‘Indian experience in newer RT techniques in breast cancer’ in a symposium on breast cancer during the Biennial national conference of Indian society of medical and paediatric oncology and Indian society of Oncology, Chennai; 14 February 2009.
- Conducted telemedicine sessions with Dr B. Borooah Cancer centre, Guwahati, AHRCC, Cuttack and RCC, Srinagar.

Dr P.K. Julka

- Breast Cancer Meeting, Korea; 19 April 2008.

- Triple Negative Breast Cancer, New Delhi; 27 April 2008.
- Moderator on UFT in Metastatic Colorectal Cancer; 30 April 2008.
- Metastatic Renal Cell Carcinoma, Nepal Oncology Society, Katmandu; 3 May 2008.
- ‘Translational research in oncology’, Department of Radiotherapy, Rohtak; 14 May 2008.
- American Society of Clinical Oncology (ASCO) Meeting, Chicago; 30 May–3 June 2008.
- Breast Cancer Video Conference with MD, Anderson University; 21 June 2008.
- ‘Chemoradiotherapy in Advanced NSCLC—recent advances’; 22 June 2008.
- Chairperson and Panelist in Biomab plus Radiotherapy in Gliomas; 25 June 2008. Recent Advances in the Management of Glioblastoma Multiforme; 6 July 2008.
- ‘Epithelones in taxane resistant disease’, Claridges; 9 August 2008.
- Moderator in Panel Discussion on Advanced Breast Cancer, New Delhi; 23 August 2008.
- Lilly Oncology Meeting at Gurgaon, Haryana; 27 August 2008.
- MCH Gynae-Oncology Meeting at Lady Hardinge Medical College, New Delhi; 28 August 2008.
- Malaysian Oncology Society Meeting, Malaysia; 17–19 October 2008.
- Guest Lecture on EGFR: A Target in Oncology, New Delhi; 18 October 2008.
- Participated in Meet the Professor Session on Breast Cancer, New Delhi; 18 October 2008.
- Guest Lecture on ‘Multimodality management of brain tumours’, Kita Kama, Malaysia; 19 October 2008.
- ‘Recent advances in glioblastoma multiforme management, VIMHANS, New Delhi; 26 October 2008.
- Guest of Honor, ‘Breast cancer and head and neck cancer’, Kamla Nehru Hospital, Ahmedabad; 9 November 2008.
- ‘Targeted therapy in head and neck cancers’; 7 December 2008.
- District Cancer Control Programme, District Cancer Centre, New Delhi; 10 December 2008.
- Neurooncology Society Meeting, New Delhi; 11 December 2008.
- Management of Febrile Neutropenia at East Delhi Physician Association Meeting; 14 December 2008.

Dr B.K. Mohanti

- ‘Salivary gland tumours’ ‘Sialogy and Phonotherapy’, AIIMS; 18 April 2008.
- ‘Introduction to Palliative Care’ Indian Association of Palliative Care (IAPC) Foundation course, AIIMS, New Delhi; 14 June 2008.

- Two lectures ‘Management of other Physical symptoms’ and ‘End-of-life care Issues’ at Indian Association of Palliative Care (IAPC) course, PGIMER, Chandigarh; 29 June 2008.
- ‘Palliative Radiotherapy in Childhood Cancers’ at Annual Conference of Paediatric Haematology Oncology (PHOCON 2008), Sir Gangaram Hospital, New Delhi; 6 November 2008.
- ‘Investigators Meeting of INSPIRE Trial, IRX Therapeutics’, Singapore; 14–15 November 2008.
- ‘Advances in Radiation Oncology’ Foundation Day of Dr BRA IRCH, AIIMS; 23 November 2008.
- Principal Investigator, National Cancer Registry Programme, ‘Patterns of Care and Survival in Cancer of Head and Neck, Breast, Cervix’, Bangalore; 1–2 December 2008.
- National Faculty Member- Indian Association of Palliative Care and Helpage India Workshop, AIIMS, New Delhi; 12 February 2008.
- Chairperson, 2 scientific sessions, XVI International Conference of Indian Association of Palliative Care, Delhi; 13–15 February 2009.
- ‘Ethics in Pain and Palliative Care’, XVI International Conference of Indian Association of Palliative Care, Delhi; 13–15 February 2009.
- ‘Improvements in Radiation Oncology: From conventional 2D to 3D’ 2nd International Radiation Oncology Conference, National Oncology Centre, Royal Hospital, Muscat, Oman; 26–27 February 2009.
- Conducted 3 Tele-medicine teaching sessions with the faculty and post-graduate residents of Regional Cancer Centre, Cuttack and SKIMS, Srinagar.
- Conducted 2 Telemedicine patient care consultations with doctors of SKIMS, Srinagar.

Dr D.N. Sharma

- ‘Role of radiotherapy in carcinoma of breast’, Government Medical College, Chandigarh; October 2008.
- ‘Image Guided Interstitial Brachytherapy in recurrent/residual cervical cancer’, Annual Meeting of RSNA 2008. Chicago, USA; November 2008.

Dr V. Subramani (Medical Physicist)

- Panelist in Pre-conference (International conference on Medical Physics-2008) workshop on Radiation safety and facility design—‘Solving of neutron problem in a high energy linear accelerator’, Hinduja Hospital, Mumbai, India; 25 November 2008.
- Invited Speaker ‘Image Guided Stereotactic Body Radiotherapy: AIIMS Experience’ International conference on Medical Physics (ICMP-2008) and 30th annual conference of Association of Medical Physicists of India, Mumbai, India; 26–29 November 2008.
- ‘Invited speaker ‘Physical aspects of Image guided Radiotherapy’ Association of Medical Physicists of India-Tamilnadu and Pondicherry chapter, JIPMER, Pondicherry; 20–21 December 2009.

- Chairperson 'Image-based Brachytherapy' International conference on Medical Physics and Radiation Protection and Radiobiology (ICMPRPR-2k9), Jaipur, India; 11–13 February 2009.
- Attended Workshop on Establishment of Directorate of Radiation safety at AERB, Mumbai, deputed by Department Health and Family welfare, Government of NCT, Delhi; 2 January 2009.

Mr A. K. Bansal (Medical Physicist)

- 'Patient-based dosimetric comparison of interstitial and intracavitary brachytherapy in cases of cancer cervix', International conference on medical physics (ICMP-2008), BARC, Mumbai; 26–29 November 2008.

Dr R. Prabhakar (Medical Physicist)

- 'Impact of different breathing conditions on the dose to surrounding normal structures in tangential field breast radiotherapy', ESTRO 27, Goteborg, Sweden; 14–18 September 2008.
- 'Stereotactic radiotherapy for brain tumours', WCC 2009, First World Congress on Cancer. Kottayam, Kerala, India; 12–14 January 2009.
- 'QA in Radiotherapy', Tutor's Update, CMAI, New Delhi; 12 February 2009.
- Advances in Radiotherapy, Tumour's Update, CMAI, New Delhi; 12 February 2009.

Surgical Oncology

Dr N.K. Shukla

1. International conference on palliative care and give a talk on 'Surgeons and palliative care', New Delhi; 12–15 February 2009.

Dr Ramesh

1. Department Presented a paper on 'Phantom breast syndrome' 'International conference on palliative care', New Delhi; 12–15 February 2009.

RESEARCH

Funded Projects Anaesthesiology

Completed

1. Evaluating the correlation of serum levels of morphine and its metabolites on pain in cancer patients. Sushma Bhatnagar. Funding by AIIMS Research Grant.
2. An open-label study investigating long-term safety and tolerability of nasalfent (Fentanyl Citrate Nasal Spray) in the treatment of breakthrough cancer pain (BTCP) in subjects taking regular opioids therapy. P.I. Sushma Bhatnagar. Funded by Company sponsored trial.
3. A comparative efficacy of amitriptyline, gabapentine and pregabalin in neuropathic cancer pain: A prospective randomized double blind placebo controlled. Seema Mishra. Funded by AIIMS Research Grant.

Laboratory Oncology

Ongoing

1. Immunophenotypic characterization of plasma cells by flow cytometry in health and disease with particular reference to plasma cell myeloma. Ritu Gupta. Funded by DST for 3 years. Funds: Rs 8.7 lakh.
2. Assessment of multi-drug resistance pattern in acute myeloid leukemia and response to therapy. Ritu Gupta. Funded by AIIMS for 2 years Funds: Rs 1.9 lakh.
3. Regulatory T-cell repertoire in plasma cell myeloma. Ritu Gupta. Funded by DBT for 3 years. Funds: Rs 14.82 lakh.
4. Molecular and immunological basis of biological heterogeneity in chronic Lymphocytic Leukemia. Ritu Gupta. Funded by DBT for 3 years. Funds: Rs 19,46,400.
5. Endothelial progenitor cells as biomarker of disease activity in multiple myeloma. Ritu Gupta. Funded by DBT for 3 years. Funds: Rs 16.79 lakh.
6. To study the molecular biology of multiple myeloma. Ritu Gupta. Funded by DBT for 3 years. Funds: Rs 33 lakh

Medical Oncology

Completed

1. Randomized trial of adjuvant endocrine therapy and chemotherapy in women with early breast cancer: The adjuvant breast cancer trial (ABC trial). Vinod Raina. Funded by Institute of Cancer Research, UK (December 2007).
2. An open label study to evaluate the efficacy and safety of human recombinant granulocyte colony stimulating factor (G-CSF) in patients with chemotherapy induced neutropenia). Vinod Raina. Funded by Clinigene Internation Pvt. Ltd. (2008).
3. A randomized phase 3 trial; of ALIMTA® (Pemetrexed) and Carboplatin versus Etoposide and Carboplatin in extensive stage small cell lung cancer. Vinod Raina. Funded by Eli Lilly and Co. (January 2009).
4. An ascending dose, sequential group, placebo-controlled, multicenter, phase i study of RWJ-800088 in subjects with cancer receiving platinum-based chemotherapy regimens protocol 800088-NAP1002; Phase 1. Vinod Raina. Funded by Johnson and Johnson (July 2008).
5. Mitochondrial mutations in acute myeloid leukemia. Sameer Bakhshi. Funded by Terry Fox (October 2008). Funds: Rs 3 lakh.

Ongoing

1. A treatment protocol for patients with gastrointestinal stromal tumor who are ineligible for participation in other SU011248 protocols and are refractory to or intolerant of imatinib mesylate. Vinod Raina. Funded by Pfizer for 3 years. Funds: Rs 15 lakh.

2. A SU011248 expanded access protocol for systemic therapy of patients with metastatic renal cell carcinoma who is ineligible for participation in other SU011248 protocols but may derive benefit from the treatment with SU011248. Vinod Raina. Funded by Pfizer for 3 years. Funds: Rs 15 lakh.
3. An open label multicenter phase I/II study to evaluate safety and efficacy of P276-00 in Patients with relapsed and/or relapsed/refractory multiple myeloma. Dr Vinod Raina. Funded by Nicholas for 1 year (12 May 2008–11 May 2009). Funds: Rs 6 lakh.
4. A double-blind, randomized phase 2b study evaluating the efficacy and safety of sorafenib compared to placebo when administered in combination with paclitaxel in patients with locally recurrent or metastatic breast cancer. Vinod Raina. Funded by Reliance for 3 year (01 May 2008–30 April 2011). Funds: Rs 15 lakh.
5. An open-label randomized comparative multicentric study to assess safety and efficacy of biomab-EGFRTM (nimutuzumab) in combination with chemotherapy versus chemotherapy alone in the treatment of patients with stage IIIb / IV Non-small cell lung cancer (NSCLC). Vinod Raina. Funded by Clinigene (Biocon) for 1 year (01 December 2008–30 November 2009). Funds: Rs 12 lakh.
6. A randomized, double-blind multicenter, placebo controlled study of adjuvant lapatinib in women with early-stage ERB2 overexpressing breast cancer. Vinod Raina. Funded by GlaxoSmithkline for 3 years (10 June 2007–09 June 2010). Funds: Rs 20 lakh.
7. A randomized, multi-centre, open-label, phase III study of adjuvant lapatinib, trastuzumab, their sequence and their combination in patients with HER2/ErbB2 positive primary breast cancer. Vinod Raina. Funded by GlaxoSmithkline for 3 years (23 May 2008–22 September 2011). Funds: Rs 20 lakh.
8. Axitinib (AG-013736) as second line therapy for metastatic renal cell cancer: axis trial. Vinod Raina. Funded by Pfizer for 7 months (April 2009–October 2009). Funds: Rs 15 lakh.
9. A randomized, open label, multicenter, phase 2/3 study to evaluate the safety and efficacy of lumiliximab in combination with fludarabine, cyclophosphamide, and rituximab versus fludarabine, cyclophosphamide, and rituximab alone in subjects with relapsed chronic lymphocytic leukemia. Vinod Raina. Funded by Biogen Idec (April 2009–May 2010). Funds: Rs 15 lakh.
10. Evaluation of circulating tumour DNA in serum of breast cancer patients. Vinod Raina. Funded by DBT (15 October 2008–14 September 2011). Funds: Rs 12 lakh.
11. Indox cancer trials network centre. Vinod Raina. Funded by Oxford University (12 May 2006–11 April 2011). Funds: Rs 30 lakh.
12. Adjuvant tamoxifen long against short (ATLAS) trial. Vinod Raina. Funded by Oxford University.
13. Randomized study comparing upfront surgery followed by chemotherapy versus upfront chemotherapy followed by interval debulking surgery in previously untreated epithelial ovarian

- cancer stage III C and stage IV (pleural effusion only). Lalit Kumar. Funded by ICMR (till June 2009). Funds: Rs 70 lakh.
14. Molecular biology of multiple myeloma. Lalit Kumar. Funded by Department of Biotechnology (till 2010). Funds: Rs 34 lakh.
 15. Role of endothelial progenitor cells as biomarkers of disease activity in multiple Myeloma. Lalit Kumar. Funded by DBT, Government of India (till 2010). Funds: Rs 17 lakh.
 16. Combination of P53, EGFR and tumor grading in determining the outcome of early stage epithelial ovarian cancer. Lalit Kumar. Funded by DBT, Government of India. Funds: Rs 2 lakh.
 17. Expansion of bone marrow and cord blood haematopoietic stem cells and their differentiation into hepatocytes. Lalit Kumar. Funded by ICMR (till 2009).
 18. A study of the prevalence and type of anemia in patients with lymphoid malignancies. Lalit Kumar. Funded by Global Cancer Concern India (2007–2008).
 19. To elucidate the cytokine profile and feasibility of immortalization of fetal liver hemopoietic cells. Lalit Kumar. Funded by DBT (2006–2009).
 20. World CML registry and observational study. Lalit Kumar. Funds: Rs 6.5 lakh (Approx). Dec 2008 (continuing).
 21. Lenalidomide plus low dose dexamethasone versus thalidomide plus low dose dexamethasone for multiple myeloma. Lalit Kumar. Funded by Dr Reddy's Labs for August 2008 (continuing).
 22. A randomized double blind study of efficacy of lactobacillus CD 2 lozenges in preventing radiation and chemotherapy induced oral mucositis in head and neck cancer protocol-P0501. Atul Sharma. Funded by CD Pharma India Private Limited for 2006 (continuing). Funds: Rs 5.42 lakh.
 23. Phase II, multicentric, open label randomized study of mapatumumab (TRM-1), a fully human monoclonal antibody to TRAIL-1 in combination Bortezomib (Velcade), and bortezomib (Velcade) alone in subject with relapsed or refractory multiple myeloma. Atul Sharma. Funded by Parexel International on behalf of HGS, USA for 2007 (continuing). Funds: Rs 8.8 lakh.
 24. Molecular remission with arsenic trioxide in acute promyelocytic leukemia (Indian APML study Group- IASG). Atul Sharma. Funded by DBT (drug support) for 2005 (continuing).
 25. Randomized, phase III-b, multi-centre, open-label, parallel study of enoxaparin (low molecular weight heparin) given concomitantly with chemotherapy vs chemotherapy alone in patients with inoperable gastric and gastro-oesophageal cancer. Atul Sharma. Funded by Criterium, Pune for 2008 (continuing). Funds: Rs 7.6 lakh.
 26. Treatment and characterization of acute lymphoblastic leukemia in children, adolescents and young adults. Sameer Bakhshi. Funded by Network of Cancer Treatment and Research and Sir Ratan Tata Trust for Clinical Management (2005). Funds: Rs 4.5 lakh.
 27. To study chromosomal abnormalities and FLT3 internal tandem duplication (ITD) mutations in acute myeloid leukemia. Sameer Bakhshi, Funded by AIIMS Research Grant for over 3 years (since Oct 2007). Funds: Rs 3 lakh.

28. Evaluation of prognostic value of FDG-PET after two cycles of chemotherapy in pediatric and adolescent high grade lymphomas. Sameer Bakhshi. Funded by DBT for 3 years (since March 2008). Funds: Rs 19.45 lakh.
29. Pharmacokinetic and toxicity profile of high dose methotrexate: Relationship with serum creatinine and MTHFR Polymorphisms in Indian Children. Sameer Bakhshi. Funded by JIV DAYA Foundation for 2 years (since October 2008). Funds: Rs 7.9 lakh.

Radiotherapy

Completed

1. A randomized controlled comparative trial to evaluate the efficacy and safety of 2-Deoxy-D-Glucose (2DG) as a radio modifier in the treatment of Glioblastoma Multiforme. Dr GK Rath, Dr PK Julka, Dr DN Sharma, Dr Omana Nair, Dr T. Puri, Dr Haresh KP. Funded by Dr Reddys for 3 years (2006–2009). Funds: Rs 3.58 lakh.
2. A centrally randomized open multi center study evaluating the efficacy and safety of combination therapy with intermax Alpha™ and vinblastine versus vinblastine monotherapy in patients with Advanced Renal Cell Carcinoma. Dr PK Julka, Dr GK Rath, Dr Amlesh Seth, Dr Omana Nair, Dr Renita Bhamrah, Dr Ashish Chaudhary. Funded by Sterling for 8 years (2001–2008). Funds: Rs 6.18 lakh.
3. A phase 2 open label randomized controlled study to evaluate the dose tolerance safety and efficacy of VT-122 regimen for the treatment of cachexia in subjects with stage IV non-small cell lung cancer. Dr PK Julka, Dr GK Rath, Dr Omana Nair, Dr Tarun Puri, Dr Renita Bhamrah. Funded by Reliance for 1 year (2007–2008). Funds: Rs 2.1 lakh.
4. A multicentric study to evaluate palanosetron and ondansetron in chemotherapy induced nausea and vomiting. Dr PK Julka, Dr GK Rath, Dr Omana Nair, Dr Gursimran Kaur. Funded by Dr Reddys for 6 months (2008–2008). Funds: Rs 2.5 lakh.
5. A prospective randomized trial of amifostine given subcutaneously during radiotherapy in Head and neck cancer patients. DN Sharma. Funded by AIIMS for 3 years (2005–2009). Funds: Rs 1 lakh.

Ongoing

1. BCIRG 006—a multicentric phase III randomized trial comparing doxorubicin and cyclophosphamide followed by Docetaxel (ACàT) with Doxorubicin and cyclophosphamide followed by docetaxel and trastuzumab (Herceptin) (ACàTH) and with docetaxel, carboplatin and trastuzumab (TCH) in the adjuvant treatment of node positive and high risk node negative patients with operable Breast cancer containing the HER2 alteration. Dr PK Julka, Dr GK Rath, Dr Rajinder Parshad, Dr Omana Nair, Dr Simran. Funded by Aventis for year 2004. Funds: Rs 1,62,313.
2. A phase 2 study of sequential neoadjuvant gemcitabine plus doxorubicin and gemcitabine plus cisplatin in large T_2 (e" 3cm) and locally advanced (T_3 , T_4 or N_2) operable breast cancer. Dr PK

Julka, Dr GK Rath, Dr Rajinder Parshad, Dr Ramesh Dawar, Dr Omana Nair, Dr Renita Bhamrah. Funded by Eli Lilly for year 2003. Funds: Rs 4.72 lakh.

3. A randomized, double-blind, parallel-group, multicentre, phase-III study comparing the efficacy and tolerability of fulvestrant (FASLODEX™) 500 mg with Fulvestrant (FASLODEX™) 250 mg in postmenopausal women with estrogen receptor positive advanced breast cancer progressing or relapsing after previous endocrine therapy. P.K. Julka, Dr G K Rath, Dr Rajinder Parshad, Dr Omana Nair, Dr Gursimran Kaur. Funded by Quintiles for year 2006. Funds: Rs 2,45,700.
4. An open label randomized multi-centre phase III study of Trastuzumab in combination with a fluoropyrimidine and Cisplatin versus chemotherapy alone as first-line therapy in patients with HER2 positive advanced gastric cancer. Dr PK Julka, Dr GK Rath, Dr NR Dash, Dr Omana Nair, Dr Tarun Puri, Dr Renita Bhamrah, Dr Gursimran Kaur, Dr Amit Bahl, Dr Pushpa Lata. Funded by Siro for year 2007. Funds: Rs 1.5 lakh.
5. A phase 1/2, modified dose escalation, open label trial to determine the therapeutic effect and safety of INCB007839 combined with trastuzumab in patients with previously untreated her2 positive metastatic breast cancer. Dr PK Julka, Dr GK Rath, Dr Tarun Puri, Dr Gursimran Kaur, Dr Pushpa Lata. Funded by Siro for year 2008. Funds: Rs 3,49,780.
6. A randomized phase 3 study of pemetrexed in combination with cisplatin versus cisplatin monotherapy in patients with recurrent or metastatic head and neck cancer. Dr PK Julka, Dr GK Rath, Dr Alok Thakar, Dr Sudhir Bahadur, Dr Omana Nair, Dr Tarun Puri, Dr Renita Bhamrah. Funded by Eli Lilly for year 2007. Funds: Rs 1.32lakh.
7. A randomized phase 3 study of Enzastaurin versus Lomustine in the treatment of recurrent, Intracranial GBM. Dr PK Julka, Dr GK Rath, Dr Chitra Sarkar, Dr Omana Nair, Dr Tarun Puri, Dr Renita Bhamrah. Funded by Eli Lilly for year 2006. Funds: Rs 1.86 lakh.
8. An open label prospective multicentric study to evaluate the safety and efficacy of BIOMAB-EGFR (Nimotuzumab) as induction and maintenance therapy in combination with radiotherapy plus temozolomide (concomitant and adjuvant) in Indian patients with Glioblastoma multiforme. Dr PK Julka, Dr GK Rath, Dr DN Sharma, Dr O Nair, Dr C Sarkar, Dr BS Sharma, Dr T Puri, Dr R Bamrah, Dr KP Hareesh. Funded by Clingene for year 2008. Funds: Rs 1.80 lakh.
9. Patterns of care and survival studies in cancers of head and neck, breast and cervix at Dr BRAIRCH, AIIMS (as part of National Cancer Registry Programme by ICMR) I-508. Dr BK Mohanti, Dr BB Tyagi. Funded by Grant from National Cancer Registry Programme, ICMR for year 2007. Funds: Rs 3.6 lakh per year.
10. A study to assess economic costs of cancer care in Indian patients receiving radiotherapy with or without chemotherapy/surgery at a Regional Cancer Centre (Collaborative study between IRCH, AIIMS and Indian Statistical Institute, Delhi. Dr Sanghamitra Das (ISI), Dr B.K. Mohanti. Funded by Grant from Indian Statistical Institute, Delhi for year 2007. Funds: Rs 2.2 lakh per year.
11. A randomized, double-blind, placebo- controlled, multi-centre phase 3 study of denosumab on prolonging bone metastasis-free survival in men with hormone-refractory prostate cancer. Dr PK

Julka, Dr Amlesh Seth, Dr Omana Nair, Dr Gursimran Kaur, Dr Renita Bhamrah. Funded by Quintiles for year 2007. Funds: Rs 2,93,267.

12. Protocol 1839IL/0706: A phase II randomized, double blind, placebo controlled, multicentre comparative study of ZD1839 250 mg or 500 mg (Iressa™) given either continuously or concomitantly with Cisplatin plus Radiotherapy for the treatment of patients with previously untreated unresected Late Stage III/IV Non-metastatic Head and Neck Squamous Cell Carcinoma. Dr P.K. Julka, Dr G.K. Rath, Dr D.N. Sharma, Dr Sudhir Bahadur, Dr Omana Nair, Dr Tarun Puri, Dr R. Prabhakar. Funded by Quintiles for year 2004. Funds: Rs 13,15,781.

Anaesthesiology

Departmental projects

Ongoing

1. Prospective, randomized placebo controlled, double blind study of tranexamic acid in patients undergoing lower GIT/GUT cancer surgery
2. To compare the effect of radiotherapy and vertebroplasty on pain relief and quality of life in cancer patients with vertebral collapse caused by spinal metastases
3. Psychosocial concerns in advanced cancer patients: An observational study, Dr BRAIRCH, AIIMS.
4. A prospective evaluation of the incidence and characteristics of breakthrough cancer pain episodes (BTCP) in head and neck cancer patients
5. Preemptive analgesia with pregabalin and dexibuprofen in malignant breast surgeries: A prospective double blind placebo controlled study
6. Redefining laryngeal mask airway classic™ insertion with no-intraoral-index-finger technique

Medical Oncology

Ongoing

- A study of triple negative breast cancer with reference to clinical feature and outcome.
- A study of basal cytokeratin and egfr in triple negative breast cancer.
- Molecular genetic analysis for the prognostic evaluation of biological markers in acute lymphoblastic leukemia (ALL).
- A prospective study on infections in febrile neutropenia, August 2008.
- Serum galactomannan assay for the diagnosis of invasive aspergillosis in hematological malignancies and stem cell transplant, October 2008.
- Retrospective analysis of peripheral T cell lymphomas; incidence, clinical characteristics, prognostic features and treatment outcomes, since January 2008).
- Quantitative estimation of bcr-abl transcripts, to see molecular remission status in patients of Chronic Myeloid Leukemia, since March 2008).

- Analysis of efficacy of chemotherapy (irinotecan and oxaliplatin-based) in advanced colorectal cancer. Dr Atul Sharma. No grant 2007–2009.
- Prothrombotic factors in patients with newly diagnosed multiple myeloma—an Observational Study. Dr Atul Sharma. No grant 2008.
- Use of autologous bone marrow stem cells for myocardium regeneration. Funded by Department of Biotechnology, Government of India for 2006.
- Oral voriconazole versus intravenous amphotericin B as antifungal prophylaxis in pediatric acute leukemia induction therapy: A randomized controlled study. Dr Sameer Bakhshi (since February 2008)

Completed

- Evaluation of efficacy of chemotherapy in advanced colorectal cancer. Dr Atul Sharma. No funding.
- ‘A randomized controlled trial comparing best supportive care, 5 – fu + folinic acid and gemcitabine + oxaliplatin in management of unresectable gallbladder cancer’. Dr Atul Sharma. No funding.

Medical Physics

Completed

1. Development of protocol for quality control of ultrasonography and US Doppler
2. Doppler ultrasonography-based tumour vascularity index and its use
3. Quality Assurance of image monitors

Ongoing

1. Development of protocol for quality assurance of medical image laser printer
2. Characterization of atherosclerotic plaque using CT scan
3. Development of Microsoft Access based image reporting module
4. Development of protocol for quality assurance of Digital and Computed Radiography
5. Patients’ dose determination in fluoroscopy guided RF ablation procedures

Radiodiagnosis

Completed

1. MRI and PET CT evaluation of soft tissue sarcomas

Ongoing

1. Ultrasound and CT evaluation of the neck for assessment of lymph node metastases in clinically No patients with squamous cell carcinomas of the upper aerodigestive tract

Radiotherapy

Completed

1. To evaluate neoadjuvant chemotherapy followed by postoperative chemotherapy and assess the expression of multidrug resistance gene and cell cycle specificity in locally advanced gastric and gastro esophageal junction adeno carcinoma. Funded by Dr Ahitagni Biswas, Dr B.K. Mohanti, Dr G.K. Rath, Dr V. Raina, Dr A. Sharma, Dr N.K. Shukla, Dr S.V.S. Deo, Dr S.N. Das, Dr S.D. Gupta.
2. Dosimetric studies in Interstitial and Intracavitary Brachytherapy of cancer cervix. AK Bansal, Dr G.K. Rath, Dr P.K. Julka, Dr D.N. Sharma, Dr M.K. Semwal, Dr Sanjay Thulkar.
3. A study to assess the effectiveness of Aloe Vera gel in preventing skin reactions associated with radiotherapy: A prospective randomized controlled trial. Jisa George T (MSc Nursing student), Dr B.K. Mohanti.

Ongoing

1. Randomized trial comparing IMRT vs. brachytherapy boost in early stage squamous cell carcinoma of the oropharynx. Dr B.K. Mohanti.
2. Clinical correlation of ER, PR and Her 2 neu expression and BRCA-I gene mutations in Indian Breast Cancer patients. Dr Gursimran Kaur, Dr P.K. Julka, Dr G.K. Rath, Dr S.D. Gupta, Dr R. Parshad, Dr S.N. Das, Dr M. Kabra.
3. The correlation of VEGF and TGF-beta expression to clinicopathological response, ER, PR and Her 2 Neu status in locally advanced breast cancer- A pilot study. Dr N. Joshi, Dr P.K. Julka, Dr G.K. Rath, Dr D.N. Sharma, Dr O. Nair, Dr A. Srivasthava, Dr S.D. Gupta, Dr S.N. Dwivedi.
4. Comparison of two different schedule of HDR-ICRT in Carcinoma of Cervix of 7Gy vs. 9Gy at Point A in 3 and 2 weekly fractions respectively: A Prospective Randomized cohort study. Dr Vinay Kumar, Dr G.K. Rath, Dr P.K. Julka, Dr D.N. Sharma.
5. PET CT in predicting response to chemo radiotherapy in carcinoma cervix. Dr Jagdeeshan, Dr D.N. Sharma, Dr G.K. Rath, Dr Rakesh Kumar, Dr Sunesh Kumar, Dr A. Malhotra.
6. Prospective comparative analysis of 3D-CT based treatment planning with 2D radiography based treatment planning for ICRT of Ca cervix. Dr Renu Madan, Dr S. Pathy, Dr B.K. Mohanti, Dr S. Thulkar, Dr V. Subramani, Dr Vatsala, Dr L. Kumar.
7. A comparative assessment of quality of life of head and neck cancer patients treated with surgery and postoperative radiotherapy versus chemoradiotherapy. Dr Subhash, Dr S. Bhasker, Dr B.K. Mohanti, Dr A. Sharma, Dr A. Thakkar.
8. Development of DICOM-RT software for interfacing the Treatment Planning System with treatment machines. Dr R.C. Joshi, Dr T. Ganesh, R. Prabhakar, A.K. Bansal, S.K. Sridhar, Dr G.K. Rath.
9. Validation of gel dosimetry as 3D verification tool for highly conformal radiotherapy techniques. N. Gopishankar, Dr S. Vivekanandan, Dr G.K. Rath, Dr S.S. Kale, Dr V. Subramani, Dr S. Thulkar. Funded by AERB. Funds: Rs 5.8 lakh.

Surgical Oncology

Ongoing

1. A prospective study comparing histopathologic versus biomarker assessment of surgical margins in operable oral cancer patients
2. Functional assessment of oral cancer patients after radical surgery and radiotherapy
3. Oncoplastic breast surgery—prospective evaluation of patient profile and out come
4. Assessment of Skin involvement in Breast cancer patients with T4b lesions
5. Prophylactic antibiotics in surgical oncology patients

Collaborative research

Completed/Ongoing

1. A Randomized controlled Trial Comparing: Best Supportive Care, 5-FU + Folinic Acid and Gemcitabine + Oxaliplatin in management of Unresectable Gallbladder Cancer. (with Medical Oncology, Surgical Oncology, Radiation Oncology and Gastroenterology)
2. Beclin-1 in oral cancer (with Biotechnology and Radiotherapy)
3. Genetic polymorphisms in Cox-2 gene in oral cancer patients (with Biotechnology and Radiotherapy)
4. Response assessment of Docetaxel based neoadjuvant chemotherapy in locally advanced breast cancer. Comparison with non-docetaxel Anthracycline based chemotherapy regimens (January 2000–December 2007). IRCH, AIIMS; April 2004–December 2007 (with Medical Oncology and Radiotherapy),.
5. Prospective evaluation of quality of life in advanced stage cancer patients receiving short course palliative radiotherapy by using EORTC-QLQ-C15-PAL questionnaire module (with Radiation oncology and Anesthesiology)
6. Adjuvant Tamoxifen long against short (ATLAS): Multi center international trial, Oxford, UK. Surgical Oncology, Medical oncology and Radiation Oncology. Funded by ATLAS.
7. Randomized study of Preoperative short course radiotherapy (25 Gy) vs. preoperative Concurrent radiotherapy (45 Gy) and chemotherapy followed by Surgery in rectal cancer (with Radiation Oncology, Surgical Oncology, Medical Oncology, Pathology, Radiodiagnosis)
8. National Retinoblastoma Registry-Delhi site, a collaborative study under ICMR, New Delhi, India (with Radiation oncology and ICMR, New Delhi)
9. Evaluation of Curcumin in the management of advanced cancer cervix (with Radiotherapy, Gynecology, Biochemistry and Pathology)
10. Evaluation of circulating Tumor DNA in Serum of breast cancer patients (with Medical Oncology and Surgical Oncology)

11. MRI and PET-CT IN Soft tissue sarcoma (STS) (with Radio diagnosis, Surgical Oncology, Nuclear Medicine)
12. Adjuvant tamoxifen long against short (ATLAS). Multi centre international trial, Oxford, UK (with Surgical and Medical oncology)
13. Cell cycle regulatory proteins WAF-e and p 16 in human esophageal cancer (with Surgical oncology, Biochemistry, Pathology)
14. Multicentric national programme on evaluation and validation of molecular markers in oral cancer: A cross sectional study (with Surgical Oncology and Biochemistry)
15. To evaluated microsatellite instabilities in different chromosomes in Indian female breast cancer patients (with Surgical Oncology and Biosciences, Jamila Milia Islamia, New Delhi)
16. Role of CT scan and MRI in the evaluation of locally advanced oral cancer.
17. Molecular evaluation of p 21 WAF -1 gene in Indian Female Breast Cancer Patients (with Surgical oncology and Bio Sciences, Jamia Milia Islamia)
18. Molecular basis of tobacco associated oral carcinogenesis (with Biochemistry and Surgical Oncology)
19. A randomized, double-blind, placebo-controlled, multi -center phase III study to evaluate the efficacy and safety of pazopanib (GW786034) compared to placebo in patients with locally advanced and/or metastatic renal cell carcinoma. VEG105192. (with Medical Oncology and Surgical Oncology)
20. An open label, non-randomized phase II trial of oxaliplatin, docetaxel and capectiabine in advanced esophageal and gastric adenocarcinoma. Protocol 0701. (with Medical Oncology, Surgical Oncology, and Radiation Oncology)
21. A randomized, double-blind, multicentre, placebo controlled study of adjuvant lapatinib in women with early stage ErbB2 over expressing breast cancer. (with Medical Oncology and Surgical Oncology)
22. A randomized, open label multicentre study of single agent larotaxel (XRP9881) at 90 MG/M2 every 3 weeks compared to continuous admn. Of 5-FU for the treatment of patients with advanced pancreatic cancer previously treated with a gemcitabine-containing regimen (with Medical Oncology and Surgical Oncology)
23. Ligand based selection from combinatorial libraries for generating recombinant antibodies to the placental (oncofetal) isozyme of alkaline phosphatase: Characterization and validation in clinical cancers (with Biochemistry and Surgical Oncology)
24. Dose reduction in CT while, maintaining diagnostic confidence (with Medical Physics Unit and Radiology AIIMS)
25. Verification of CT displayed dosimetric parameter (CTDI) for various scanning protocol (with Medical Physics Unit and Radiodiagnosis, Dr BRAIRCH)

26. Quality control of PET/CT (with Medical Physics Unit, IRCH and Nuclear Medicine, AIIMS)
27. Role of FDG PET CT in evaluation of patients with recurrent ovarian cancer: a pilot study (with Radiology)
28. Randomized study comparing up front surgery followed by chemotherapy versus upfront chemotherapy followed by interval debulking surgery in previously untreated epithelial ovarian cancer stage 3C and stage 4 (pleural effusion only) (with Radiology, Medical Oncology and gynaecology)
29. Validation of gel dosimetry as 3D verification tool in highly conformal radiotherapy techniques (with Radiology, Neurobiochemistry and Radiotherapy)
30. Prospective comparative evaluation of 3D CT based treatment planning and 2D radiography based treatment planning for intracavitary brachithery in carcinoma cervix (with Radiology and Radiotherapy)
31. A study of angiogenesis, proliferative activity and DNA ploidy in squamous cell carcinoma of larynx and their correlation with lymph node metastasis (with Radiology and Pathology)
32. The role of multidetector computed tomographic dacryocystography in patients with epiphora (with Radiology and RPC)
33. Incremental role of F-18 FDG PET-CT in evaluating response to primary treatment in advanced epithelial ovarian cancer patients (with Radiology and Nuclear Medicine)
34. Role of Minimally invasive guided therapy in treatment of focal liver Neoplasms (with Anaesthesiology and, Radiodiagnosis)
35. Role of Minimally invasive guided therapy in treatment of lung metastasis (with Anaesthesiology and Collaboration, General Surgery)
36. Role of Minimally invasive guided therapy in treatment of focal bone Neoplasms (with Anaesthesiology Orthopaedics)
37. Pilot study of p16, p54, k-ead, and c-erb2 expression in non neoplastic and gall bladder cancer epithelium. Funding 1.0 Lac- AIIMS- extra mural grant (with Medical Oncology and Pathology)
38. Role of neoadjuvant chemoradiotherapy in gall bladder cancer (with Medical Oncology, GI Surgery, Radiation Oncology)
39. 'Evaluation of vascular permeability by dynamic contrast enhanced—MRI and glucose metabolism by PET-CT scan as surrogate markers of angiogenesis in Osteosarcoma' (with Medical Oncology, Radiology, Nuclear Medicine, Orthopaedics and Pathology)
40. 'Role of PET-CT in osteosarcoma for initial staging and chemotherapy response evaluation; comparison with conventional radiological modalities (MRI scan, CT scan, and Bone scan) and histopathological tumour necrosis' (with Medical Oncology, Radiology, Nuclear Medicine, Orthopaedics and Pathology)

41. Evaluation of expression of P-Glycoprotein in Retinoblastoma (with Medical Oncology, Ophthalmology, Ocular Pathology, Ocular Biochemistry and Ocular Pharmacology)
42. Use of autologous bone marrow stem cells for myocardium regeneration (with Medical Oncology, Surgical Oncology, Radiation Oncology)
43. 'An open label, non-randomized phase II trial of oxaliplatin, docetaxel, and capecitabine in advanced esophageal and gastric adenocarcinoma' Protocol 0601 (with Medical Oncology and Ocular Pharmacology)
44. Evaluation of percentage purity of anti-cancer and anti-microbial compounds using HPLC (with Medical Oncology and Laboratory Oncology)
45. T cell repertoire in plasma cell myeloma. Dr Atul Sharma. Funded by DBT for 2007 (continue). Funds: Rs 13.0 lakh.
46. Endothelial progenitor cells as a biomarker of disease in multiple myeloma. Dr Atul Sharma. Funded by DBT for 2007 (continue). Funds: Rs 17 lakh.
47. Assessment of multi drug resistance pattern in AML and response to therapy. Funding extra mural grant, AIIMS, for 2006 (continue) Dr Atul Sharma. Funds: Rs 1.9 lakh.
48. Role of PET-CT in staging and evaluation of early response to chemotherapy in patients of neuroblastoma and rhabdomyosarcoma (with Medical Oncology and Nuclear Medicine and Paediatric Surgery)

PUBLICATIONS

Journal

1. Prakash, Gupta D, Jain R, Mishra S, Bhatnagar S. Suction catheter as a low-diameter emergency airway device in the setting of severe tracheal stenosis. *Anaesthesia Intensive care* 2008; **36**:461–2.
2. Agarwal R, Gupta R, Bhaskar A, Sharma A, Kumar L. Synchronous Presentation of Multiple Myeloma and Lung Cancer. *J Clin Oncol* 2008;**26**:5814–16.
3. Agarwal S, Das P, Karak AK, Kumar L, Ray R. Childhood follicular non-hodgkin's lymphoma: A case report and review of literature. *India J Med Paed Oncol* 2008;**29**:36–9.
4. Ali R, Raina V. Developing innovative models for North-South cooperation in clinical research: Experience from the INDOX Cancer Research Network. *Ann Oncol* 2008;**19**:831–3.
5. Prakash A, Jain R, Srikanti M, Mishra S, Bhatnagar S. Continuous NIPPV in Pneumocystis carinii pneumonia with acute severe hypoxaemic respiratory failure in an immunocompromised cancer patient: A case report. *Internet J Anesthesiol* 2007;**13**:1.
6. Anand M, Sharma S, Kumar R, Raina V. Diagnostic consideration in prolymphocytes in pleural fluid: A care report. *Acta Cytol* 2008;**52**:251–4.

7. Arora VK, Aggarwal S, Mathur S, Rath GK, Julka PK. Pleural mesothelioma: An unusual case diagnosed on pleural fluid cytology and immunocytochemistry. *Diagn Cytopathol* 2009. [Epub ahead of print]
8. Bahl A, Sharma DN, Basu J, Rath GK, Julka PK. Pre-treatment anemia evaluation in cancer patients attending radiotherapy clinic: Results from a single Indian centre. *Indian J Med Sci* 2008;**62**:417–20.
9. Bahl A, Sharma DN, Kumar M, Basu KS, Rath GK. Radiation-induced malignant gliomas: Is there a role for reirradiation? **In: regard to Paulino et al.** *Int J Radiat Oncol Biol Phys* 2008;**72**:304–5. [Epub 2008 feb 8]
10. Bahl A, Sharma DN, Rath GK, Julka PK. Small molecular inhibitor of transforming growth factor-beta protects against development of radiation-induced lung injury. *Int J Radiat Oncol Biol Phys* 2008;**72**:630 and **71**:1–9.
11. Bakhshi S, Bhat GM, Sen S, Sharma S, Sharma DN. Malignant medulloepithelioma of optic nerve head. *J Pediatr Hematol Oncol* 2008;**30**:478–80.
12. Bakhshi S, Bhat GM, Sharma SS, Sharma S, Sharma DN. Malignant medulloepithelioma of optic nerve head. *J Pediatr Hematol Oncol* 2008;**30**:478–80.
13. Bakhshi S, Meel R, Naqvi SG, Mohanti BK, Kashyap S, Pushker N, et al. Therapy and outcome of orbital primitive neuroectodermal tumour. *Pediatr Blood Cancer* 2009;**52**:544–7.
14. Bakhshi S, Padmanjali KS, Arya LS. Infections in childhood acute lymphoblastic leukemia: An analysis of 222 febrile neutropenic episodes. *Pediatr Hematol Oncol* 2008;**25**:385–92.
15. Bakhshi S, Siddhu T. Paediatric orbital and ocular lymphomas. *Ped Blood Cancer* 2008;**50**:940–1.
16. Bakhshi S, Singh P, Thulkar S. Bone involvement in paediatric non Hodgkin's lymphoma. *Hematology* 2008;**13**:348–51.
17. Bakhshi S, Singh P, Thulkar S. Bone involvement in paediatric non-Hodgkin's lymphomas. *Hematology* 2008;**13**:348–51.
18. Bhaskar A, Gupta R, Sharma A, Kumar L, Jain P. Analysis of bone marrow plasma cells in patients with solitary bone plasmacytoma. *Cancer Therapy* 2009;**7**:49–52.
19. Bhatnagar S, Gupta D, Mishra S, Thulkar S, Chauhan H. Bedside ultrasound-guided celiac plexus neurolysis with bilateral paramedian needle entry technique can be an effective pain control technique in advanced upper abdominal cancer pain. *J Palliat Med* 2008;**11**:1195–9.
20. Bhatnagar S, Mishra S, Gupta M, Srikanti M, Mondol A, Diwedi A. Efficacy and safety of a mixture of ketamine, midazolam and atropine for procedural sedation in paediatric oncology: A randomised study of oral versus intramuscular route. *J Paediatr Child Health* 2008;**44**:201–4.
21. Bhatnagar S, Mishra S, Srikanti M, Gupta D. Cancer pain management at a tertiary care cancer centre in India—a retrospective analysis of 3,238 patients. *J Opioid Manag* 2008;**4**:361–8.

22. Biswas A, Puri T, Goyal S, Gupta R, Eesa M, Julka PK, *et al.* Spinal intradural primary germ cell tumour—review of literature and case report. *Acta Neurochir (Wien)* 2009;**151**:277–84.
23. Biswas A, Puri T, Goyal S, Haresh KP, Gupta R, Julka PK, *et al.* Osseous Hodgkin's lymphoma—review of literature and report of an unusual case presenting as a large ulcerofungating sternal mass. *Bone* 2008;**43**:636–40.
24. Chaudhry R, Joshy L, Kumar L, Dhawan B. Changing pattern of Clostridium difficile associated diarrhoea in a tertiary care hospital: A 5 year retrospective study. *Indian J Med Res* 2008;**127**:377–82.
25. Chopra A, Anand M, Kumar R, Kalita D, Raina V. Unusual sighting: Amyloid deposits in bone marrow aspirate in multiple myeloma. *Indian J Pathol Microbiol* 2008;**51**:562–3.
26. Chopra A, Anand M, Kumar R, Kalita D, Raina V. Unusual sighting: Amyloid deposits in bone marrow aspirate in multiple myeloma. *Indian J Path Microbio* 2008;**51**:562–3.
27. Chopra A, Kumar R*, Kabra M, Anand M. Production of dysplastic platelets by peripheral blood megakaryoblasts in transient myeloproliferative disorder in Down syndrome. *Platelets* 2008;**19**:160–1.
28. Gupta D, Mazumdar A, Singh M, Mishra S, Bhatnagar S. Pre-insertion doppler: Another benefit of ultrasound imaging during central venous access. *Anaesthesia Intensive care* 2008;**36**:457.
29. Gupta D, Khurana H, Sharma SK, Goyal GN, Mishra S, Bhatnagar S. Macintosh Laryngoscope Aided Tongue Elevation eases Difficult LMA Classic™ Insertion. *Internet J Anesthesiol* 2008;**18**:1.
30. Gupta D, Mishra S, Bhatnagar S. Interventional Palliation: Hour of Need for Evolution of Palliative Medicine. *J Palliative Med* 2008;**11**(7):958.
31. Gupta D, Goyal GN, Chauhan H, Mishra S, Bhatnagar S. An initiative to end-of-life decisions in cancer care. *Internet J Pain, Symptom Control Palliative Care* 2008;**6**:1.
32. Gupta D, Babu NG, Khurana H, Thulkar S, Mishra S, Bhatnagar S. Pakter Curved Needle Set refines Ultrasound Guided Ganglion Impar Neurolysis. *Internet J Anesthesiol* 2008;**18**:2.
33. Dwary AD, Agarwala S, Thulkar S, Bakhshi S. Choledochal cyst with obstructive jaundice mimicking resistant abdominal Burkitt lymphoma. *Ped Blood Cancer* 2008;**50**:1080–1.
34. Singh G, Kumar P, Thulkar S. Enhancing the quality of radiological breast cancer images by computer aided image segmentation technique. *IJBST* 2008;**1**:10–16.
35. Singh G, Thulkar S, Seith A, Parshad R, Kumar P. An approach for assessment of tumor volume from mammography in locally advanced breast cancer. *Malaysian J Med Sci* 2008;**15**:37–41.
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37. Ganesan P, Kumar L, Hariprasad R, Gupta A, Dawar R, Vijayaraghavan M. Improving care in ovarian cancer: The role of a clinico-pathological meeting. *Natl Med J India* 2008;**21**:225–7.

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39. Ganesan P, Swaroop C, Ahuja A, Thulkar S, Bakhshi S. Early onset sinonasal mucormycosis during induction therapy of acute lymphoblastic leukemia: Good outcome without surgical intervention. *J Pediatr Hematol Oncol* 2009;**31**:152–3.
40. Ganesan P, Thulkar S, Rajan A, Bakhshi S. Solid variant of alveolar rhabdomyosarcoma mimicking non-Hodgkin lymphoma: Case report and review of literature. *J Pediatr Hematol Oncol* 2008;**30**:772–4.
41. Ganesan P, Thulkar S, Rajan A, Bakhshi S. Solid variant of alveolar rhabdomyosarcoma mimicking non-Hodgkin's lymphoma: case report and review of literature. *J Pediatr Hematol Oncol* 2008;**30**:772–4.
42. Garg M, Kanojia D, Khosla A, Dudha N, Sati S, Chaurasiya D, *et al.* Sperm-associated antigen 9 is associated with tumor growth, migration, and invasion in renal cell carcinoma. *Cancer Res* 2008;**68**:8240–8.
43. Ghose J, Manjunatha YC, Thulkar S, Bakhshi S. Avascular necrosis of femoral head in childhood acute myeloid Leukemia: Complication of chemotherapy without steroids. *Pediatr Blood Cancer* 2008;**51**:308–9.
44. Ghosh I, Thulkar S, Arora R, Bakhshi S. Multifocal osteomyelitis as a presenting manifestation of childhood acute myeloid leukemia. *J Pediatr Hematol Oncol* 2009;**31**:75–6.
45. Ghosh I, Thulkar S, Arora R, Bakhshi S. Multifocal osteomyelitis as a presenting manifestation of childhood acute myeloid leukemia. *J Pediatr Hematol Oncol* 2008;**31**:75–6.
46. Ghosh J, Manjunatha YC, Thulkar S, Bakhshi S. Avascular necrosis of femoral head in childhood acute myeloid leukemia: Complication of chemotherapy without steroids. *Pediatr Blood Cancer* 2008;**51**:308–9.
47. Goyal S, Puri T, Gupta R, Julka PK, Rath GK. Accessory breast tissue in axilla masquerading as breast cancer recurrence. *J Cancer Res Ther* 2008;**4**:95–6.
48. Goyal S, Puri T, Julka PK, Rath GK. Excellent response to letrozole in brain metastases from breast cancer. *Acta Neurochir (Wien)* 2008;**150**:613–4.
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PATIENT CARE

Total bed strength	182
Medical Oncology (Regular and short-daycare)	78
Radiation Oncology	37
Surgical Oncology	55
Palliative Care Unit	06
ICU (5th Floor)	06

Total OPD attendance	74,280
(Refer table below for details)	
New cases	8,793
Old cases	65,487
Total Admissions	23,822
Regular	4,786
Short(aycare)	19,036
Operation theatre services	6,651
Major	632
Minor	6019
Electro cardiogram (ECG)	2,265

Description of various OPD/Clinics at IRCH with work load during Year 2008–2009

No.	Name of the OPD/Clinic	New Registration			Revisits		
		Male	Female	Total	Male	Female	Total
1.	Adult Medical Oncology Clinic (AMOC)	555	380	935	9768	10,044	19,812
2.	Adult Lymphoma Leukemia Clinic (ADLL)	306	197	503	7,352	3,082	10,434
3.	Breast Cancer Clinic	41	419	460	159	3,638	3797
4.	Bone and Soft Tissue Clinic	144	90	234	519	341	860
5.	Gastro-Intestinal Clinic	283	265	548	880	684	1,564
6.	Gynaecology Clinic 'A'	–	223	223	–	881	881
7.	Gynaecology Clinic 'B'	–	603	603	–	2,108	2,108
8.	Head and Neck (Surgery)-A	186	54	240	1,161	310	1,471
9.	Head and Neck (ENT)-B	808	148	956	3,283	598	3,881
10.	Lung Cancer Clinic	54	15	69	184	41	225
11.	Ophthalmic Clinic	34	19	53	117	90	207
12.	Paediatric Medical Oncology Clinic (PDMOC)	112	34	146	866	262	1,128
13.	Paediatric Lymphoma Leukemia Clinic (PDLL)	34	14	48	536	156	692

14. Paediatric Surgery Clinic	87	48	135	1,242	566	1,808
15. Pain Relief Clinic	180	115	295	2,322	1840	4,162
16. Pain and Palliative Care Clinic (RT-II)	04	01	05	13	52	65
17. Radiotherapy Clinic	1,579	1,315	2,894	5,331	5,182	10,513
18. Surgical Oncology Clinic	118	94	212	338	328	666
19. Transplant Clinic	04	05	09	116	32	148
20. Urology Malignancy Clinic	210	15	225	958	107	1,065
TOTAL	4,739	4,054	8,793	35,145	30,342	65,487

Distribution of new patients according to place of residence for the year 2008–2009 (Total=8726)

Assam	45
Arunachal Pradesh	02
Andhra Pradesh	08
Bihar	1,072
Chandigarh	0
Chattisgarh	13
Delhi	2,984
Dadar Nagar Haveli	0
Daman and Diu	07
Gujrat	02
Goa	01
Haryana	1,051
Himachal Pradesh	40
Jammu and Kashmir	73
Jharkhand	101
Kerala	09
Karnataka	02
Meghalaya	07
Manipur	15
Madhya Pradesh	85

Mizoram	01
Maharashtra	06
Nagaland	09
Orissa	63
Punjab	79
Rajasthan	173
Sikkim	26
Tripura	08
Tamil Nadu	03
Uttar Pradesh	2,403
Uttarakhand	363
West Bengal	75
Distribution (Other countries) for the year 2008–2009 (Total=67)	
Afghanistan	05
Bangladesh	02
Canada	01
Fiji	01
Iran	01
Kenya	01
Nepal	55
Pakistan	01

Anaesthesiology Services

Facilities available in the department:

1. ICU facilities for post operative patients.
2. PAC and pain and palliative care clinic is run four times in a week in addition to the anaesthesiology related work.
3. Home support to patients with advanced malignancies by NGOs and keeping monthly meeting with them to know follow up reports
4. Providing critical care to patients of radio therapy, Medical Oncology, and Surgical Oncology.
5. Facility for Paediatric Radiotherapy.
6. Anaesthesia for minor paediatric oncology procedures like Bone marrow biopsy, Central line insertion, Bone marrow Harvesting and others.

7. Facility for Paediatric radiological procedures under anaesthesia, Radio frequency ablation for liver, lung, and breast carcinoma.

Newer Facility

1. Interventional pain management techniques: PNFS (Peripheral Nerve Field Stimulator) and percutaneous vertebroplasty.
2. PNFS in orbital neuralgia, nerve sheath tumour and percutaneous vertebroplasty in vertebral collapse in bone metastatic pain.
3. Started a certificate course named 'Indian Association of Palliative Care's Certificate Course in Palliative Care'.
4. Unit of Anesthesiology, Dr B.R.A IRCH is Nodal Center for conducting Indian Association of Palliative Care's Certificate Course in Palliative Care.

Laboratory oncology services (Total=65,475)

Haemogram (Hb, TLC, Platelets)	49,285
Peripheral blood smear	5,701
Bone marrow aspirate and touch preparation	2,650
Cytochemistry	659
Serum protein electrophoresis	1,649
Immunofixation	382
Urine electrophoresis	341
ESR	2,007
Flow	2,699
Cytospin	02
APAAP41	41
FNAC Lymph Node	59

Medical Oncology

Total chemotherapy in daycare	19,036
OPD chemotherapy	8,871
Admission	
Ward4786 Day care	19036
Total	23,822
OPD Procedure	12,864

Diagnostic and therapeutic procedures

Bone marrow biopsy	502
Bone marrow aspiration	660

Pleural tapping	79
Intra thecal methoxerate	767
Skin biopsy	3
Cerebral spinal fluid for cytology	36
Catherization	19
Other Supportive Services	
Suture removal	93
Laboratory services	
Cytogenetic reports	373
Cryo-preservation/Store at 80°C	31
Storage of PBSC at 4°C	60
Infusion of PBSC	85
Viability of PBSC	85
MNC	91
CD-34	91
Alloogenic/BMT/PBS CT	05
RT-PCR	159
GM ELISA	197
Apheresis	
Single donor platelets (SDP)	1,089
Harvest peripheral blood stem cell (PBSE)	90
Haemogram	11,710

Progress of Department

1. Vast all round improvement in the department since April 2007.
2. A new look daycare of 30 beds is active and working well, 70-80 patients receive treatment daily in this facility.
3. Fully functional transplant floor with 9 rooms on 7th floor.
4. Fully functional 4 beds aphaeresis facility on 1st floor.
5. Anticancer Drug supplies to ward and OPD patients vastly improved.
6. The department performed approximately 70 transplants in this year.
7. Full-fledged clinical trials facility has been initiated on 4th floor.
8. Computerization of Day Care and Record Section in full swing.

Medical Physics–Department Statistic = 4,600

Number of blood bags irradiated	2,333
Quality assurance tests done on x-ray machines	1,275
Quality test done on film processor at room no.10 (X-ray)	517
QA test done on film processor at room no. 46 (X-ray)(US, Mammo)	14
Radiation output measurements in X-ray units	163
Quality test done on film processor at room no. 77 Main Hospital (X-ray)	279
Radiation protection survey (measurement) of X-ray installation	17
Advice in inadvertent exposure in pregnancy	02

Radiodignosis = 21,998

Name of procedure	Number
X-rays (Routine)	11,190
Ultrasound	3,938
CT Scan	5148
Mammography	682
Intervention/IVP	1,034
Special investigations	06

Radiotherapy Services = 1,62,177

Total cases on radiotherapy	70,444
Total fields on radiotherapy	1,78,326
Cases on brachytherapy	1,040
Treatment planning and simulations	5,193
2D and 3D distribution	641
Compensators	438
Shielding blocks, immobilization devices, moulds	1,573
Radiation review clinic	7,263
Number of cases on chemotherapy	8,624

Number of injections 44,822

Radio frequency ablation (RFA) 4

Procedures and supportive services (Treatment room No. 15) = 12,864

Total Deaths = 281

Surgical Oncology

Facilities available in department

Minor Operation Theatre. Diagnostic and minor therapeutic procedures including lymph node biopsy, punch/trucut biopsy, excision of skin/oral tumours, soft tissue tumors, feeding jejunostomy, colostomy, insertion of Hickman's catheter/chemo ports for long term Chemotherapy are available in the Minor OT.

Endoscopy services (diagnostic and therapeutic)

Diagnostic Endoscopy: Fibre optic upper G.I.endoscopy, side viewing duodenoscopy, Colonoscopy, Sigmoidoscopy, Bronchoscopy, Cystoscopy, Nasopharyngo laryngoscopy and laparoscopy.

Therapeutic Endoscopy: Stricture dilatation, Intra luminal Radiotherapy, Stenting and Percutaneous Endoscopic Gastrostomy.

Major cancer operation theatre

Facilities available for all major cancer surgeries including radical resection and reconstruction of tumours involving head and neck, GI tract, breast, bone and soft tissue, gynaecological malignancies and thoracic tumours. Advanced reconstructive surgical procedures including microvascular free tissue transfer are also available.

Advanced state of art technologies such as LASERS, CUSA, Harmonic Scalpel and Intra Operative Radiotherapy are also available.

Minor operations and endoscopic procedures performed: 6,019

Major cancer operations performed 632

Delhi Cancer Registry

1. The Delhi Cancer Registry is a Population Based Cancer Registry covers an urban area of 891.09 Square kilometers of Delhi Municipal Corporation, New Delhi Municipal Committee and Delhi Cantonment and 29 census town with an estimated population of 1,54,88,442 (Males : 85,19,141, Females :69,69,301) persons in year 2005.
2. The crude cancer incidence in Delhi during the year 2005 among males and females are 80.8 and 84 per 100,000 persons respectively.
3. The first five most common sites of cancer in Delhi among males during 2005 are lung (14.2), prostate (9.4), larynx (9.3), tongue (7.5) and mouth (6.1) as per World Age adjusted incidence rates per 100,000 persons.

4. The five leading sites of cancer in females during 2005 are breast (32.2), cervix uteri (18.9), ovary (7.5), gall bladder (7.4) and corpus uteri (4.7).

Community Service

Professor G.K. Rath

- Participated in the ‘State level awareness programme on prevention of Cancer’, Agartala; 21 April 2008.
- TV Interview on ‘Oncology and cancer management’ in Zee News, 17 December 2008.
- Invited as the Guest of honor and distinguished expert at the cancer awareness meeting/camp to celebrate the World cancer day, IGIMS, Patna; 4 February 2009.
- Delivered a talk on ‘Cancer in women’, All India Radio.

Professor P.K. Julka

- Television Programme on Radiosurgery: Total Health, Delhi Doordarshan News, 27 December 2008.
- Television Programme on Breast Cancer Recent Advances, Delhi Doordarshan, 5 December 2008.
- AIR Phone-in Programme on Oral Cancer, 1 December 2008.
- Television Programme on Cancer Awareness on Aaj Tak TV, 24 October 2008.
- Television Programme on Cancer on Delhi Doordarshan, 16 June 2008.
- Television Programme on Cancer on Delhi Doordarshan, 23 May 2008.

Professor N.K. Shukla

- Dr N.K. Shukla was involved in care and advice to the ostomates (patients of colostomy, ileostomy and Urostomy).

Dr Pratik Kumar

- Appeared as an expert in an article published in Times of India, 14 March 2009 regarding medical X-ray investigations and radiation doses involved in medical imaging.

Dr D.N. Sharma

- Participated in a Live Show on DD TV (DD News) on Breast Cancer, October 2008.

AWARDS AND HONOURS

Dr G.K. Rath delivered the Farooq Abdullah Oration ‘Cancer Control Programme in India’, International Conference of Medical Physics, Radiation protection and Radiobiology (ICMPRRR-2K9) and the 14th Annual convention of Northern chapter of Medical Physicists of India, SMS Medical college, Jaipur, 10 February 2009; Sir Dorabji Tata Oration Award, ‘Development of Radiation Oncology facilities in India-My Journey’, Combined biennial conference of Indian Society of Oncology and Indian Society of Medical and Paediatric Oncology, Chennai, 14 February 2009. Leader of the

team, Department of Atomic Energy, Government of India to visit Wahkaji Village, Meghalaya for KPM Uranium mining and milling project, Mawthabah, Meghalaya; 16–19 February 2009.

Chairman of Project Review and Steering Group of the project entitled ‘Development of Data Management system for Oncology with special reference to RCC Thiruvananthapuram, Data’, Centre for Development of Advanced Computing (C-DAC), organized by the Ministry of Communications and Information Technology, Government of India; Expert group of Cancer Screening programme of Gujrat state, Government of Gujarat; Steering committee of World Health Organization-Expert Committee workshop on Patterns of care and survival and studies on breast cancer, cancer cervix and head and neck cancers at the National Institute of Advanced Studies (NIAS), Indian Institute of Science campus, Bangalore, 1–2 December 2008; Curriculum committee for MD Radiotherapy of Medical Council of India; Steering Committee of National Cancer Registry Programme, ICMR; ICMR task force on cancer management guidelines; Project review and steering group of the project of ministry of Information and Technology, Government of India on ‘Design and development of Electronic portal imaging device for radiation therapy’ being carried out by CSIO and TSG integration; Ethics Committee, Institute of Cytology and Preventive Oncology (ICPO), ICMR;

Member of Expert Committees/Bodies of the following:

- Task force subcommittee on review of guidelines for the management of stomach cancer of the Indian Council of Medical Research, New Delhi.
- Scientific Advisory Group (SAG), Division of NCD, ICMR, New Delhi.
- Academic Senate of Manipal University.
- Appointed by MCI to inspect the standard of examination and other teaching facilities available at Indira Gandhi Government Medical College, Shimla for the recognition of MD Radiotherapy granted by Himachal Pradesh University.
- Expert to select the various faculty posts in Radiotherapy Department at the Uttarakhand Forest Hospital Trust, Haldwani and Nainital.
- External examiner for MD (Radiotherapy), at Nizam’s Institute of Medical Sciences, Hyderabad; 15 April 2008.
- Inaugrated the National workshop on ‘Calibration of HDR Brachytherapy source’, Chennai; 5 September 2008.
- External expert for the meeting of the board of studies of the department of Radiotherapy, SGPGI, Lucknow; 18 November 2008.
- External examiner for MD (Radiotherapy), SGPGI, Lucknow; 19 November 2008.
- Technical Advisory Group (TAG) for the demo project on Screening technologies to advanced rapid testing (START) project on a new HPV testing (Fast HPV or Care HPV) for the screening of cervical cancer in a rural community at Noida of ICPO.
- External examiner for MD (Radiotherapy), PGIMER, Chandigarh; 4 December 2008.

- External examiner for MSc (Radiology with Radiotherapy as special subject), PGIMER, Chandigarh; 4 December 2008.
- Expert group of Ministry of Health and Family Welfare to examine the issues regarding the taking over/funding and management of Dr B. Borooah cancer institute, Guwahati; 10–11 December 2008.
- External examiner for MD (Radiotherapy), Christian Medical College, Ludhiana; 8 January 2009.
- Chief Guest for the felicitation programme of the Society for cancer research and communication, Mumbai; 10 January 2009.
- Expert member for the technical specification committee meeting for the procurement of linear accelerator, AHRCC, Cuttack; 12 January 2009.
- Expert in the technical bid evaluation committee meeting of Chittaranjan National Cancer Institute to evaluate the technical offers of dual energy linear accelerator, Kolkatta; 22 January 2009.
- Invited as the Guest of honor during the inauguration function and to chair the first scientific session of the international conference of medical physics, Radiation protection and Radiobiology (ICMPRRR-2K9) and the 14th Annual convention of Northern chapter of Medical physicists of India, SMS Medical College, Jaipur; 10–11 February 2009.
- Purchase Management Committee, Delhi State Cancer Institute (DSCI).
- Working Group for Medical Electronics and Telemedicine, Department of Information Technology, Government of India, New Delhi; 25 March 2009.
- Governing Bodies of four Regional Cancer Centres, Bikaner, Allahabad, Cuttack and Agartala.
- Governing Body of Delhi State Cancer Institute, New Delhi.
- Safety Review Committee for Application of Radiation (SARCAR), Atomic Energy Regulatory Board (AERB), Government of India.
- The sub group of Ministry of Information and Technology, Government of India to review the progress of the Jai Vigyan project, Ministry of Science and Technology, Government of India on development and deployment of 6 MV Medical Linear Accelerator.
- Standing Committee on Radiotherapy Development Programme, Ministry of Health and FW, Government of India.
- Rotary Cancer Foundation, Delhi.
- Advisory Committee, Dr BRA IRCH.
- Core Committee Member of the projects under the North East Initiative of the Indian Council of Medical Research.
- Project Review Committee on Working Group of Medical Electronics, Ministry of Information Technology, Government of India.
- Project Review Committee, Oncology:- Indian Council of Medical Research, New Delhi.

- Scientific Advisory Committee of three Institutes (a) Gujarat Cancer and Research Institute, Ahmedabad, (b) Institute of Pathology, ICMR and (c) Institute of Cytology and Preventive Oncology, ICMR.
- Member of Board of Studies of Radiotherapy and Radiation Medicine of Banaras Hindu University, Varanasi.

Advisory Editor of *Journal Academy of Hospital Administration*. Member of Editorial Board of *Indian Journal of Chest Disease and Allied Sciences*. *Indian Journal of Cancer*. *International Journal of Biosciences and Technology*. *Journal of Contemporary Brachytherapy*.

Member of Consulting Editors. *Journal of Cancer Research and Therapeutics*. Reviewer for *Clinical Oncology*. *International Journal of Biosciences and Technology*. *Eastern Journal of Medicine*

Professor P.K. Julka is member/awardee Chairperson, ICRO (Indian College of Radiation Oncology), 2008–2009. Inspection of RGCI, New Delhi for recognition of BSc Radiotherapy Course, 2008. Expert for starting MCh in Gynaecology at Maulana Azad Medical College, New Delhi, 2008. Examiner for MD Radiotherapy, SGPGI, Lucknow; 25 April 2008. Examiner for MD Radiotherapy, AIIMS, New Delhi; 12 May 2008. Examiner for M.D. Radiotherapy, Rohtak Medical College; 14 June 2008. Examiner for M.D. Radiotherapy, Bir Hospital, Kathmandu, 31 August- 1 September 2008. Examiner for M.D. Radiotherapy, SGPGI Lucknow, 12 November 2008; Member of Editorial Board *Journal of Cancer Research and Therapeutics*.

Professor V. Raina Guiding 5 DM students in their research. Principal guide of one PhD student. Co-guide of 4 PhD students.

Professor B.K Mohanti is a member/ awardee Nominated as National Faculty for the Institute of Palliative Medicine, Calicut, by Indian Association of Palliative Care Reviewer of manuscripts for *Indian Journal of Cancer*, *National Medical Journal of India* and *Indian Journal of Palliative Care*. As expert in the panel of ICMR on ‘Impact of cell phone towers on public health’, meeting, ICMR, New Delhi; 4 July 2008. Worked as External Examiner for IAPC certificate course examination conducted, PGIMER, Chandigarh; 10 August 2008 and 11 January 2009.

Professor Lalit Kumar Chief Guide for 4 PhD students, Co-guide–2 PhD students, Guide and Co-guide for DM (Medical Oncology) and MD students in the department of Pharmacology, Ophthalmology, and of MSc Student in Biochemistry; External examiner, DM Medical Oncology, Dr MGR Medical University, Tamilnadu and Nizam’s Institute of Medical Sciences, Hyderabad; Examiner for evaluation of PhD thesis (2008–2009), University of Madras, Chennai; Appraiser and examiner for DNB in Medical Oncology (2008); Examiner for evaluation of MD thesis (Medicine), PGIMER, Chandigarh; Member Expert committee (Task Force), Department of Biotechnology, Government of India to monitor/review the projects entitled ‘Curcumin and clinical trials in cancer and Mw related projects’ for the year 2008–2009; Chairman, Expert Committee for Curriculum in Medical Oncology and member, expert committee for curriculum in Gynaecologic Oncology for making curriculum for award of DM/MCh, Invited by Medical Council of India. Reviewer for Cancer related Research Projects submitted to the Department of Biotechnology, ICMR and other agencies. Member selection Committee to interview candidates for Commonwealth scholarship 2008. Reviewer for the Postgraduate Medical Journal, *National Medical Journal of India*, *Paed Hematology Oncology*, *Indian J Biochemistry*. Invited expert member for Ethics Committee to review projects related to Oncology (Dharmshila

Cancer Hospital, Delhi). Invited expert member for the management committee of the Indian Cancer Society, New Delhi. Member, advisory board of scientific research Committee, Cancer Institute, Adyar, Chennai (Madras). Organized (a) Symposium on Life style and Cancer: 28 November 2008 and (b) Symposium on Ovarian Cancer; 27–28 March 2009.

Dr Sameer Bakhshi, Bharat Jyoti Award on the Global Friendship Day, New Delhi; 2 January 2009 by India International Friendship Society.

Dr Sushma Bhatnagar, received a travel grant from DST to present a poster entitled ‘Total freedom from cancer pain at tertiary care centre in India. A retrospective analysis of 3238 patients’, 27th Annual Scientific Meeting of the American Pain society, 8–10 May 2008. Tampa, FL, USA and 23rd Annual Meeting, FL, USA, 1–4 2008. Received a travel grant to present a Poster entitled ‘Ultrasound guided Blocks in cancer patients’, 12th World Congress on Pain Glasgow, Scotland, UK; 17–22 August 2008;. selected as an Editor of Indian Journal of Palliative Care; Organizing Secretary of 16th International Conference on Indian association of Palliative Care, AIIMS; 13–15 February 2009.

Dr Pratik Kumar was nominated as Referee for the manuscripts submitted to the *Journal Radiation Measurements* published by Elsevier, Netherlands. He was nominated Editor, Medical Physics Chronicle, a newsletter of Northern Chapter of Association of Medical Physicists of India (AMPI-NC). Continued to be the member of the Editorial Board of Journal of Medical Physics; Member of Electro-medical Equipment Sectional Committee, BIS, New Delhi; Member, Executive Committee, Association of Medical Physicists of India (AMPI), Referee for Journal of Medical Physics, Examiner for Annamalai University, Chidambaram, Tamilnadu, Questionsetter for Homi Bhabha National University, Mumbai and Examiner for Sher-I-Kashmir Institute of Medical Sciences, Srinagar.

Dr Seema Mishra received a travel bursary by Royal College of Physicians for ?? weeks Fellowship, Sir Michael Sobell House, Churchill Hospital, Oxford, UK; 2008; Advanced Course in Pain and Symptom Management, Sir Michael Sobell House, Churchill Hospital, Oxford, UK; 2–3 July 2008’ Member of Editorial Reviewer Board of *American Journal of Hospice and Palliative Medicine*.; Joint Secretary of 16th International Conference on Indian association of Palliative Care, AIIMS; 13–15 February 2009; attended national workshop of faculty group, Calicut; 31 October–1 November 2008. external examiner for IAPC certificate Course, Bhagavan Mahavir Cancer Hospital and Research centre, Jaipur; 10 January 2009 and Acharya Harihar RCC pain Clinic, Cuttack, Orrisa; 31 January 2009.

Dr D.N. Sharma Awarded UGC Travel grant for attending RSNA Conference 2008.

SIGNIFICANT EVENTS

Anaesthesiology

- Organised 16th International Conference on Indian association of Palliative Care 13–15 February 2009;
- Organized 8th Foundation Course on Palliative Care on 15–16 January 2009 for Medical Practitioners and Nursing Staff treating Cancer patients in and around Delhi;
- Nodal centre for IAPC certificate course in Palliative Care at DrBRA, IRCH

Radiodiagnosis

- **Dr Sanjay Thulkar:** elected as joint secretary of 'Indian Society of Vascular and Interventional Radiologists' for year 2008-09
- Dr Sanjay Thulkar: Nominated as the member of the Ethics Sub-committee, AIIMS.
- Dr Sanjay Thulkar: Nominated as the member of Ministry Of Health and Family Welfare advisory committee for strengthening of the civil hospital, Nahrlagun, Arunachal Pradesh.

Radiotherapy

- Started Image guided radiotherapy (IGRT) and stereotactic body radiotherapy (SBRT).
- Started 4D CT Scan for radiotherapy planning purposes.
- Started extracorporeal bone irradiation in bone tumours during surgery.

VISITING SCIENTISTS

1. Dr Anders Brahme, Radiation Physicist, Karolinska Institute, Sweden.
2. Dr Ashwatha Narayana from New York medical centre, USA.
3. Dr Sant Chawla medical oncologist from Sarcoma Oncology Centre in Santa Monica, CA.
4. Dr Anders Ahnesjo, Adjunct professor, Medical Radiation Physics, Uppsala University, Uppsala Sweden.
5. Dr Geoff Hank: Professor of palliative medicine, University of Bristol, UK.
6. Dr Ramarao Pasupuleti: Faculty at the Pain Institute, Whittington, USA.
7. Ms. Liliana De Lima: Executive director, International association for hospice and palliative Care (IAHPC), USA.
8. Dr Jan Stjernsward: Faculty at Borringe Kloster, Sweden.
9. Dr Max Wattson: Consultant Palliative Medicine, Northen Ireland Hospice.
10. Dr Bert Broeckert: Professor at Interdisciplinary Centre for the study of religion and worldview, K.U. Leuven, Belgium.
11. Dr Kumar Ballani, USA.

ADMINISTRATION

Chief Professor G.K. Rath

Administration Officer Sh. Ram Rattan

Total No. of Staff of Dr BRAIRCH including Faculty:

Faculty 20

Group A and B 52

Technical staff 96

Nursing staff	183
Resident staff (SR, JR)	60
Stores staff	06
Ministerial staff	29
Group D staff	84
Daily wages	02
PTSG	04
Outsourced sanitation staff	167
Outsourced security staff	58½ duties per day
Outsourced data entry operators	10

DELHI CANCER REGISTRY

Scientist VI Dr B.B. Tyagi

FINANCE

Accounts Officer Shri D.P. Gangal

STORES

Assistant Store Officer Shri T.R. Mahajan

10.5 Neurosciences Centre

Chief

Hari Hara Dash

NEUROANAESTHESIOLOGY

Professor and Head

Hari Hara Dash

Professor

Parmod K. Bithal

Additional Professor

Arvind Chaturvedi

Associate Professor

Rajendra Singh Chouhan

Assistant Professors

Mihir Prakash Pandia

Girija Prasad Rath

Hemanshu Prabhakar

NEUROLOGY

Professor and Head

Madhuri Behari

Professors

Kameshwar Prasad

MV Padma Strivastava

Associate Professor

Manjari Tripathi
Achal Srivastava

Sumit Singh
Garima Shukla
Mamta Bhushan Singh

Vinay Goyal
Rohit Bhatia

NEUROSURGERY

Professor and Head

B.S. Sharma

Professor

A.K. Mahapatra (on deputation)

Associate Professors

S.S. Kale

P.S. Chandra
Aditya Gupta

A. Suri

Assistant Professors

Rajender Kumar

Manmohan Singh

Manish Sharma

Assistant professors (JPN Trauma Centre)

D.K. Gupta

D. Aggarwal
G.D. Satyarthee

S. Sinha

NEURORADIOLOGY

Professor and Head

N.K. Mishra

Additional Professor

Shailesh B Gaikwad

Assistant Professor

Ajay Garg

NEUROPATHOLOGY LABORATORY

Professor

Chitra Sarkar

Associate Professor

M.C. Sharma

Assistant Professor

Vaishali Suri

EDUCATION

Neurosurgery

- MCh Neurosurgery Programme: Post MS 3 years, Post-MBBS 6 years.
- Visiting fellowship Programme: 4 fellows visited the department during 2008–2009.
- Experimental Microneurosurgery Lab: Fully functional during this period.
- PhD Programme : 1 student.

Neurology

Actively involved in all teaching programmes of the department of Neurology and the institute, training undergraduate and post-graduate and postdoctoral (DM) students. This includes guidance for preparation and presentation of seminars, journal clubs and clinical combined rounds of the department.

- Trained one faculty member from SMS Hospital, Jaipur in reading and reporting PSGs and the basics of EEG.
- Following overseas students came for short- term training:
 - Ms Johanna Hauer, UK; 16–27 February 2009.
 - Ms Divya Mehta, New Zealand; 16–27 February 2009.
 - Ms Peeyusha Nalkara, Switzerland; 1 December 2008–17 January 2009.
 - Dr Sayed Vaqur Ahmed, Nepal; October 2008–March 2009.
 - Dr Robin Maskey, Nepal; October 2008–March 2009.

Neurosurgery

Invited Faculty

- Sarveshwari Memorial Orator: Professor Anil Nanda, Chief of Neurosurgery, LSU HSC, Louisiana, United States.
- Microneurosurgery Workshop faculty: Professor V. Rajshekhar, Professor and Head of Neurosurgery, CMC Vellore.

Conference organized

- AIIMS Annual Microneurosurgery Workshop; February 2009. Chairman: Professor B.S. Sharma, PS Chandra.

Lectures delivered

- **Professor B.S. Sharma**, WFNS , Goa, July 2008; Annual Conference of Skull Base Surgery Society of India, Mumbai; October 2008; Annual Conference of Delhi Neurological Association; February 2009.
- **Dr S.S. Kale** Spine Workshop, National Hospital, Colombo; AO Spine Complications in Spine Surgery Course, Strasbourg, France.
- **Dr P.S. Chandra** attended CME, NSI, Pune, 2008; Electrocorticography, Role and controversies; CV junction anomalies; ISSICON; Shimla, 2008; CME, IEA, Patna, Bihar Chapter, Epilepsy Surgery; Guest Faculty; GEMIND; Guidelines for epilepsy surgery, India, IES.
- **Dr A. Suri** was invited to 15th Annual Meeting of the Japanese Society of Neuroendoscopy, Tokyo; 21–22 November 2008; 5th International Congress of the World Federation of Skull Base Societies, 19th Annual Meeting of the North American Skull Base Society joint meeting, Vancouver, Canada,.
- **Dr A. Gupta** Gamma Knife Society meeting, Quebec, May 2008 for presentation on GK therapy of Trigeminal Neuralgia; Conference of Indian Society for Cerebrovascular Surgery, Kolkata; October 2008.

Neuroanaesthesiology

Postgraduate teaching

- Six MD-Anaesthesiology students (Two months each) from Anaesthesiology department, AIIMS, and 4 PG students (3 from Lady Hardinge Medical College New Delhi-Two weeks each and 1 from VSS Medical College, Burla) received neuroanaesthesiology training.
- Twelve Senior Residents (8 from Department of Anaesthesiology, AIIMS and 4 from Bhim Rao Ambedkar Institute Rotary Cancer Hospital) received training in Neuro-anaesthesiology for variable periods as a part of interdepartmental rotation on mutual exchange basis.
- One PDCC (Neuroanaesthesiology) student from Bangur Institute of Neurosciences and Psychiatry (15–30 April 2008); 3 DNB (Anaesthesiology) students, 2 from ESI Hospital, New Delhi (11–25

August 2008); one from Tata Motors Hospital, Jamshedpur (05–19 January 2009) received training in Neuroanaesthesia-physiology.

- Once a week (Saturdays) Seminars, Journal club and case presentations as a part of departmental teaching programme were organized.

Short-term training

1. Dr Pryambodho, from Indonesia (01 April–30 June 2008).
2. Dr R. Hazarika, from Guwahati Medical College (12 June–23 July 2008).
3. Dr M.K. Jain from Institute of Human Behaviour and Allied Sciences, New Delhi (02 September–01 August 2008).

Neuroradiology

Undergraduate teaching

Faculty of the department was part of undergraduate teaching curriculum

DM Neuroradiology course started in July 2001. Two candidates were registered for this course.

Short-term training

One technician and one doctor had short-term training in the department. Residents from Neurology, Neurosurgery and Radiology had received training on rotation in this department. BSc student from Radiology department received training on rotation.

Neuropathology Laboratory

There was no change in the undergraduate and postgraduate teaching programme

Dr Kachnar Verma, Allahabad Medical College, short-term training in Neuropathology for three months.

Continuing Medical Education (CME)

Neurology

- Second Asian and Oceanian Congress of Parkinson's disease and movement disorders, New Delhi; 15–17 February 2009.
- Seventh Asia Pacific Parkinson's Association Symposium, New Delhi; 15–16 February 2009.
- Workshop Meta-analysis, BP Koirala Institute of Health Sciences, Dharan; 11–12 August 2008.
- Two 'Workshops on epilepsy and EEG', under IES Agenesis, CMET, AIIMS; 5–6 July and 27–28 December 2008.
- A patient awareness programme on Multiple Sclerosis, AIIMS; 16 January 2009 in collaboration with multiple sclerosis society of India.

- 9th Annual Conference of Indian Epilepsy Association and Indian Epilepsy Society (ECON), India Habitat Centre, New Delhi; 21–22 October 2008.

Lectures delivered by departmental faculty, residents and staff (only in CME programmes): Invited talks and panel discussions:

Dr Madhuri Behari

- Presidential Oration at 16th Annual Conference of Indian Academy of Neurology; October 2008
- South Asian Conference of Neurosciences, Bangladesh Medical College, Dhaka; November 2008.
- Presidential oration at 16th Annual Conference of Indian Academy of Neurology; October 2008.

Dr K. Prasad

- Fourth National Congress of Indian Stroke Association, Hyderabad; 13–15 March 2009.
- Minimum Statistics for Survival.
- Critical Analysis of medical papers to help in practice.
- Stem Cell Therapy for Stroke.
- ‘Acute Ischemic stroke—controversies and innovations in Thrombolysis’, Annual Conference of Delhi Neurological Association, AIIMS, New Delhi; 7–8 February 2009.
- ‘Thrombolysis in Stroke: Indian Perspective’, Annual Conference of APICON 2009, NOIDA, UP; 29 January 2009.
- Invited as a Tutor for the 7th Asia Pacific Evidence-Based Medicine and Nursing Workshop and Conference at National University of Singapore; 13–16 January 2009.
- ‘Association of Socioeconomic Status with In-hospital Mortality and disability after Stroke: A retrospective hospital-based Cohort Study’. Annual Conference of Indian Academy of Neurology, New Delhi; 22–25 October 2008.
- ‘Fever is associated with doubling of odds of short-term mortality in ischaemic stroke’, 6th World Stroke Congress, taking place, Vienna, Austria; 24–27 September 2008.
- Invited to facilitate the 14th Oxford Workshop on Teaching evidence-Based Practice, Oxford, UK; 8–12 September 2008.

Dr Manjari Tripathi

- ‘Clinical Aspects of Dementia’. 1st Asian and 2nd National Medical Students Research Conference, ‘Moving Academy of Medicine and Biomedicine’, Pune; 20–24 April 2008.
- Sleep Architecture Revisited—‘What is it and how is it relevant in psychiatry and Neurology?’ (Speaker), IHC-Delhi Neuroscientists meet; 22 June 2008.
- CME Seminar on Medical Emergencies, ‘Status Epilepticus and its Management’ Chandimandir Command Hospital (HR); 13–14 September 2008.

- 11th National Level CME on ‘Applied Radiology—Clinical aspects of Intractable epilepsy’, Allahabad (UP) as MANM ORATION Speaker; 28 September 2008.
- ‘AOCN-IANCON 2008 Delhi’, ‘Management of Uncontrolled Epilepsy’, 23 October 2008.
- ‘AOCN-IANCON 2008 Delhi’, ‘Management of Dementia’; 24 October 2008.
- Talk on ‘Advanced therapeutic hopes of epilepsy’, Ahmedabad Gujrat Neurocon; 15 November 2008.
- Talk on ‘Seizure semiology—videos on epilepsy’, Ahmedabad Gujrat Neurocon; 16 November 2008.
- Talk on ‘Pseudoseizures differential diagnosis with video for Physicians of Ahmedabad’ Ahmedabad; 16 November 2008.
- ‘Essential neuroscience for the neuropsychiatrist and an approach to neuropsychiatric evaluation’, Clinical bedside neuropsychological evaluation at the Institute of Neurological Sciences-Voluntary Helath Services, Taramani, Chennai; 22–23 November 2008.
- ‘Polysomnography and movment disorders of sleep’, DURG, Neuroscientists Association; 30 November 2008.
- Intractable epilepsy ‘Bhilai steel plant’, ‘Steel Authority of India Limited’, Bhilai; 3 January 2009.
- ‘10th Annual Conference of the Indian Epilepsy Association and Indian Epilepsy Society (ECON)’, Sri Venkateswara Institute of Medical Sciences (SVIMS), Tirupati; 7–8 February 2009, ‘EEG and SLEEP.
- ‘Cognitive Indices’ and Discussion on ‘Current Diagnostic constructs- relevance to India’. Chennai; 13–14 February 2009.
- FICCI 2nd International Conference on ‘Medical Electronics’ and Exhibition. Theme: ‘Opportunity India the Innovators Choice and World Destination’, ‘MRI and EEG in Neuro Psychopharmacology: Integration of Concepts’; 19–20 February 2009.
- Talk on ‘Seizure causes and treatments’, *Prasar Bharti* ‘Indian Radio Corporation’, New Delhi; 18 March 2009.
- Talk on ‘Sleep disorder’, in ‘Prasar Bharti Radio’, New Delhi; 18 March 2009.
- ‘Randomized controlled clinical trial workshop’, Sponsored by the National Institutes of Health and the International Clinical Sciences Support Center, New Delhi, India; 30 April–2 May 2008.
- Working Group on Universal Clinical Criteria for Dementia Classification—Core Committee, NBRC (HR); 21 June 2008.
- ‘Current diagnostic constructs-relevance to India’, Neurosciences India Group, T.S. Shrinivasan Neurolinks 2009, The Ageing Brain and Mind, New Delhi; 15–16 February 2009.

- Panel Discussion: 'Risk factors and diagnostic markers for disorders of ageing' and as discussant 'Current diagnostic constructs—relevance to India', Chennai; 16 February 2009.
- 'International Workshop on Nerve Muscle Disorders', GB Pant Hospital, New Delhi; 20–22 March 2009.
- AES–Meeting 2008 December, Seattle.
- AASM- Meeting 2008 June, Baltimore.
- COGTATE- Standardisation meet Dubai; February 2009.

Dr Vinay Goyal

- 'Medical approach to refractory epilepsy', Jalandhar; 10 September 2008.
- 'Important aspect of patient care, related to various stages of unconsciousness', Neuro Nursing Update 2008, AIIMS, New Delhi; 29 September 2008.
- 'Management of dystonia with reference to botulinum toxin', 4th National Medicine Update 2008, Medical college Bhopal, Bhopal; 8 November 2008.
- 'Management of refractory epilepsy', Indian Epilepsy Association (Punjab branch), Ludhiana; 16 November 2008.
- Panelist: 'Interesting case and discussions', International workshop on 'Nerve and muscle disorders', GB Pant Hospital, New Delhi; 20 February 2009.
- Chairperson: Indo-US CME on 'Emergency and Trauma', 1 March 2009.
- 'New approaches to the treatment of diabetic neuropathic pain', Mata Chanan Devi Hospital, New Delhi; 29 March 2009.

Dr Garima Shukla

- 'Sleep disorders—diagnosis and management' and on 'Insomnia—recognizing types and management', CME programmes organized by the local chapters of the IMA, Lucknow, Kanpur, Varanasi and Allahabad; March 2008.
- 'Recognizing different seizure types and seizure mimics', BAPICON, the Annual Conference of the Association of Physicians of India, Bihar chapter, Patna; 25 April 2009.

Dr Mamta Bhushan Singh

- Convened the pre-conference EEG workshop held before IAN 2009 and also delivered a talk 'Polarity, Field Determination and Localization' in the workshop.
- 'Refractory epilepsy— recognition and management'.
- Kanpur ,Medical College MDH Institute of Neurosciences—The Brain and Spine Foundation.
- 'Headache: When to treat, how to treat and when to refer?'; 29 March 2009.
- 4th National Congress of Indian Stroke Association (endorsed by the World Stroke Organization), Convened : Intensive care treatment in stroke, Hyderabad; 14–15 March 2009.

Neuroanaesthesiology

Lectures delivered

1. Dr P.K. Bithal conducted 7 workshops in various cities for training DNB teachers.
2. Dr H.H. Dash, 1st Asian Congress of Neuroanaesthesia and Critical care, Beijing, China; 28 November–1 December 2008.
3. Dr M.P. Pandia, 1st Asian Congress of Neuroanaesthesia and Critical care, Beijing, China; 28 November–1 December 2008.

Neuroanaesthesiology

National and International Conferences

The department faculty and residents attended 13 conferences (8 national and 5 international), 1 international symposium and one CME. Fourteen lectures (11 in national conferences and 3 in international conferences) were delivered by faculty members and 12 (7 international + 05 national) research papers were presented by faculty members and senior residents in the conferences.

Neuroradiology

National and International Conferences

The department faculty participated and delivered following lectures:

Dr S.B. Gaikwad

1. 'Current Evidence for carotid artery stenting', mid term CME and Annual registry meeting of ISVIR, AIIMS, New Delhi; 26–27 April 2008.
2. Third Anatolian Course on Interventional Neuroradiology. This meeting was jointly organized with intracranial stent meeting, Ankara, Turkey; 8–13 May 2008.
3. 'Complications in Neurointervention', Goa; 23–24 July 2008.
4. 'Evidence for carotid stenting for extracranial carotid occlusive disease', 12th Annual meeting of ISVIR, Mumbai; 1–4 November 2008.
5. Attended a 'Neurointervention workshop', delivered a lecture on intracranial stenting, NIMHANS, Bangalore; 7–8 November 2008.
6. Attended symposium on 'Interventional radiology', Bhubaneswar and delivered a lecture on 'Neurointerventions: A spectrum'; 9 November 2008.
7. 'Basic techniques in Onyx embolization', 12th Annual conference of ISNR, AVMS, Lucknow; 13–16 November 2008.
8. 'Ramchandra Advanced Interventional Neuroradiology' (RAIN) meeting and workshop, chaired a session on live case demonstration of intracranial stenting procedure during the workshop, Chennai; 10–12 December 2008.
9. 'MRI physics', 62nd National Conference of the Indian Radiological and Imaging Association, Patna; 7 January 2008.

Dr Ajay Garg

1. 'DWI and DTI for the evaluation of Neonatal Brain', Seminar on Advances in MRI, AIIMS, New Delhi; 22 March 2009.

Neuropathology Laboratory

Lectures delivered

International

- **Jha P, Sarkar C, Sharma MC, Suri V.** Genome wide structural variations in malignant glioma samples of Indian population. Human Genome Meeting (HUGO) 2008 Workshop, September 2008, Hyderabad.

National

Sarkar C.

- 'CNS tumours: New entities', 14th Indo-US CME on Surgical Pathology, Cytology and Haematology, Agra; 4 February 2009.
- 'Role of molecular genetics in clinical management of gliomas', CME, AFMC, Pune; 1 June 2008.
- 'High-grade gliomas: Pathology and prognostic factors', State of Art lecture, KGMC, Lucknow; March 2009.
- **Suri V, Sarkar C, Sharma MC.** 'Classification and histopathology of CNS tumours', Paediatric Hematology oncology conference, Sir Ganga Ram Hospital New Delhi; 6 November 2008.

Neuropathology laboratory

Lectures delivered

International conferences

Sarkar C.

- '1p and 19q deletions in astrocytic and oligodendroglial tumours', First congress of the Asian Society of Neuropathology, Tokyo, Japan; 22 May 2008.
- 'Paediatric vs. adult glioblastomas: A comparative histopathological and molecular genetic study', 9th European Congress of Neuropathology, Athens, Greece; 8–10 May 2008.

National conferences

- Sarkar C. Clinicopathological Study of Limb Girdle Muscular Dystrophies (LGMD) in Indian patients. Annual Conference of Indian Academy of Neurology, New Delhi; October 2008.
- Suri V, Sarkar C, Sharma MC. Role of Molecular Genetics in High Grade Gliomas. Neurooncology CME, Vidyasagar Institute of Mental Health and neurosciences, New Delhi; 26 October 2008.
- Suri V, Sarkar C, Sharma MC. Molecular techniques in neuropathology. XI Annual conference of DNACON, AIIMS; February 2009.

- Jain A, Suri V, Sharma MC, Sarkar C. Demographic profile of gliomas at a tertiary institute in India, Delhi Chapter, IAPM; 5 April 2008.
- Agarwal S, Suri V, Sharma M, Sharma MC, Gaikwad S, Sarkar C. Primary myeloid sarcoma involving the left cerebellopontine angle in an adult female: a case report and review of literature, Delhi Chapter IAPM; 5 April 2008.
- Shrivastav A, Suri V, Goel RK, Mohanty M, Suri A, Sharma BS, *et al.* Effect of bone marrow derived mononuclear cells on nerve regeneration in rat sciatic nerve transection model, Delhi Chapter IAPM; 5 April 2008.
- Jagan C, Agarwal S, Suri V, Datta Gupta S, Ray R, Sharma MC, *et al.* Rhabdoid tumours and tumors with rhabdoid phenotype—a perspective of 3 years experience at a tertiary care setting in India, Delhi Chapter IAPM; 5 April 2008.
- Shukla B, Suri V, Sharma MC, Sarkar C. Assessment of 1p/19q status in oligodendroglial tumours by interphase FISH assay, Delhi Chapter IAPM; 5 April 2008.
- Srivastava A, Suri V, Goel RK, Mohanty S, Suri A, Sharma BS, *et al.* Effect of bone marrow derived mononuclear cells on nerve regeneration in rat sciatic nerve transection model. XI Annual conference of DNAICON; AIIMS; February 2009.
- Jha P, Jha P, Pathak P, Scaria V, Suri V, Sharma MC, *et al.* Genome wide structural variations and copy number analysis in malignant glioma samples using high-density single-nucleotide polymorphism arrays. XI Annual conference of DNAICON, AIIMS; February 2009.
- Jain A, Sharma MC, Suri V, Singh S, Bhatia R, Sarkar C. Role of histochemistry and electron microscopy in the diagnosis of mitochondrial myopathies. XI Annual conference of DNAICON, AIIMS; February 2009.
- Pathak P, Sharma MC, Suri V, Singh S, Bhatia R, Sarkar C. Dysferlin protein analysis in LGMD2B, a universal approach for diagnosis: First report from India. XI Annual conference of DNAICON, AIIMS; February 2009.
- Das P, Puri T, Jha P, Suri V, Sharma MC, Sharma BS, *et al.* Glioblastoma multiforme with long term survival. XI Annual conference of DNAICON, AIIMS; February 2009.
- Agarwal S, Shukla B, Suri V, Pathak P, Sharma MC, Gupta D, *et al.* Assessment of 1p and 19q deletion status by interphase Fluorescence in-situ hybridization assay and correlation with p53 and EGFR expression: A comparative study in oligodendroglial, mixed oligoastrocytic and astrocytic tumors. XI Annual conference of DNAICON, AIIMS; February 2009.

RESEARCH

Neurosurgery

1. Cervical spine myelopathy international (CSMI) trial
2. Development of neurosurgery cadaver training centre. Funded by DST FIST (2006)

3. Efficacy and safety of AP 12009 in adult patients with recurrent or refractory anaplastic astrocytoma (WHO Grade III): Randomized, open-label Phase III clinical trial
4. International infantile hydrocephalus study: A multi-center, prospective, randomized study under the aegis of international study group for neuroendoscopy (ISGNE) and International Society for Pediatric Neurosurgery (ISPN). Ashish Suri, A.K. Mahapatra, Deepak K. Gupta.
5. Phase II multicentre, open label dose confirmation study of interstitial I¹³¹-chTNT 1bMoAb (COTARA) for the treatment of glioblastoma multiforme (at first relapse). Funded by Peregrine Pharmaceuticals, Texas, USA. Deepak Gupta, A.K. Mahapatra, Ashish Suri.
6. Prospective multi-centre, double-blind parallel group study to evaluate efficacy of clazosentan in reducing vasospasm related morbidity and all-cause mortality in adult patients with aneurysmal SAH treated with aneurysm clipping
7. A double blind placebo controlled trial of progesterone with or without hypothermia in subjects with severe traumatic brain injury. Ongoing Project in the Department of Neurosurgery, Jai Prakash Narain Apex Trauma Center, All India Institute of Medical Sciences, New Delhi, India (partially funded by NIH)
8. Brain trial (Bradykinin B2 receptor antagonist in Neurotrauma): A multicentric randomized trial by London school of Hygiene and Tropical medicine
9. DECRA trial (Decompressive craniectomy in severe head injury): A multicentric randomised trial being conducted in USA.
10. CRASH2 trial: A multicentric randomised trial by London school of hygiene and tropical medicine
11. Genetics of developmental CV junction anomalies. Funded by DBT. Funds: Rs 20 lakh.
12. STICH II trial. Funded by MRC, UK.
13. ISS implantation in vascular dementias. Funded by BRAINSGATE
14. Simultaneous fMRI and EEG to localize the epileptogenic foci in intractable epilepsy. Funded by DBT. Funds: Rs 35 lakh.

Departmental projects

1. Autopsy study in diffuse axonal injury
2. Screening of von Hippel Lindau gene for germline mutations in intracranial aneurysms—a prospective study
3. Role of Simvastatin in prevention of vasospasm and improving functional outcome after aneurysmal Sub-Arachnoid hemorrhage: A Prospective Randomized Double blind Placebo controlled trial

Neurology

Funded projects

Completed

1. Safety and efficacy of melperone in the treatment of patients with psychosis associated with Parkinson's disease. Professor M. Behari. Funded by Ovation Pharma for 1.5 years (2006–2008). Funds: Rs 10 lakh.

2. A multi centre, randomized, double blind, placebo and entacapone controlled, parallel group study of efficacy, safety and tolerability of E2007 in levodopa treated Parkinson's disease and patients with motor fluctuations. Professor M. Behari. Funded by Eisai Pharma Ltd (3 years (2006–2008)). Funds: Rs 20 lakh.
3. Correlation of electrophysiological states and hemodynamic changes during simultaneous EEG-fMRI in Intractable Epilepsy. Funded by DBT, AIIMS.
4. Cognitive activation studies of language and memory as a preoperative evaluation in patients with intractable epilepsy—a novel non-invasive method of investigation. Funded by DST, AIIMS.
5. To Assess whether saliva and serum free anti-epileptic drugs levels are equivalent. Funded by ICMR, AIIMS.
6. CAP-Analysis in Nocturnal intractable seizures. Funded by DBT.
7. A multicentre, randomized, double-blind, placebo-controlled, parallel-group trial, with placebo run-in, and an open-label treatment period, to evaluate the performance of the cogstate computerized neuropsychological battery and the adas-cog in generally cholinesterase-native AD patients randomized to either donepezil or placebo. Funded by Quintile.
8. Safety, tolerability and effectiveness evaluation of the ISS in the treatment of vascular dementia—a pilot study. Funded by BRAIN GATES.
9. Comprehensive etiological study in cerebro-vascular disease with special reference to Stroke in young. Project being conducted in AIIMS.
10. Surgical treatment of intracerebral lobar haemorrhage (STICH-II). International trial on surgical treatment of intracerebral haematomas, AIIMS.
11. Effects of amyloid beta on the morphology and protein profile of the rat hippocampus, Department of Anatomy.
12. A Comparison of Autonomic functions before and after surgical intervention in patients with temporal lobe Epilepsy, Department of physiology.
13. A study of quantitative EEG and sleep architecture changes, cognitive functions and stress in mild cognitive impairment and Alzheimer's disease, Department of Physiology.
14. Autologous intra-arterial infusion of bone marrow mono nuclear cells for static encephalopathy with special reference to cerebral palsy. Funded by DST.
15. Normobaric oxygen therapy for acute ischemic stroke: A pilot study in Indian patients. ICMR.
16. Minocycline in acute ischemic stroke. Funded by ICMR.
17. ENOS.
18. Stem cell therapy in acute ischaemic stroke. Funded by DBT.
19. G-CSF trial in acute ischaemic stroke.

Ongoing

1. A randomized, double-blind, placebo-controlled, dose-escalation study of single and multiple oral dose administration of BIIB014 in subjects with moderate to late-stage Parkinson's disease who are also receiving treatment with levodopa as PI. Funded by Biogen Idec for 1 year (2008–2009). Funds: Rs 10 lakh.
2. A randomized, multicentre, double-blind, placebo-controlled, dose-comparison study to determine the efficacy and safety of BG00012 in subjects with relapsing-remitting multiple sclerosis as PI. Funded by Biogen Idec 2 years (2008–2010). Funds: Rs 16.5 lakh.
3. Study the safety and efficacy of *R-HSC-001* in patients with Parkinson's disease; as PI. Funded by Reliance Life Sciences for 2 years (2008–2010). Funds: Rs 16.5 lakh.
4. Identification of novel gene(s) for familial PD as CO-I. Funded by DBT for 3 years (2007–2010). Funds: Rs 95 lakh.
5. Clinical Correlation of Ach-R-Abs and MuSK-Abs in myasthenia gravis patients in context with phenotype and genotype variation as PI. Funded by ICMR for 3 years (2007–2010). Funds: Rs 28 lakh.
6. Implantation of human retinal pigment epithelial (hRPE) cells in 6-OHDA lesioned rat model of Parkinson's disease as PI. Funded by DST for 3 years (2007–2010). Funds: Rs 43 lakh.
6. Intravenous autologous bone marrow derived stem cell therapy for patients with acute ischemic stroke: A multi-institutional project. Funded by Department of Biotechnology, Government of India.
7. Central database management facility. Funded by Department of Biotechnology, Government of India.
8. Capacity building on stroke biology. Funded by Department of Biotechnology, Government of India.
9. Mobilization of stem cells using G-CSF in acute ischemic stroke patients: A randomized clinical trial. Funded by Department of Biotechnology, Government of India.
10. Evaluation of therapeutic effect of Repetitive Transcranial magnetic stimulation (rTMS) in Writers cramp, Migraine, Drug resistant Depression and Obsessive Compulsive Disorders. Funded by ICMR 2009.
11. Prevalence of the restless legs syndrome in women and its relationship with iron deficiency: A prospective case-controlled study from North India. Funding by All India Institute of Medical Sciences for 2 years. Funds: Rs 44,000
12. Generating knowledge for assessment of emerging technologies—the effects of continuous positive airway pressure therapy for prevention of new vascular events in patients with sleep disordered breathing and stroke: A randomized controlled study. Funding by Department of Science and Technology, Ministry of Science and Technology, Government of India for 3 years. Funds: 69 lakh.

Departmental projects

Completed

1. Clinical profile of familial vs non-familial Parkinson's disease
2. Sleep Pattern in familial Parkinson's disease
3. Prescription pattern of neurologists at a tertiary care hospital for migraine
4. Psychiatric co-morbidity in patients of medically refractory epilepsy—pre and post epilepsy surgery
5. Prevalence of Sleep disordered breathing in Stroke patients
6. Lower prevalence of sleep disturbances in familial Parkinson's disease: A prospective case control study

Ongoing

1. Predictors of seizures in intractable epilepsy patients undergoing long term video EEG recording
2. Neuropsychiatric problems in patients with Parkinson's disease
3. Care giver burden among caregivers of Parkinson's disease patients
4. Long term prognosis and factors affecting prognosis in tubercular meningitis
5. Result of Mitoxantion therapy in multiple sclerosis
6. Ocular movements in familial Parkinson's disease
7. Thrombolysis with intravenous rt-PA for acute ischaemic stroke: The third international stroke trial (IST-3). Funded by Medical Research Council, UK.
8. ENOS: Efficacy of nitric oxide in stroke—a prospective, international, multicentre, randomised, parallel-group, blinded, controlled, collaborative, factorial trial to investigate the safety and efficacy of treatment with transdermal glyceryl trinitrate, a nitric oxide donor, and of stopping or continuing prior antihypertensive therapy, in patients with acute stroke. Funded by Medical Research Council, UK.
9. Genetic basis of ischaemic stroke in an Indian population. Funded by UK-India Education Research Initiative, British Council, UK.
10. Prevalence of symptomatic and asymptomatic coronary artery disease in patients with stroke.
11. Prognostic factors for acute bacterial meningitis
12. Validation of diagnostic criteria for differentiating between pyogenic and tubercular meningitis
13. Predictors of in-hospital mortality in patients with intracerebral hemorrhage
14. Excessive daytime sleepiness in patients with medically refractory epilepsy versus those with controlled epilepsy—a prospective study

Collaborative projects

Completed

1. Meeting for DC of Mr Sarvana Perumal S (PhD Student) (with Department of Pharmacology 10 February 2009).
2. Meeting for DC of Mr Prabhakar Singh (PhD Student). (with Department of Anatomy; 31 March 2009).
3. Meeting for DC of 'Evaluation of antiepileptic property of selected Indian plants and their mechanism of action' (with Department of Pharmacology; 5 February 2009).
4. Meeting for DC Ms Shweta Sharma, (PhD Student) (with Department of Physiology; 24 April 2009).

Neuroanaesthesiology

Completed

1. A comparison of two anaesthetic techniques for paediatric spinal surgery: Sevoflurane versus Isoflurane
2. Anesthetic concerns and postoperative complications in repair of myelomeningocele: A retrospective study
3. Intraoperative non-invasive versus invasive haemodynamic monitoring during craniotomy for supratentorial tumour surgery: A cost effective-analysis
4. Neurological outcome after intracranial aneurysm surgery at AIIMS: A retrospective analysis (January 2003–December 2006)
5. Bispectral index–guided administration of anesthesia for transsphenoidal resection of pituitary tumors: A comparison of three anesthetic techniques
6. A review of perioperative complications during frameless stereotactic surgery: Our institutional experience
7. Comparative study of thiopentone and propofol for brain protection during temporary clipping in intracranial aneurysm surgery
8. Comparative evaluation of percutaneous retrogasserian glycerol rhizolysis and radiofrequency thermocoagulation techniques in the management of trigeminal neuralgia

Ongoing

1. Comparative study of early and delayed extubation after transoral odontoidectomy and posterior fixation
2. Perioperative complications after transoral odontoidectomy and posterior fixation
3. Effect of avoiding nitrous oxide in patients undergoing surgery for supratentorial tumours
Perioperative complications in patients undergoing endoscopic surgery

Neuroradiology

Funded projects

Ongoing

1. Phase imaging and diffusion tensor imaging—Novel MR Contrasts in the evaluation of cryptogenic focal epilepsy, Ajay Garg, Funded by Department of Science and technology.
2. Quantitative vessel size imaging (VSI) in cerebral gliomas and correlation with histopathological grading and vascular endothelial growth factor expression. Ajay Garg. Funded by Department of Biotechnology.

Departmental projects

1. Role of diffusion tensor imaging in the evaluation of intracranial meningiomas.
2. Evaluation of angiographic features of CNS vasculitis
3. Diffusion tensor imaging and fiber tracking in spinal cord arteriovenous Fistulae and feasibility study of holocord DTI and tractography
4. Venous drainage pattern in patients with perimesencephalic and non-perimesencephalic angio-negative subarachnoid hemorrhage
5. Role of 3D rotational angiography in management of treated intracranial aneurysms.
6. Diffusion tensor imaging in the evaluation of intractable epilepsy

Neuropathology Laboratory

Funded projects

Ongoing

1. Glial tumours: A correlative clinicopathological study of chromosomes 1p/19q status, epidermal growth factor receptor (EGFR) amplification and p53 expression. Chitra Sarkar. Funded by ICMR (2007–2010). Funds: Rs 16.5 lakh (approx)
2. Study of the role of bone marrow derived mononuclear cells in peripheral nerve repair of adult rats. Vaishali Suri. Funded by AIIMS (2006–2009). Funds: Rs 18 lakh (approx).
3. Acute thalamic involvement in severe head injury-An autopsy study with histopathological correlation. Chitra Sarkar (2006–2009). Funded by AIIMS. Funds: Rs 2.2 lakh (approx).
4. Role of Sonic Hedgehog signaling in Human Cerebellum Development. Chitra Sarkar. Funded by NBRC, DBT (2007–2009). Funds: Rs 15 lakh (approx).
5. Efficacy and safety of AP 12009 in adult patients with recurrence or refractory anaplastic astrocytoma (WHO grade III) as compared to standard treatment with temozolomide or BCNU: A randomized actively controlled, open label clinical phase III study. Chitra Sarkar. Funded by Antisense Pharma, Germany (2007–2010). Funds: Rs 25 lakh (approx).

Departmental projects

Completed

1. p53, EGFR and HER2 receptor in osteogenic sarcomas
2. GBMs with long-term survival: Role of cell cycle regulatory genes.

Ongoing

1. Primary and secondary glioblastomas: A study of EGFR amplification, EGFR vIII mutants and p53 expression
2. Study of gliomagenesis: Possible involvement of CNS developmental pathway
3. Study of limb girdle muscular dystrophy (LGMD) patients in Indian population using Calpain-3, dysferlin and sarcoglycan protein analysis
4. Clinicopathological study of angiogenesis in glioblastoma multiforme
5. Childhood GBMs: A clinicopathological and molecular genetic study

Collaborative Research

Ongoing

1. Analysis of immunomodulation property of IFN-g on classical, non-classical MHC 1 and TGF-b expression in astrocytic tumors and their relevance in immunotherapy (with Neurobiochemistry)
2. Study of HIC-1 in tumorigenesis and cell response (with Biochemistry)
3. Effects of administration of human umbilical cord blood cells (HUCBG) in combination with melatonin versus HUCBG along in rat with stroke (with Neurology)
4. Altered DNA sequences in gliomas: Characterization of changes and context sequences with reference to tumor type (with Biochemistry, AIIMS)
5. Characterization of the properties of an amplified region of DNA in primary meningeal tumours (with Biochemistry)
6. Analysis of FAT gene in glial tumours (with Biochemistry)
7. Pilocytic astrocytomas: Correlation of clinical features and outcome with proliferation index and angiogenesis (with Neurosurgery)

PUBLICATION

Neurosurgery

Journals

1. Garg A, Suri A, Chandra PS, Kumar R, Sharma BS, Mahapatra AK. Endoscopic third ventriculostomy: 5 years' experience at the All India Institute of Medical Sciences. *Pediatr Neurosurg* 2009;**45**:1–5. [Epub 2009 Feb 17]

2. Sharma MC, Jain D, Gupta A, Sarkar C, Suri V, Garg A, *et al.* Dysembryoplastic neuroepithelial tumor: A clinicopathological study of 32 cases. *Neurosurg Rev* 2009;**32**:161–70. [Epub 2009 Jan 23]
3. Kasliwal MK, Kale SS, Sharma BS, Suri V. Totally cystic intradural extramedullary schwannoma. *Turk Neurosurg* 2008;**18**:404–6.
4. Teegala R, Kumar P, Kale SS, Sharma BS. Craniovertebral Junction tuberculosis: A new comprehensive therapeutic strategy. *Neurosurgery* 2008;**63**:946–55.
5. Tripathi M, Singh MS, Padma MV, Gaikwad S, Bal CS, Tripathi M, *et al.* Surgical outcome of cortical dysplasias presenting with chronic intractable epilepsy: A 10-year experience. *Neurol India* 2008;**56**:138–43.
6. Chandra PS, Padma VM, Shailesh G, Chandreshekar B, Sarkar C, Tripathi M. Hemispherotomy for intractable epilepsy. *Neurol India* 2008;**56**:127–32.
7. Goel RK, Ahmad FU, Vellimana AK, Suri A, Chandra PS, Kumar R, *et al.* Endoscopic management of intraventricular neurocysticercosis. *J Clin Neurosci* 2008;**15**:1096–101. [Epub 2008 Jul 23]
8. Sharma BS, Ahmad FU, Chandra PS, Mahapatra AK. Trigeminal schwannomas: Experience with 68 cases. *J Clin Neurosci* 2008;**15**:738–43. [Epub 2008 Apr]
9. Ahmad FU, Sharma BS, Garg A, Chandra PS. Primary spontaneous CSF rhinorrhea through the clivus: Possible etiopathology. *J Clin Neurosci* 2008;**15**:1304–8. [Epub 2008 Apr 18]
10. Sinha S, Sharma BS. Cystic Acoustic Neuromas: Surgical outcome in a series of 58 patients. *J Clin Neurosci* 2008;**15**:511–18.
11. Sinha S, Sharma BS. Malignant paraganglioma of the sellar region simulating pituitary macroadenoma: Case report and review of literature. *J Clin Neurosc* 2008;**15**:937–9.
12. Sinha S, Sharma BS, Sarkar C, Mahapatra. Giant pituitary adenomas: Surgical outcome in a series of 127 cases. *Pan Arab J Neurosurg* 2008;**12**:60–6.
13. Sinha S, Borkar S. Chronic Calcified extradural Hematoma in a child: Case report and review of literature. *India J Neurotrauma* 2008;**5**:51–2.
14. Sinha S, Sharma BS. Microsurgical management of giant acoustic neuromas: An institutional series of 400 cases. *Asian J Neurosurg* 2008;**2**.
15. Sinha S, Sharma BS. Neurocysticercosis: Review of current status and management issues. *J Clin Neurosci* (Accepted for Publication).
16. Kasliwal MK, Sinha S, Sharma BS. Bilateral anterior cerebral artery aneurysm due to mucormycosis—a case report. *J Clin Neurosci* 2009;**16**:156–9.
17. Agarwal S, Suri V, Rishi A, Garg A, Sharma MC, Sinha S, *et al.* Glioneuronal tumour with neuropil-like islands: A new entity. *Neuropathology* 2009;**29**:96–100.
18. Kasliwal MK, Sinha S, Yadav OP, Kumar R, Sharma BS. Giant hemicranial calcified subdural empyema—unusual complication after nine years of ventriculoperitoneal shunt insertion. *Indian J Ped.* (In Press).

19. Borkar SA, Kasliwal MK, Sinha S, Sharma BS. MR Imaging in Aneurysmal Bone Cyst of the Orbit. *Turk Neurosurg* 2008;18:183–6.
20. Kasliwal MK, Srivastava R, Sinha S, Kale SS, Sharma BS. Vasospasm after transsphenoidal pituitary surgery: A case report and review of the literature. *Neurol India*. 2008;56:81–3.
21. Borkar SA, Sinha S, Sharma BS. Remote site Extradural Hematoma. *J Clin Neurosci*. (Accepted for publication)
22. Sinha S, Watabe T, Yoko K, Daikichi O, Shei I, Oda J, *et al*. Suction decompression assisted clipping of large and giant internal carotid artery aneurysms: An experience in 13 cases and review of literature. *J Bras Neurocirurg* 2008;19:14–20.

Chapters in Book

1. Yoko K, Sinha S, Sano H, Watabe T, Oda J, Oguri D, *et al*. Microsurgical management of thrombotic aneurysms.
2. Sharma BS, Sinha S. Neurocysticercosis. *Textbook of Neurosurgery*. (In Press)
3. Sharma BS, Sinha S. Intracavernous aneurysms. *Textbook of Neurosurgery*. (In Press)
4. Suri A, Borkar SA. Posterior Circulation Aneurysms. *Textbook of Neurosurgery*. In: Ramamurthy, Tandon (eds).
5. Chandra PS. Role of Electro corticography in epilepsy surgery; CME book of NSI 2008.
6. Chandra PS. Epilepsy surgery; CME book of Epilepsy Update, IEA, In: Patna, Bihar chapter.

Neurology

Journals

1. Kalaria RN, Maestre GE, Arizaga R, Friedland RP, Galasko D, Hall K, *et al*. Alzheimer's disease and vascular dementia in developing countries: Prevalence, management, and risk factors. *Lancet Neurol* 2008;7:812–26.
2. Bhatia R, Vibha D, Srivastava MV, Prasad K, Tripathi M, Singh BM. Use of propofol anesthesia and adjunctive treatment with levetiracetam and gabapentin in managing status epilepticus in a patient of acute intermittent porphyria. *Epilepsia* 2008;49:934–6.
3. Biswas A, Ranjan R, Meena A, Akhter MS, Yadav BK, Munisamy M, *et al*. Homocystine levels, polymorphisms and the risk of ischemic stroke in young Asian Indians. *J Stroke Cerebrovasc Dis* 2009;18(2):103–10.
4. Biswas A, Ranjan R, Meena A, Akhter S, Saut N, Frere C, *et al*. TAFI antigen level variability in young healthy Asian Indians; first report from Asia. *Clin Biochem* 2008;41(9):750–3.
5. Biswas A, Tiwari AK, Ranjan R, Meena A, Akhter MS, Yadav BK, *et al*. Prothrombotic polymorphisms, mutations, and their association with pediatric non-cardioembolic stroke in Asian-Indian patients. *Ann Hematol* 2009;88:473–8.

6. Biswas A, Tiwari AK, Ranjan R, Meena A, Akhter MS, Yadav BK, *et al.* Thrombin activatable fibrinolysis inhibitor gene polymorphisms are associated with antigenic levels in the Asian-Indian population but may not be a risk for stroke. *Br J Haematol* 2008;**143**:581–8.
7. Chandra PS, Padma VM, Shailesh G, Chandreshekar B, Sarkar C, Tripathi M. Hemispherotomy for intractable epilepsy. *Neurol India* 2008;**56**:127–32.
8. Sachin S, Senthil KS, Singh S, Goyal V, Shukla G, Mahajan H, *et al.* Functional mapping in PD and PSP for sustained phonation and phoneme tasks...*J Neurol Sci* 2008;**273**(1–2):51–6. [Epub 2008 Aug 3].
9. Goyal V, Chawla JM, Balhara YP, Shukla G, Singh S, Behari M. Calcific myofibrosis due to pentazocine abuse: a case report. *J Med Case Reports* 2008;**2**:160.
10. Jain D, Sharma MC, Sarkar C, Gulati S, Kalra V, Singh S, *et al.* Congenital myopathies: A clinicopathological study of 25 cases. *Indian J Pathol Microbiol* 2008;**51**:474–8.
11. Prasad K, Bhatia R, Srivastava MVP, Pardasani V, Garg A, Rishi A. Fatal subacute necrotising brainstem encephalitis in a young man due to a rare parasitic (balamuthia) infection. *Practical Neurol* 2008;**8**:112–17.
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13. Madakasira VP, Bhatia R, Tripathi M, Singh MB, Prasad K. Post stroke seizures. Prospective study in a tertiary care referral centre. *International J Stroke* 2008;**3** (Suppl 1):163.
14. Madakasira VP, Gaikwad S, Bhatia R, Singh MB, Tripathi M, Prasad K. Treatment of acute basilar artery occlusion with a combination IA Rtpa, Organization of events and a non-peptide platelet glycoprotein IIB/IIIa inhibitor. *International J Stroke* 2008;**3** (Suppl 1):270.
15. Tripathi M, Padma MV, Bhatia R, Prasad K, Chandra S. Experience of treatment of status epilepticus with CPA and LCT. *Epilepsia* 2008;**49**:1–517.
16. Pardasani V, Shukla G, Singh S, Goyal V, Behari M. Abnormal sleep-wake cycles in patients with tuberculous meningitis: A case-control study. *J Neurol Sci* 2008;**269**:126–32. [Epub 2008 Feb 21]
17. Prasad K, Jaeschke R, Wyer P, Keitz S, Guyatt G. Evidence-based medicine teaching tips working group. Tips for teachers of evidence-based medicine: Understanding odds ratios and their relationship to risk ratios. *J Gen Intern Med* 2008. [Epub ahead of print]PMID: 18181004]
18. Prasad K, Mendelow AD, Gregson B. Surgery for primary supratentorial intracerebral haemorrhage. *Cochrane Database Syst Rev* 2008;**4**:CD000200. (Review)
19. Prasad K, Singh M. Corticosteroids for managing tuberculous meningitis. *Cochrane Database Syst Rev* 2008;**1**:CD002244. [PMID: 18254003]
20. Prasad K. Delays in publishing the results of clinical trials harm patients, and public health (editorial). *Pract Neurol* 2008;**8**:6–7.

21. Suhail R, Behari M, Irshad M, Goyal V, Jaikhanani BL. Antibodies against postsynaptic acetylcholine receptor and presynaptic membrane receptor in myasthenia gravis. *Trends Med Res* 2008;1–8.
22. Bhatia R, Vibha D, Padma MV, Prasad K, Tripathi M, Singh MB. Use of propofol anaesthesia and adjunctive treatment with levetiracetam and gabapentin in managing status epilepticus in a patient of acute intermittent porphyria. *Epilepsia* 2008;49:934–6.
23. Bhatia R, Padma MV, Gaikwad S, Prasad K, Tripathi M, Singh MB. Treatment of acute basilar artery occlusion using i.v. Tpa and Abciximab. *Lancet Asia Medical Forum Stroke in Asia*. Beijing, China, 2008.
24. Bhatia R, Yadav R. Everyday Practice, Diabetic Neuropathy. *National Med J India* 2008.
25. Bhatia R, Desai S, Padma MV, Tripathi M, Prasad K. Adrenoleucodystrophy: Uncommon MRI Finding. *Ann Indian Academy Neurol* 2008;11:56.
26. Sachin S, Goyal V, Singh S, Shukla G, Sharma MC, Gaikwad S, et al. Clinical spectrum of Hallervorden-Spatz syndrome in India. *J Clin Neurosci* 2009;16:253–8.
27. Sachin S, Padma MV, Bhatia R, Prasad K, Gureshkumar C, Tripathi M. Psychological impact of epilepsy in women of childbearing age in India. *Epileptic Disord* 2008;10:282–9.
28. Sachin S, Kumaran S, Singh S, Goyal V, Shukla G, Mahajan H, et al. Functional mapping in PD and PSP for sustained phonation and phoneme tasks. *J Neurol Sci* 2008;273(1–2):51–6.
29. Sachin S, Shukla G, Goyal V, Singh S, Aggarwal V, Gureshkumar, et al. Clinical speech impairment in Parkinson's disease, progressive supranuclear palsy, and multiple system atrophy. *Neurol India* 2008;56:122–6.
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33. Tripathi M, Singh MS, Padma MV, Gaikwad S, Bal CS, Tripathi M, et al. Surgical outcome of cortical dysplasias presenting with chronic intractable epilepsy: A 10-year experience. *Neurol India* 2008;56:138–43.
34. Tripathi M. Technical notes for digital polysomnography recording in sleep medicine practice. *Ann Indian Academy Neurol* 2008;11 (2):129–38.
35. Yadav R, Prasad K, Madakasira VP, Bhatia R, Tripathi M, Singh MB. Influence of socioeconomic status on in-hospital mortality and morbidity after acute stroke in India: A retrospective hospital based study. *International J Stroke* 2008;3 (Suppl 1):415.
36. Rath GP, Dash HH, Bithal PK, Goyal V. Intracranial haemorrhage after percutaneous radiofrequency trigeminal rhizotomy. *Pain Pract* 2009;9:82–4.

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1. Behari M. Cranial Nerves. In: Shah SN (eds). *API textbook of Medicine*. 8th ed. Mumbai, India: Urvi Compugraphics Pvt. Ltd; 2008:1126–35.
2. In: Bichile SK (ed). *Refractory Epilepsy How Much Investigate?* Published in The Association of Physicians of India Medicine update 2008;**18**:578–85.
3. *Diagnosis of dementia*. Pune. Published in First Asian and Second National Medical Students' Conference, Moving Academy of Medicine and Biomedicine; 2008:42–4.
4. In: Grover A, Aggarwal V, Gera P, Gupta R (eds). Episodic Loss of Consciousness. *Manual of Medical Emergencies*. 3rd ed. 2008:618–25.
5. In: Grover A, Aggarwal V, Gera P, Gupta R (eds). *Visual Loss in the Emergency Room*. 3rd ed. Book Manual of Medical Emergencies; 2008:663–77.
6. In: Schachter SC, Holeses GL, Dorothee GA, Trenite KN (eds). Presurgical Evaluation for Epilepsy Surgery. *Behavioral Aspects of Epilepsy principal and practice*. 2008:297–306.
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Abstracts presented in Conferences

1. Rai NK, Behari M, Sachin S, Shukla G, Singh S, Singh DC, *et al*. Raven's progressive matrix test in Parkinson's Disease. *Ann Indian Academy Neurol* 2008;**11 (Suppl 2)**:2008.
2. Behari M, Sachin S, Dihana M, Goyal V, Singh S, Shukla G. Predictors of dyskinesia in Parkinson. *Ann Indian Academy Neurol* 2008;**11 (Suppl 2)**:S137.
3. Yadav R, Singh S, Shukla G, Goyal V, Gupta Nandita, Behari M. DHEAS in women with Parkinson's disease. *Ann Indian Academy Neurol* 2008;**11 (Suppl 2)**:S161.
4. Singh H, Shukla G, Singh S, Goyal V, Padhy UP, Desai S, *et al*. Spinal Cord involvement complicating Acute Bacterial meningitis. *Ann Indian Academy Neurol* 2008;**11 (Suppl 2)**:S167.
5. Manral M, Vivekanand S, Behari M. Nutritional status according to mini-nutritional assessment in Parkinson's disease patients. *Ann Indian Academy Neurol* 2008;**11 (Suppl 2)**:S179.
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8. Gupta P, Goyal V, Singh S, Shukla G, Behari M. Botulinum toxin therapy in patient of Wilson's disease. 2nd Asian and Oceanian Parkinson's Disease and Movement Disorders Congress. 2009:45.
9. Singh P, Goyal V, Shukla G, Singh S, Behari M. Assessment of health related quality of life and depression in patients with hemifacial spasm. 2nd Asian and Oceanian Parkinson's Disease and Movement Disorders Congress. 2009:46.
10. Verma Alok, Goyal V, Behari M, Singh S. HRQoL in cranial focal dystonia. 2nd Asian and Oceanian Parkinson's Disease and Movement Disorders Congress. 2009;47.
11. Saxena M, Sethil KS, Singh S, Narang V, Behari M. Articulatory dysfunction in Parkinson's disease: An FMRI study. 2nd Asian and Oceanian Parkinson's Disease and Movement Disorders Congress; 2009:53–4.
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Neuroanaesthesiology

Journal

1. Dash HH. Prehospital care of head injured patients (Review). *Neurol India* 2008;**56**:415–19.
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4. Rath GP, Dash HH, Bithal PK, Goyal V. Intracranial haemorrhage after percutaneous radiofrequency trigeminal rhizotomy. *Pain Pract* 2009;**9**:82–4.
5. Rath GP, Prabhakar H, Bithal PK, Dash HH, Narang KS, Kalaivani M. Effects of butorphanol and fentanyl on cerebral pressures and cardiovascular hemodynamics during tunneling phase for ventriculoperitoneal shunt insertion. *Middle East J Anesthesiol* 2008;**19**:1041–53.
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9. Prabhakar H, Bithal PK, Chouhan RS, Dash HH. Rupture of intracranial aneurysm after partial clipping due to aspiration drainage system—a case report. *Middle East J Anesthesiol* 2008;**19**:1185–90.
10. Prabhakar H, Ali Z, Rath GP, Bithal PK. Tension pneumocephalus following external ventricular drain insertion. *J Anesth* 2008;**22**:326–7.
11. Prabhakar H, Ali Z, Bithal PK, Rath GP. Low bispectral index values in a 2-year-old with a large bifrontal porencephalic cyst. *Eur J Anaesthesiol* 2008;**25**:513–14.
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15. Prabhakar H, Ali Z, Bhagat H. Venous air embolism arising after removal of Mayfield skull clamp. *J Neurosurg Anesthesiol* 2008;**20**:158–9.

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17. Prabhakar H, Ali Z, Sharma MS. Valsalva's maneuver to assist delivery of a neuro- cysticercosis cyst from the fourth ventricle. *Anesth Analg* 2008;**107**:731.
18. Ghosh I, Bithal PK, Dash HH, Chaturvedi A, Prabhakar H. Both clonidine and metoprolol modify anesthetic depth indicators and reduce intraoperative propofol requirement. *J Anesth* 2008;**22**:131–4.
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Neuroradiology

Journals

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Neuropathology Laboratory

Journal

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26. Keepanasseril A, Suri V, Gupta N, Ghoshal S. Transitional cell carcinoma of the ovary: Unusual presentation as metastatic cervical lymph node. *J Obstet Gynaecol Res* 2008;**34**:696–8.
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Conference/Meeting Attended

Neurology

Dr M. Behari

1. Investigator's Meeting at Kuala Lumpur, Malaysia; 27–28 March 2009.

2. Neurological Society of India meeting, Pune; 17–20 December 2008.
3. Investigator's meeting at Hong Kong; 2–3 October 2008.
4. Selection Committee meeting for the Additional Professor post in Neurology Department as an expert, Bangalore; 15 October 2008.
5. 16th Annual Conference of the Indian Academy of Neurology, New Delhi; 23–26 October 2008, as President of Academy.
6. Presidential oration at 16th Annual Conference of Indian Academy of Neurology; October 2008.
7. External expert for the selection Committee for selection/Assessment promotion of faculty members of the Department of Neurology at the SGPGI, Lucknow; 5 November 2008.
8. Invited speaker at South Asian Conference of Neurosciences at Bangladesh Medical College, Dhaka; November 2008.
9. Midterm EC of IAN meeting, Cochin; 7 March 2009. Invited by the Medical Council of India to inspect PSG Institute of Medical Sciences and Research, Coimbatore for starting DM (Neurology) course under, Dr MGR Medical University, Tamilnadu; 5 March 2009.

PATIENT CARE

Neurosurgery

1. The Department runs a busy Neurosurgical service, with Outpatient Clinics 4 times a week. During 2008–2009, the Department treated 20886 old cases and 9982 new cases. In the Gamma Knife follow-up Clinic, a total of 789 patients were seen.
2. Inpatient care comprises 25 ICU beds, 72 General ward beds. CN tower has become the Private Ward block, with Neurosurgical patients being admitted on 1st, 3rd, 5th and 6th Floors. During the last quarter of 2008, renovation of NS3 and NS2 wards has been carried out, which included provision of an HDU (high dependency unit) in both wards.
3. We have a total of 7 dedicated Neurosurgical Operating rooms, with 2 of these being currently under construction/renovation for the installation of the Intraoperative MR system (the 'Brain Suite'). The entire range of Neurosurgical cases are operated and managed at our Department. During 2008–2009, a total of 2741 procedures were carried out, out of which 2452 were major, remainder being minor procedures. During the same period, a total of 239 Gamma Knife procedures were carried out.

Neurology

Community Services/Camps

1. Organized World Parkinson's Disease Day for patients; 6 April 2008.
2. Doordarshan (DD1) 'Evening Live Show: Parkinson's disease' public awareness program on DD News, 5 pm; 13 February 2009.
3. 'PRAN', Newer methods of treatment in PD; and Panelist in Public awareness program on World Parkinson's disease, AIIMS, New Delhi; 5 April 2009.

4. Doordarshan (DD News); ‘Total health: Parkinson’s disease’ public awareness program on DD News, 8.30–9.30 am; 12 April 2009.
5. Doordarshan (DD News); Total health; ‘Stroke: Diagnosis and management’, Public Awareness Program on DD News, 8.30–9.30 am; 12 April 2009.

Patient care

Indoor	Data will be provided by MRD section, AIIMS
Outdoor	
Total Old and New Patients	68417

PROCEDURES DONE IN EMG/EEG Laboratory

Data to be provided by Dr Achal and Dr Mamta (not provided till now)

EEG	3253
Long and short-term VEEG	250
Evoked Potentials	236
NCV–EMG	3264
QST	113
ECG	1019

(In the patient care/ supportive activities include information regarding: (a) facilities available in the department (including, special clinical and or special laboratory facilities (b) community services/ camps, etc.)

The Department of Neurology organized following patient awareness programmes:

Parkinson’s disease	April 2008
Epilepsy	Nov 2008
Headache	August 2008
Brain storm	December 2008

The faculty members routinely give talks on radio and television on neurological disorders such as migraine, Parkinson’s disease, epilepsy, stroke, Myasthenia gravis, muscle disorders, etc.

Neuroanaesthesiology

Peri-operative Anaesthetic Care

1. Neurosurgical operations

Elective	2018
Emergency	537
Total	2555

2. Neuroradiological procedures

Diagnostic	257
Therapeutic	106
Total	363

Neuro-intensive care unit

Neurosurgical	2000
Neurologic	156
Total	2156

Pain-clinic

A total of 829 patients (148 New and 681 Old) were attended in the OPD ,129 of them were treated with nerve blocks in the operation theatre.

Neuroradiology

Procedures	Number of investigations
Digital Subtraction Angiography	654
Gamma Knife Angiogram	59
MRI	2,127
CT	
Head	13,338
Chest	306
Andomen	123
Spine	495
Image guided/CT guided study	112
Emergency CT	6,847
Ultrasound	1,332
Plain X-rays OPD/indoor	19,120
Private case reporting	2,633
Interventional procedures	139
Total	47,276

Neuropathology Laboratory

Neuropathology surgical specimens	2,744
Frozen sections	522
Muscle biopsies: Total number received	340
Muscle enzyme histochemistry	537
Diagnostic Immunohistochemistry	4,219
Myelin stain	155
Electron microscopy: Specimen received	1,109
Specimen processed	554

AWARDS AND HONOURS

Neurosurgery

Professor B.S. Sharma, Secretary, Neurological Society of India until, December 2008; President, Skull Base Surgery Society of India, 2007–2008; Treasurer, Indian Society of Cerebrovascular surgery.

Dr S.S. Kale, invited as Honored Guest and Honorary member of Venezuelan Society of Neurosurgery, 2008.

Dr P.S. Chandra, Task force member, ILAE and Board of Director, International brain mapping society.

Dr A. Suri, Executive Member of the Skull Base Surgery Society of India.

Dr A. Gupta, completed BOYSCAST fellowship of Department of Science and Technology; awarded the title of 'First Research Professor in Neurosurgery', CJW Medical centre, United States.

Neurology

Dr M Behari, President, Delhi Neurological Association (2008–09). President of Indian Academy of Neurology (2007–2008). He was awarded Best Investigator Award of Indian Society of Clinical Research, Mumbai; October 2008.

Dr Manjari Tripathi, American Academy of Sleep Medicine (AASM), International Scholar Mini Fellowship 2008- Northwestern University Chicago and Stanford SF, USA. DBT Young Investigator award- for Fmri and EEG as an essential tool in the Non-invasive investigation of patients with epilepsy which is Intractable. Several Travel scholarship awards. MANM Oration Allahbad.

Dr Garima Shukla, Awarded Fellowship in Epilepsy and Sleep Medicine, Epilepsy Centre of the prestigious Cleveland Clinic, Cleveland, Ohio, This was through selection as BOYSCAST fellow by the Department of Science and Technology, Ministry of Science and Technology, Government of India. Selected to receive the Young Investigator bursary award for paper submitted for presentation at the 28th International Epilepsy Congress, Budapest, Hungary; June 2009.

Dr Rohit Bhatia, Awarded fellowship in stroke at the prestigious Calgary Stroke Programme at the University of Calgary, Calgary, Canada; March 2009. List only awards, honors and named orations of national and international repute conferred (non-elected) memberships of fellowships of offices of the international and national societies and journals. Do not list the lectures delivered by the faculty in CMI's and conferences.

Academic, Administration, Finance, Engineering, Library, Central facilities, etc.

Dr Madhuri Behari, 2nd Asian Oceanian Congress of Parkinson's Disease and Movement Disorders, New Delhi February 2009. 7th Asia Pacific Parkinson's Association International Symposium, New Delhi; February 2009.

Dr K. Prasad, Director, Clinical Epidemiology Unit, AIIMS, New Delhi. Nominated as a member of an Expert Committee for expansion of infrastructure at ICGEB for clinical development of malaria vaccines. Continuing as 'Member of the Executive Council' of Pandit Bhagwat Dayal Sharma University of Medical Sciences, Rohtak for a term of two years (2008–2010).

Neuroanaesthesiology

Dr H.H. Dash has been selected as a member of the Editorial Board of the *Journal of Neurosurgical Anesthesiology (USA)*. Attended Selection Committee for the selection for the faculties at Nizam's Institute of Medical Sciences, Hyderabad, 08 December 2008. Assisted Standing Selection Committee for the interview of faculty posts at NEIGRIHMS, Shillong, New Delhi, 3–4 April 2009.

Dr A. Chaturvedi was selected a member of Editorial Board of *Global Journal of Applied Physiology and Postoperative Pain (GJAPAS)*.

Neuroradiology

Dr N.K. Mishra, Member of the task force on basic research in modern biology, Department of Biotechnology, Government of India; Co-editor in chief and chairman of scientific committee for the *Journal of Neuroradiology*; Member Editorial Board for Interventional Neuroradiology, *Indian Journal of Radiology and Imaging (IJRI)*.

Dr S.B. Gaikwad, Invited as visiting associate professor, Brigham and Womens' Hospital, Neuroradiology Section, Harvard Medical School, Boston, Massachusetts, USA, January–June, 2009.

Dr Ajay Garg, Completed long-term Biotechnology Overseas Associateship Award at University of California at San Francisco, USA, January 2008–January 2009.

Neuropathology Laboratory

1. **Dr Chitra Sarkar** Elected as Fellow Royal College of Pathologists (FRCPath), London; April 2008.
2. Herbert Kraus Gold Medal for the paper entitled 'MGMT Gene Promoter Methylation in Adult and Paediatric GBM' presented at the Annual Conference of Neurological Society of India, Pune; December 2008.

3. P. Das, T. Puri, P. Jha, V. Suri, M.C. Sharma, B.S. Sharma, A. Gupta, C. Sarkar. First Prize in Neurosurgery for the poster entitled Glioblastoma multiforme with long-term survival in the XIth annual conference of DNA (DNA CON-2009), AIIMS; 6–7 February.
4. S. Agarwal, B. Shukla, V. Suri, P. Pathak, M.C. Sharma, D. Gupta, B.S. Sharma, A. Suri, A. Halder, C. Sarkar. Second Prize for paper entitled ‘Assessment of 1p and 19q deletion status by interphase Fluorescence in-situ hybridization assay and correlation with p53 and EGFR expression: A comparative study in oligodendroglial, mixed oligoastrocytic and astrocytic tumours’: In the XIth annual conference of DNA (DNA CON- 2009), AIIMS; 6–7 February.
5. P Pathak, M C Sharma, V Suri, S Singh, R Bhatia, C Sarkar. First Prize for Neurology for the poster entitled ‘Dysferlin protein analysis in LGMD2B, a universal approach for diagnosis: First report from India’ in the XI annual conference of DNA (DNA CON- 2009), AIIMS; 6–7 February.

SIGNIFICANT EVENTS

Neurology

Dr M. Behari Member , Institute body of NIMHANS, Bangalore, Scientific Advisory Board of Armed Forces Medical College, Ethics Committee of JNU, Committee constituted by Ministry of Health and Family Welfare on Diabetes, Stroke and Hypertension.

Neuropathology Laboratory

Dr Chitra Sarkar was included as one of the 100 distinguished ‘Women in science’ in India and her autobiography was published in a book entitled ‘Lilavati’s Daughters’, brought out by the Indian Academy of Sciences, Bangalore.

Dr Vaishali Suri’s recent publication in 2009 on ‘Genetic pathways in pediatric glioblastomas’ in Neuro-Oncology [Suri V, Das P, Jain A, Sharma MC, Borkar SA, Suri A, Gupta D, Sarkar C. Pediatric glioblastomas: A histopathological and molecular genetic study. *Neuro Oncol.* 9 December 2008. [Epub ahead of print] PubMed PMID: 18981259] has been included in the Research Highlights sections of ‘*Nature Clinical Practice Neurology*’.

VISITING SCIENTISTS

Neurology

Dr Sudhansu Chokroverty, Co-Director of Neurology (Clinical Neurophysiology and Sleep Medicine) at the New Jersey Neuroscience Institute, JFK Medical Center, Edison, New Jersey, ‘**The Rhythms and Rituals of the Sleeping Brain**’, 20 February 2009.

10.6 Dr. Rajendra Prasad Centre for Ophthalmic Sciences

Chief & Professor

Supriyo Ghose

Professor

Raj Vardhan Azad
Sat Pal Garg
Atul Kumar
Jeewan Singh Titiyal
Sudarshan Khokhar

Rasik Behari Vajpayee
Anita Panda
Pradeep Sharma
Radhika Tandon

Vimla Menon
Yog Raj Sharma
Gita Satpathy
(Ocular Microbiology)
Mahesh Chandra

Medical Superintendent

Shakti Kumar Gupta

Additional Professors

Dilip R. Shende

G.V. Satyanarayana Murthy
(Ocular Anaesthesiology)
Niranjan Nayak
(Ocular Microbiology)

Mandeep Singh Bajaj
(Community Ophthalmology)

Rajpal

Associate Professors

Seema Sen
(Ocular Pathology)
Namrata Venkatesh
Tanuj Dada

Sanjay Sharma
(Ocular Radiology)
Pradeep Venkatesh

Seema Kashyap
(Ocular Pathology)
Neelam Pushker

Assistant Professors

T. Velpandian
(Ocular Pharmacology)
Viney Gupta
M. Vanathi
Medha R.

Praveen Vashist
(Community Ophthalmology)
Rohit Saxena
Rajesh Sinha
Renu Sinha
(Ocular Anaesthesiology)

Jasbir Kaur
(Ocular Biochemistry)
Tushar Agarwal
Bhavna Chawla
Parijat Chandra

EDUCATION

Undergraduates

MBBS – 40

Post graduates

MD - (23 passed)

PhD - 15

SRs: Ophthalmology - 32

Ocular Anaesthesia - 06

Paraclinical Pool Officers/

BSc (Hons) Ophthalmology Pool

Course - 30 Officers - 05

10 students passed

Short- and long-term training

Thirty Ophthalmologists from various parts of the country including 16 in 'Training of trainers programme' (ECCE/IOL) were trained in different fields of specialization.

Continuing Medical Education

The centre organized following Conferences/Seminars/Workshops on:

Eye donation day celebration	8 September 2008
National Workshop on cornea corneal transplantation	30 April–1 May 2009
National Workshop on Phacoemulsification Surgery	April 2008
Orientation programme	6–7 May 2008
Hospital waste management and Role of HKS	19 May 2008 and 13 September 2008
National Workshop on strabismology	3–4 October 2008
Ethicon suture edu.	13–20 October 2008 and 17 November 2008
Ophthalmic nursing	20 January 2009

The faculty of the Centre participated in, various scientific forums, delivered 90 lectures including key note addresses and chaired 44 scientific sessions.

RESEARCH

Funded Projects

Completed

1. Immunophenotypic characterization of small lymphocytic lymphomas of the eye.
2. Clinical evaluation of refractive phakic intraocular lens.

Ongoing

1. Detection of HPV genome in malignant ocular lesions
2. Comparative genome hybridization in primary angle closure glaucoma families: A pilot study in Indian population
3. Evaluation of polymerase chain reaction assay for herpes simplex virus 1 (HSV 1) detection in tear specimen of suspected viral keratitis, particularly stromal and atypical epithelial keratitis
4. Development of small interfering RNAs (siRNAs) for inhibition of enterovirus-70 and coxsackievirus A24 viruses causing acute hemorrhagic conjunctivitis
5. Culture of human adult retinal pigment epithelial cells on human amniotic membrane
6. Transplantation of human retinal pigment epithelial cells in the 6-hydroxy dopamine lesioned rat model of Parkinson's disease

7. Evaluation of the bio-disposition of xanthophylls in Indian donor eyes and detection of their content in commonly available fruits and vegetables
8. Evaluation of tear-fluid constituents in various ocular pathological conditions using tandem mass spectrometry
9. Phenotypic, molecular and ultrastructural study of coagulase negative staphylococci and their biofilms in device related infections
10. Evaluation of calcium dobesilate for various ocular conditions. A phase 2/3 randomized, controlled, double-masked, multi-centre, comparative trial, in parallel groups, to compare the safety and efficacy of intravitreal injections of 0.3 mg pegaptanib sodium (Macugen®), given as often as every 6 weeks for 2 years, to sham injections, in subjects with diabetic macular edema (DME) involving the centre of the macula
11. A 12-month randomized, pilot study to compare the efficacy and safety of verteporfin (visudyne) photodynamic therapy (standard fluence) plus intravitreal ranibizumab (Lucentis) versus verteporfin (visudyne) photodynamic therapy (reduced fluence) plus intravitreal ranibizumab (lucentis) in patients with subfoveal or juxtafoveal choroidal neovascularization secondary to age-related macular degeneration
12. LX211-01-UV: A double-masked, placebo-controlled, parallel-group, multi-centre, dose-ranging study to assess the efficacy and safety of LX211 as therapy in subjects with active sight threatening, non-infectious intermediate-, anterior and intermediate-, posterior- or pan-uveitis
13. LX211-02-UV: A double-masked, placebo-controlled, multi-centre, parallel-group, dose-ranging study to assess the efficacy and safety of LX211 as therapy in subjects with clinically quiescent sight threatening, non-infectious intermediate-anterior and intermediate-, posterior- or pan-uveitis
14. LX211-03-UV: A double-masked, placebo-controlled, parallel-group, multi-centre, dose-ranging study to assess the efficacy and safety of LX211 as therapy in subjects with active sight threatening, non-infectious intermediate-, anterior uveitis
15. A phase II prospective randomized, multi-centre diabetic macular edema dose ranging comparator study evaluating the efficacy and safety of PF-04523655 versus laser therapy (DEGAS)
16. A pilot study to assess the adjunctive role of pegaptanib sodium (Macugen) for the treatment of severe, aggressive and progressive retinopathy of prematurity (ROP)
17. Clinical evaluation of blink and clean contact lens solution

Departmental projects

Completed

1. Clinical and chromosomal analysis of the congenital eyelid anomalies in a tertiary care hospital
2. To evaluate the role of oral corticosteroids in orbital cellulitis
3. Comparative evaluation of the effect of olopatadine (0.1%) and polyherbal eye drop formulation in patients having allergic conjunctivitis

4. Evaluation of four muscle recessions in nystagmus without eccentric null
5. Evaluate FD-2 (Frisby Davis-Distance) in surgical management of intermittent exotropia.
6. Correlation of visual functions with cortical activation patterns on functional magnetic resonance imaging (fMRI) in cases of optic neuritis
7. To evaluate the incidence of recurrence of amblyopia following discontinuation of amblyopia treatment in the cases of treated anisometropic amblyopia
8. Cycloplegic refraction in children: A comparison of homatropine and atropine
9. Evaluation of combined trabeculectomy with mitomycin versus trabeculectomy with mitomycin alone in primary congenital glaucoma
10. Long term structural and functional outcomes in treated juvenile open angle glaucoma eyes
11. Clinical profile of patients of ocular trauma attending ocular emergency services at tertiary care hospital
12. Role of magnetic resonance imaging in management of soft tissue sarcoma

Ongoing

1. Evaluation of ocular toxicity of festival colors during the celebration of Holi
2. Development of a poly-herbal formulation for dry eye (computer vision syndrome)
3. Development of microdialysis technique to study intraocular kinetics of drugs
4. Evaluation of cassette dosing technique for the intraocular penetration of drugs
5. Modulation of transporters for the intraocular penetration of drugs
6. Evaluation of expression of P- glycoprotein (P-gp) in retinoblastoma
7. Identification and characterization of differentially expressed genes in human retinoblastoma
8. Regulation of apoptosis in human retinoblastoma
9. Molecular genetics of glaucoma
10. Development of a potential biopolymer to serve as an alternative substrate of human amniotic membrane for *ex-vivo* expansion of corneal epithelial stem cells
11. Photoreceptor changes in aging human retina and their possible link with oxidative stress
12. Phenotypic characterization of limbal epithelial cells cultured on amniotic membrane
13. Determination of plasma levels of ethambutol in tuberculosis patients having retinal toxicity
14. Bone marrow derived stem cell therapy and the trabecular meshwork: An experimental study
15. Mutational analysis of primary angle closure glaucoma and primary open angle glaucoma patients in Indian population

16. Use of autologous bone marrow derived stem cells (Phase-2 trial) and umbilical cord blood stem cells (pilot study), transplantation by intravitreal injection for rehabilitation of patients with retinitis pigmentosa and allied hereditary retinal dystrophies
17. Single nucleotide polymorphisms associated with diabetic retinopathy
18. Immunohistochemical and molecular studies on WntB-Catenin signaling pathway in sebaceous cell carcinoma of the eyelid
19. Prevalence of vitamin A deficiency in children and nursing mothers co-related with corneal pathology a hospital based study
20. Evaluation of efficacy of probing in nasolacrimal duct obstruction with adjunctive mitomycin-C in adults
21. Modified lateral eyelid isolation flap for reconstruction of full thickness eyelid defects
22. Modified lateral plication for Marcus Gunn jaw winking phenomenon
23. Visual parameters in patients with regressed retinoblastoma
24. Study of visual functions and fundus findings in orbital tumours and their alterations after surgery
25. Serial ultrasonic evaluation and its clinico-pathological correlation in retinoblastoma patients undergoing chemo reduction and local treatment or enucleation
26. Randomized control trial using carboplatin 750mg/m² and 560 mg/m² for ocular salvage in group C and D retinoblastoma
27. Malignant tumours of the eye and orbit in children: The varied clinical profile and role of tumour markers in management
28. An integrated predictive model for evidence-based eye care
29. Health related quality of life in blind children (8–18years) of retinoblastoma
30. Prospective comparative randomized evaluation of intravitreal avastin, intravitreal triamcinolone acetonide and laser treatment in non-responsive persistent diffuse diabetic macular edema
31. Multifocal electroretinogram in emmetropes, myopes and hypermetropes and its correlation with optical coherence tomography
32. Comparative evaluation of functional outcome of dye assisted internal limiting membrane peeling in macular hole surgery using multifocal electroretinogram
33. Comparative evaluation of combination therapies photodynamic therapy + ranibizumab vs photodynamic therapy + pegaptanib in the treatment of subfoveal classic choroidal neovascular membrane
34. A randomised prospective study of anatomic and functional outcomes in patients of central serous chorioretinopathy (CSC) with and without laser treatment

35. Comparative study of combination therapies using photodynamic therapy with intravitreal triamcinolone *vis a vis* photodynamic therapy with intravitreal bevacizumab in treatment of neovascular age-related macular degeneration
36. Qualitative and quantitative assessment of early lesions in diabetic retinopathy with multifocal electroretinogram
37. Role of intravitreal bevacizumab in diabetic vitrectomy
38. Role of avastin in vitreous surgery for diabetic non resolving vitreous hemorrhage
39. Comparative study of 25 gauge vs 20 gauge system for pars plana vitrectomy in the management of rhegmatogenous retinal detachment
40. Predictors of type 1 retinopathy of prematurity in preterm babies
41. Comparative evaluation of intravitreal pan anti-vascular endothelial growth factor with intravitreal selective anti-vascular endothelial growth factor in diabetic macular edema
42. A randomized prospective study for comparison of effects of pascal photocoagulation with conventional laser photocoagulation in diabetic macular edema and proliferative diabetic retinopathy
43. Role of bevacizumab in surgery for diabetic vitreous haemorrhage with or without traction retinal detachment
44. Study on the prevalence, therapeutic options and outcome measures of amblyopia
45. Assessment of magnitude and progression of myopia in school going children in Delhi
46. Long term changes in Heidelberg retinal tomography and visual fields in primary adult glaucoma patients
47. Role of computed tomography dacryocystography in the evaluation of patients with epiphora
48. Role of magnetic resonance imaging in characterization of sonographically indeterminate adenexal masses

Collaborative projects

Completed

1. Evaluation of the intraocular penetration of timolol in the *in situ* gel forming formulation. (with INMAS, Delhi)
2. Epidemiology of age-related eye disease-in India-INDEYE (with The London School of Hygiene and Tropical Medicine)

Ongoing

1. A genetic component to the INDEYE study of cataract and age-related macular degeneration in India (with INDGEN)

2. Evaluation of vitreous humor as a marker fluid in the autopsy drug level analysis (with Forensic Science Laboratory, New Delhi)
3. Assessment of safety and efficacy of relinethra CAu (an autologous bioengineered conjunctiva) in conjunctival disorders (with Reliance Life Sciences)
4. Outcome of optical penetrating keratoplasty in bilaterally blind patients (with Psychiatry)
5. Ocular surface reconstruction with autografts of non-ocular origin (with Dental Surgery)
6. Sentinel Surveillance Unit at the R. P. Centre, AIIMS, under the National Programme for Control of Blindness (with National Programme for Control of Blindness, Government of India)
7. Community ophthalmology activities in ORBIS (with RIO Child Eye Care Project)

PUBLICATIONS

Journals

1. Bakshi S, Bhat GM, Sen S, Sharma S, Sharma DN. Malignant medulloepithelioma of optic nerve head. *J Pediatr Hematol Oncol* 2008;30:478–80.
2. Chawla B, Tandon R. Sutureless amniotic membrane fixation with fibrin glue in symptomatic bullous keratopathy with poor visual potential. *Eur J Ophthalmol* 2008;18:998–1001.
3. Chawla B, Agarwal P, Tandon R, Titiyal JS. Peripheral ulcerative keratitis with bilateral optic nerve involvement as an initial presentation of acute lymphocytic leukemia in an adult. *Int Ophthalmol* 2009;29:53–5.
4. Dada T, Agarwal A, Gadia R, Vanathi M, Panda A, Gupta V, *et al.* Ultrasound biomicroscopy in opaque grafts with post penetrating keratoplasty glaucoma. *Cornea* 2008;27:402–5.
5. Dada T, Aggarwal A, Minudath KB, Vanathi M, Choudhary S, Gupta V, *et al.* Post-penetrating keratoplasty glaucoma. *Indian J Ophthalmol* 2008;56:269–77.
6. Gadia R, Sihota R, Dada T, Gupta V. Current profile of secondary glaucomas. *Indian J Ophthalmol* 2008;56:285–9.
7. Gupta SK, Agarwal R, Srivastava S, Agarwal P, Agrawal SS, Saxena R, *et al.* The anti-inflammatory effects of *Curcuma longa* and *Berberis aristata* in endotoxin-induced uveitis in rabbits. *Invest Ophthalmol Vis Sci* 2008;49:4036–40.
8. Gupta V, Kumar R, Gupta R, Srinivasan G, Sihota R. Bilateral iridocorneal endothelial syndrome in a young girl with Down's syndrome. *Indian J Ophthalmol* 2009;57:61–3.
9. Jeganathan VS, Ghosh S, Ruddle JB, Gupta V, Coote MA, Crowston JG. Risk factors for delayed suprachoroidal haemorrhage following glaucoma surgery. *Br J Ophthalmol* 2008;92:1393–6.
10. Jhanji V, Tandon R, Sharma N, Titiyal JS, Satpathy G, Vajpayee RB. Whole globe enucleation versus *in situ* excision for donor corneal retrieval a prospective comparative study. *Cornea* 2008;27:1103–8.

11. Kandpal H, Aneesh MK, Seith A, Sharma S. Symptomatic perineural extension of fungal sinusitis in an immunocompetent person: imaging features. *Singapore Med J* 2008;**49**: e171–e174.
12. Kumar A, Gopalakrishnan K, Sinha S. Combination photodynamic therapy and intravitreal ranibizumab in neovascular age-related macular degeneration in a north Indian population: A pilot study. *Retina* 2008;**28**:1132–7.
13. Menon V, Shailesh G, Sharma P, Saxena R. Clinical trial of patching versus atropine penalization for the treatment of anisometropic amblyopia in older children. *JAAPOS* 2008;**12**:493–7.
14. Murthy GVS. The socioeconomic impact of human immunodeficiency virus/acquired immune deficiency syndrome in India and its relevance to eye care. *Indian J Ophthalmol* 2008;**56**:395–7.
15. Murthy GVS, John N, Gupta SK, Vashist P, Rao GV. Status of paediatric eye care in India. *Indian J Ophthalmol* 2008;**56**:481–8.
16. Murthy GVS, John N, Gupta SK, Vashist P, Rao GV. Authors' reply. *Indian J Ophthalmol* 2009;**57**:162–3.
17. Murthy GVS, Gupta SK, John N, Vashist P. Current status of cataract blindness and Vision 2020: The right to sight initiative in India. *Indian J Ophthalmol* 2008;**56**:489–94.
18. Naithani P, Sinha A, Gupta V. Inherited partial aniridia, microcornea with high myopia and Bergmeister papilla: A new phenotypic expression. *Indian J Ophthalmol* 2008;**56**:145–6.
19. Neena J, Rachel J, Vashist P, Murthy GV. Rapid assessment of avoidable blindness in India. *PLoS ONE* 2008;**3**:e2867.
20. Neena J, Murthy GV, Vashist P, Gupta SK. Work capacity and surgical output for cataract in the national capital region of Delhi and neighbouring districts of north India. *Indian J Public Health* 2008;**52**:177–84.
21. Patwardhan SD, Sharma P, Saxena R, Khanduja SK. Preferred clinical practice in convergence insufficiency in India: A survey. *Indian J Ophthalmol* 2008;**56**:303–6.
22. Prakash G, Sharma N, Choudhary V, Titiyal JS. Higher-order aberrations in young refractive surgery candidates in India: Establishment of normal values and comparison with white and Chinese Asian populations. *J Cataract Refract Surg* 2008;**34**:1306–11.
23. Prakash G, Sharma N, Goel M, Titiyal JS, Vajpayee RB. Evaluation of intrastromal injection of voriconazole as a therapeutic adjunctive for the management of deep recalcitrant fungal keratitis. *Am J Ophthalmol* 2008;**146**:56–9.
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25. Satpathy G, Bhan A, Sharma A, Kar UK. Detection of chlamydophila pneumoniae (Chlamydia pneumoniae) in endarterectomy specimens of coronary heart diseases patients. *Indian J Med Res* 2008;**128**:658–62.

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27. Senthilkumari S, Velpandian T, Biswas NR, Bhatnagar A, Mittal G, Ghose S. Evidencing the modulation of P-glycoprotein at blood-ocular barriers using gamma scintigraphy. *Curr Eye Res* 2009;**34**:73–7.
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32. Sihota R, Ghate D, Mohan S, Gupta V, Pandey RM, Dada T. Study of biometric parameters in family members of primary angle closure glaucoma patients. *Eye* 2008;**22**:521–7.
33. Sihota R, Kumar S, Gupta V, Dada T, Kashyap S, Insan R, *et al*. Early predictors of traumatic glaucoma after closed globe injury: Trabecular pigmentation, widened angle recess and higher baseline intraocular pressure. *Arch Ophthalmol* 2008;**126**:921–6.
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35. Tandon R, Verma K, Chawla B, Sharma N, Titiyal JS, Kalaivani M, *et al*. Intravenous dexamethasone vs methylprednisolone pulse therapy in the treatment of acute endothelial graft rejection. *Eye* 2009;**23**:635–9.
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37. Vats S, Murthy GVS, Chandra M, Gupta SK, Vashist P, Gogoi M. Epidemiological study of ocular trauma in an urban slum population in Delhi, India. *Indian J Ophthalmol* 2008;**56**:313–6.
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39. Velpandian T, Sihota R, Sinha A, Gupta V. Transconjunctival penetration of mitomycin C. *Indian J Ophthalmol* 2008;**56**:197–201.
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Chapters in Books and Monographs

1. Azad RV, Khan MA. Laser photocoagulation in retinopathy of prematurity. In: Garg A, Lin JT, Alio JL, Azad RV, Bovet JJ, *et al* (eds.) *Mastering the techniques of LASER application in ophthalmology*. 1st ed. New Delhi: Jaypee Brothers; 2008:535–41.
2. Azad RV, Nair S. Lasers for miscellaneous retinal vascular disorders. In: Garg A, Lin JT, Alio JL, Azad RV, Bovet JJ, Pajic B, *et al* (eds.) *Mastering the Techniques of LASER Application in Ophthalmology*. 1st ed. New Delhi: Jaypee Brothers; 2008:597–604.
3. Kumar A, Sinha S. Anti-vascular endothelial growth factor treatment for neovascular age-related macular degeneration and diabetic retinopathy. In: Saxena S (eds). *State-of-the-Art, Advanced Ophthalmic Surgery*. 1st ed. New Delhi: Jaypee Brothers; 2008:159–70.
4. Sharma YR, Gupta R, Sharma R. Management of pediatric ocular trauma. In: Garg A. *et al.* *Clinical diagnosis and management of ocular trauma*. 1st ed. New Delhi: Jaypee Brothers; 2008:181–8.

Books

1. Garg A, Lin JT, Alio JL, Azad RV, Bovet JJ, Pajic B *et al.* *Mastering the techniques of LASER application in ophthalmology*. 1st ed. New Delhi: Jaypee Brothers; 2008.

PATIENT CARE

Hospital services

	New cases	Old cases	Total
General OPD	116,390	81,538	1,97,928
Emergency	37,019	–	37,019
Total cases	153,409	81,538	2,34,947

Speciality clinics

1. Cornea	6,019	15,414	21,433
2. Lens	816	793	1,609
3. Uvea	900	1,875	2,775
4. Contact lens	1,262	2,264	3,526
5. Glaucoma	2,761	6,731	9,492
6. Ophthalmoplasty	2,835	1,541	4,376
7. Paediatric ophthalmology	796	361	1,157
8. Trauma clinic	1,162	1,040	2,202
9. Retina	2,509	4,059	6,568

10. Neuro-ophthalmology	1,616	1,152	2,768
11. Medical Ophthalmology	1,214	1,334	2,548
12. Vitreo retinal	1,915	1,137	3,052
13. Ocular surface disorder	41	49	90
14. a) Orthoptic	6,849	29,625	36,474
b) Squint	6,830	31,400	38,230
15. Refraction	–	29,667	29,667
Total cases	37,525	128,442	1,65,967
Grand total of cases	190,934	209,980	4,00,914

Indoor admissions

General ward	15,918
Casualty	2,029
Private ward	1,136
Short admissions	4,124
Daycare admissions	6,435
Total	29,642

Operations

Major	16,186
Daycare	6,039
Total major	22,225
Minor	7,051
Grand total	29,276
Deaths	02

Yearly other figures

Average bed occupancy ratio	86%
Average length of stay	4.7 Days
Average OPD attendance per working day	1345
Average number of indoor admission per working day	81
Average number of surgeries per working day	80

Investigative Laboratories

Fluorescein angiography + ICG	6,306
Ultrasonography	16,727
EUA	188
ECG	2,055

Applanation tonometry	16,547
Indirect ophthalmoscopy	4,429
Goldmann perimetry	2,524
Automated perimetry	4,703
ERG	715
VER	4,995
EOG	48
ENG	28
Focimetry	6,765
Colour vision	3,633
LI	4,126
Ultrasonic pachymetry	1,107
Non-contact tonometry	18,823
Refraction	65,525
Auto refraction	26,516
Axial length	22,022
Keratometry	20,164
OCT	7,912
Contact lenses (Old + New)	3,452
Artificial eye	575
Low vision aid	1,350
PRP	4,087
Nd-Yag laser	3,038
Fundus photography	6,355
Excimer workup (Lasik)	
Lasik (operated) eyes	131
Lasik (unoperated) eyes	465
PTK (operated) eyes	38
PTK (unoperated) eyes	94
Phakic IOL (operated) eyes	-
Phakic IOL (unoperated) eyes	63
Total number of other investigations in Lasik Lab	8731
Excimer Laser (inv. and surgeries) [R.No.101]:	
Aberometry	
Orbiscan	

PDT	102
Injection lucentis	347
Injection macugen	148
Retinal camera Ret. CAM	422
Cornea service lab	19,845
Cornea research lab	12,014
Glaucoma research lab	42,108
Total	3,38,953
Ocular Radiology	
Total number of X-rays	14,050
Total number of CTs	310
(Done in the main Department of Radiodiagnosis)	
Total number of special investigations (DCG)	50 eyes
Ocular Microbiology	
<i>Grand total</i>	13,822
Bacterial culture and sensitivity	9,665
Fungal culture	2,558
Cytology	578
Viral Ag detection	160
<i>Chlamydia</i> Ag detection	369
PCR for (<i>Chlamydia</i>)	5
PCR (HSV)	130
conjunctivitis (PCR)	34
<i>chlamydia</i> tissue culture	169
<i>chlamydia</i> serology	15
conjunctivitis (Ag detection)	22
conjunctivitis (tissue culture)	22
Culture for acanthamoeba	95
Ocular Pathology	
Total investigations	49,525
Blood (TLC, DLC, PBS, ESR, BT/CT)	14,953
Urine	19,165
Histopathology, Cytopathology and Research	15,407
Ocular Biochemistry (Clinical Chemistry)	
Total samples (apart from research)	11,488
Indoor	10,119

Outdoor	1,369
Ocular Pharmacology and Pharmacy	
Free drugs (vials) supplied through Ocular Pharmacy	77,505
MK Media	603
Eye Bank	
Total eyes	644
Surgery performed (Three corneas used for six patients)	512
Unsuitable for clinical transplantation	82
Preserved in Glycerine	35
Histopathology/stem cell	18
Culture	
Registration for Keratoplasty	
Total	790
Called for admission	879
Balance remaining	706
Number of pledges in 2008	248
Community Ophthalmology	
<i>Eye Care Services in Slums</i>	
Primary Eye care Clinics	
Slums covered for comprehensive eye-care services	20
Attendees at OPD in slums clinics	13,640
Refraction carried out in OPDs in slums clinics	4,909
Patients referred to R.P. Centre	1,474
Patients operated	619
Subsidized Spectacles issued in Slums	2,609
Training events and health education events:	
General practitioners and Volunteers Training Programmes organized	20
General practitioners and Volunteers Trained	231
Eye Health Education Events	22
Participants in the education events	1,138
Comprehensive screening camps for Diabetic retinopathy, Glaucoma and cataract in Urban Slums of Delhi:	
Comprehensive screening camps organized in urban slums	17
People examined	2,347

Patients referred for at R.P. Centre	328
Patients operated	95
Refractions carried out in PEC Centres in slums Clinics	757

Reach-in-Programme for cataract surgery in Rural and remote areas:

Adult screening camps organized	20
People examined	4,250
Patients referred at R.P. Centre	1,093
Patients operated at R.P. Centre	930
Follow-up camps organized	19
Patients examined in follow-up camps	742
Paediatric screening camps organized	1
Children examined	101
children referred at R.P. Centre	19

School Eye Screening (SES) Programme

School covered under SES Programme	19
Teachers trained under School Vision Screening Programme	51
Children screened	6,254
Children prescribed spectacles	516
Children issued spectacles	501

Rehabilitation services

Blind patient counseled for rehabilitation services	83
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AWARDS AND HONOURS

Professor S. Ghose, invited by the Executive of the Delhi Ophthalmological Society to receive on behalf of our Institution, the coveted Annual Awards (Trophies) and Certificates of Appreciation, for co-coordinating and conducting for RPC during 2008–2009; Invited to address the Expert Group at ICMR, on a Task Force for Retinoblastoma being created with ICMR, along with a National Retinoblastoma Registry, November 2008; Continued to be: Director of WHO Collaborating Centre for Prevention of Blindness; Honorary Advisor Ophthalmology to the Ministry of Health and Family Welfare, Government of India; Invited by the School of Health Sciences at Indira Gandhi National Open University (IGNOU) as Member of their Advisory Committee for organization and curriculum framing of their BSc (Hons) Optometry and Ophthalmic Techniques programme; Invited by the ICMR, DST, and CSIR amongst others as their Reviewer for Projects and nominated works for SSB Award submitted to them in the field of Ophthalmology, 2008–2009; Expert Member of the Technical Advisory Group on Visually Handicapped for Projects submitted to District Rehabilitation Centre Scheme, Ministry of Social Justice and Empowerment, Government of India, New Delhi 2008–2009; Invited Member Technical Advisory Group (TAG) for The Inclen Trust International study ‘Neuro-developmental Disabilities Among Children in India: An Inclen Study’ for their Second TAG

Meeting, New Delhi, April 2008; Expert Member to help the Sectional Committee of Ophthalmic Instruments and Appliances, MHD 5, Bureau of Indian Standards, New Delhi; Expert Member, Management Development Programmes on Operation, Maintenance and Repair of Optical and Ophthalmic Equipment sponsored by MEA, GOI under the aegis of the Central Scientific Instruments Organization (CSIO), a National Laboratory of CSIR, GoI; Invited speaker and Panel Member in their Educational Symposium in the area of Continuous Professional Development especially regarding Medical Knowledge, **Interpersonal** and Communication Skills during the International Educational Programme of the Education Subspecialty Day, World Congress of Ophthalmology 2008, Hong Kong, in conjunction with the Asia-Pacific Academy of Ophthalmology, June–July 2008; Invited by the Prevention of Blindness and Deafness (PBL), Team Leader at the World Health Organization (WHO) HQ Switzerland, **to represent our WHO Collaborating Centre** from India and present **the achievements of our Centre** at their **Symposium entitled ‘WHO Collaborating Centres: Role in Education’ organized for the 2008 World Ophthalmology Congress at Hong Kong, June–July 2008**; Vice President of the National Forum of Vision 2020: The Right to Sight–India.

Professor Rajvardhan Azad: Elected as Vice President, All India Ophthalmological Society, Annual Conference, Bangalore, 2008; President, Organising Committee, IX Biennial Conference of SAARC Academy of Ophthalmology, , India Habitat Centre, New Delhi, 4–6 September 2008; Awarded a Special Annual Award, Coeur d ‘or’ (Heart of Gold) initiated by the Kalra Hospital Sri Ram Cardio-Thoracic Neurosciences Centre on the occasion of World Heart Day, 28 September 2008; Appointed by the Medical Council of India as Inspector for inspecting: Subharti Medical College, Meerut, February 2009; Katuri Medical College and Hospital, Guntur, February 2009; Nil Ratan Sircar Medical College, Kolkata, November 2008 and January 2009; Sree Balaji Medical College and Hospital, Chennai, December 2008; Amrita School of Medicine, Cochin, Kerala, October 2008 and Padamshree Dr D.Y. Patil Medical College Hospital and Research Centre, Navi Mumbai, May 2008. Appointed Chairman, Expert Committee Established for Rajendra Nagar Superspecialty Hospital for Eye, Patna, State Health Society, Bihar, 18 March 2008; Joseph Eye Hospital, Tiruchirapalli, February 2008; Member Reviewers Committee, Indian Council of Medical Research (ICMR); Bio Med Central Ophthalmology, London; Ophthalmic Surgery Laser and Imaging; Indian Journal of Ophthalmology; Journal of American Association Paediatric Ophthalmology and Strabismus; Clinical and Experimental Ophthalmology; British Medical Journal of Ophthalmology; Indian Journal of Paediatrics; Acta Ophthalmologica; Expert Review of Ophthalmology; Continued to be: Expert Standing Selection Committee, PGI, Chandigarh; Appointed Chairman Ophthalmology Section, Bureau of Indian Standards (BIS) Ministry of Agriculture Food and Civil Supplies, Consumer Affairs and Public distribution; Secretary, SAARC Academy of Ophthalmology.

Professor Yog Raj Sharma, (Reviewer) Emergency Medicine Journal of Ophthalmology, 2009; Ophthalmology (American Academic of Ophthalmology) 2008–2009; British Medical Group, 2008–2009.

Professor Pradeep Sharma, Awarded Dr S.N. Mitter Oration Award for 2008–2009 by Delhi Ophthalmological Society.

Dr Ramanjit Sihota, (Reviewer) *Indian J Ophthalmology*, 2008; *Archives of Ophthalmology*, 2008; *British Journal of Ophthalmology*, 2008; *Eye*, 2008; Ophthalmic Epidemiology, 2008; Ophthalmic and Physiological Optics, 2008; Acta Ophthalmologica.

Professor Atul Kumar, Appointed as Member Selection Committee for the post of Faculty at KGM, Lucknow, UP, February 2009; UGC Award on 'Interaction between Science and Society' 2009; Awarded Oration on 'Magnitude, Challenge and Update-Diabetic Retinopathy' 2008 Uttarakhand Ophthalmic Society, October 2008; Member Committee Ministry of Health and Family Welfare, Nirman Bhavan for planning and preparing manual of Diabetic Retinopathy for medical colleges and primary health centre in India. Spoke on 'Vitreotomy for Diabetic Retinopathy (including Diabetic Retinopathy Vitrectomy Study)' September 2008; Member, PG Board of Studies in Surgery and Allied Sciences. Pt. B.D. Sharma PGIMS, Rohtak 2008; Member, UGC Expert Committee on university status, 2008.

Professor Jeewan S. Titiyal, Jointly awarded Best of Video show award entitled 'Deep Anterior Lamellar Keratoplasty Using' the 'Big Bubble Technique' in 'Hurler Scheie Syndrome' at American Academy of Ophthalmology, Atlanta, USA, 2008; Awarded certificate of appreciation by Delhi Ophthalmological Society, New Delhi, April 2008; Major (Dr) S.C. Dutta Oration on 'Difficult situations in Phacoemulsification Surgery' awarded by Ophthalmological Society of West Bengal, XXIX Annual State Conference, October 2008; Reviewer: Indian Journal of Ophthalmology; Indian National Medical Journal of India; Editorial Board Member: Delhi Journal of Ophthalmology; Journal of Uttranchal Ophthalmological Society.

Dr Radhika Tandon, Awarded Gold Medal by Intraocular Implant and Refractive Society of India, 22 August 2008 for achievements in Ophthalmology and contribution to teaching Ophthalmology; invited by SMS Medical College Jaipur and Four Decade Trust for delivering Jubilee oration on 'Eye Banking and Corneal Transplantation–Newer trends', 8 November 2008; Nominated as international Health Professional of the year by International Biographical Centre, Cambridge, England; Member, Task force in the priority areas of the Blindness programme in All India Ophthalmological Society; invited by Prova Eye Bank, B. C. Memorial Eye Foundation and Disha Eye Hospital and Research Centre, Barrackpore to provide technical guidance and assistance for helping the local ophthalmic surgeons start a keratoprosthesis service at their hospital. Successful Skills transfer workshop was conducted, 26 March 2009; appointed member of expert committee to examine documents to be released as Medical Standards for Eye Banking in India by Directorate General of Health Services, MOHFW (Ophthalmology Section); continued to be: Member of the core group for introduction of OSCE style examination by the National Board of Examination; Joint Secretary of Eye Bank Association of India; remained on the panel of examiners in Ophthalmology of Royal College of Surgeons, Edinburgh; adjunct faculty member, CMET, AIIMS.

Dr G.V.S. Murthy, Awarded the Dr G. Venkataswamy Memorial Award for exemplary individual contribution in Community Eye Care by the Community Ophthalmology Society of India at Venu Eye Institute and Research Centre, Delhi, 22 November 2008; Joined the International Centre for Eye Health, London School of Hygiene and Tropical Medicine, London as a Senior Clinical Lecturer in the Clinical Research Unit since, 1 October 2007; Technical Consultant for the National Nigeria Blindness and Low Vision Survey; Technical Consultant for the childhood disability project in Bangladesh and Pakistan. Continued to be: Secretary, International Society for Geographical and Epidemiological Ophthalmology; Member, Editorial Board of the *Journal of Community Eye Health*; Member, Operational Research Advisory Group of Vision 2020 India; Member, WHO Global Monitoring Committee of Implementation of Vision 2020 Initiative; invited faculty for the Community

Eye Health Diploma course at the L.V. Prasad Eye Institute, Hyderabad; Reviewer: BMC Ophthalmology; BMC Public Health; International Ophthalmology and Visual Science; *Eye*; *Journal of Community Eye Health*; *National Medical Journal of India*; *International Ophthalmology*; *Acta Ophthalmologica*; *Indian Journal of Ophthalmology*; On the Reviewer's panel of *British Journal of Ophthalmology*; Lancet; Member, INDIACLEN; Member, 'Expert- Group on Trachoma' by Blindness Control Division of the Ministry of Health and Family Welfare; Member, Academic Resources Advisory Committee of the National Programme for Control of Blindness.

Dr Sanjay Sharma, Reviewer, *Journal of Vascular and Interventional Radiology*.

Dr Namrata Sharma, Jointly awarded Best of Video show award entitled 'Deep Anterior Lamellar Keratoplasty using the 'Big Bubble Technique in Hurler Scheie Syndrome' at American Academy of Ophthalmology, Atlanta, USA, 2008.

Dr Praveen Vashist, Member, 'Expert- group on trachoma', Blindness Control Division of the Ministry of Health and Family Welfare; Member, Editorial Board, NPCB India, Quarterly Newsletter of National Programme for Control of Blindness; Reviewer for: Indian Journal of Community Medicine, 2008; Indian Journal of Ophthalmology; Resource person for the State Programme Manager and District Programme Manager's training under NPCB.

SIGNIFICANT EVENTS

- Department of Ocular Pharmacology and Pharmacy, Dr R.P. Centre, AIIMS has recognized as DST-FIST sponsored by Department of Science and Technology (DST), Government of India, New Delhi.
- The Stem cell/Tissue and cell culture facility, established in the department of Ocular Biochemistry, is actively involved in research in ocular diseases. The Molecular Biology laboratory in the department of Ocular Biochemistry, is pivotal in research into the genetic basis of eye diseases. New investigations viz. (i) glycosylated haemoglobin, (ii) homocysteine and (iii) C-reactive protein has been started for patient care services in the department of Ocular Biochemistry.
- Molecular pathology laboratory has been started at department of ocular pathology.
- Drishti Project under National Association for the Blind collaborated by Reliance provides trephines and medication for post-operative patients.
- National Eye Donation Fortnight: 25 August–8 September 2008. Awareness drive for eye donation was launched, charts and pamphlets distributed. 12 eyes were received and 13 pledges were made for eye donation.
- Eye donation day was celebrated, 8 September 2008 at LT-6, 6th floor, Dr R.P. Centre. Various programmes were introduced to promote eye donation and spread throughout the country. Certificates and momentos were distributed to the donor families.
- Personal visit of Officer-in-charge, Eye Bank with Grief Counsellor to various departments of AIIMS and Casualty. Awareness generated among the mortuary staff about eye donation counseling.
- Eye donation-related programme, at RML Hospital, 27 August 2008.

- Eye donation-related recording at 5 pm, Mandi House, Delhi Doordarshan ‘Evening live show’; 25 August 2008.
- Eye donation-related programme, Dayal Singh College, New Delhi, 27 August 2008. Eye Donation related programme recording was done by All India Radio, 25 August 2008. Another radio programme was recorded and telecast through All India Radio, FM Gold 106.4; 28 August 2008.
- The team from Community Ophthalmology Department deputed to serve the flood relief rehabilitation camp at Bihar, organized by Hans Raj College, Delhi University; 9–15 September 2008 and also participated in the cataract surgical camp organized by R.P. Centre in District Godda, Jharkhand; 24–30 November 2008.

VISITING SCIENTISTS/FELLOWS AT RPC, AIIMS

- Dr Wahidul Islam, Country Director, Sightsavers International Bangla Desh.
- Mr Zelalem, ORBIS Ethiopia Programme Manager HCRP.
- Jeremy Watson, Journalist ‘Scotland on Sunday’
- Dr Anngayarkanni Narayanasami, Reader, Department of Ocular Biochemistry, Shankara Nethralaya.
- Dr Vanitha Thulasisanan, Staff Scientist Bio-Red Laboratory, Hercules USA.
- Dr Bhaskar Singh, Scientist, Department Bio-physics.
- Mr Sumit Mehna from Bio-red.

10.7 Jai Prakash Narayan Apex Trauma Centre

Chief

M.C. Misra

Faculty In-charge Hospital Administration

John R. Bera(Ortho)

Associate Professor Kamran Farooque (Ortho)

Assistant Professors

Babita Gupta (Anaesthesia)	Chhavi Shawney (Anaesthesia)	Sanjeev Bhoi (Emergency Medicine)
Shefali K. Sharma (Emergency Medicine)	Vinay Gulati (Emergency Medicine)	Adarsh Kumar (Forensic Medicine)
Sanjeev Lalwani (Forensic Medicine)	Purva Mathur (Laboratory Medicine)	S. Arul Selvi (Laboratory Medicine)
Deepak Agrawal (Neurosurgery)	Deepak K Gupta (Neurosurgery)	G.D. Satyarthee (Neurosurgery)
Sumit Sinha (Neurosurgery)	Buddhadev Chaudhary (Ortho)	Vijay Sharma (Ortho)
Vivek Trikha (Ortho)	Atin Kumar (Radiodiagnosis)	Shivanand G. (Radiodiagnosis)
Amit Gupta (Surgery)	Subodh Kumar (Surgery)	Maneesh Singhal (Surgery)
Sushma (Surgery)		Biplab Mishra (Surgery)

EDUCATION

Short-term training

- Dr Okidi, Okechukwu O 01.05.08 – 01.11.08 (Six months)

Elective training

- Ms Anina Zeumer of Germany 04.02.08 – 03.05.08 (Three Months)
- Mr Bhagteshwar Singh of U.K. 01.11.07 – 31.01.08 (27 days)
- Ms Manvi Solanki of Mumbai 08.04.08 – 03.05.08 (26 days)
- Ms Ho Weng Yan of Singapore 05.05.08 – 28.05.08 (23 days)
- Ms Jenica Yong Su-Ern of Singapore 05.05.08 – 28.05.08 (23 days)

- Ms Amanda Loh Wenying of Singapore 05.05.08 – 28.05.08 (23 days)
- Mr Donovan Eu Kum Chuen of Singapore 05.05.08 – 28.05.08 (23 days)
- Ms Michelle Lim Hui Ping of Singapore 05.05.08 – 28.05.08 (23 days)
- Ms Ker Liang of Singapore 05.05.08 – 28.05.08 (23 days)
- Ms Lim Jia Yang of Singapore 05.05.08 – 28.05.08 (23 days)
- Mr Kosalarajah Paheentharajah of Germany 29.09.08 – 23.11.08 (1m 25 days)
- Ms Konika Chatterjee of Australia 16.11.08 – 29.11.08 (14 days)
- Ms Marie-Laura Veronika Berger of Germany 08.12.08 – 02.03.09 (3 months)

Continuing Medical Education (CME)

Professor M.C. Misra

Course Director for

- 15th ‘Training Course in operative laparoscopy—basic and advanced’; 23–27 March 2009.
- 3rd ‘Training Course in laparoscopic hernia surgery’; 10–12 February 2009.
- 2nd Training course in laparoscopic colorectal surgery; 19–21 January 2009.
- 14th ‘Training Course in operative laparoscopy—basic and advanced’; 5–9 January 2009.
- 13th ‘Training Course in operative laparoscopy- basic and advanced’; 8–13 December 2008.
- 2nd ‘Training Course in laparoscopic hernia surgery’, 25–27 November 2008.
- 12th ‘Training Course in operative laparoscopy—basic and advanced’; 10–14 November 2008
- 11th ‘Training course in operative laparoscopy—basic and advanced’; 13–17 October 2008.
- 3rd Training Course in laparoscopic suturing skills; 20–21 September 2008.
- 10th ‘Training Course in operative laparoscopy—basic and advanced’, 1–5 September 2008
- 1st ‘Training Course in laparoscopic hernia surgery’; 6–8 August 2008.
- 2nd Training Course in laparoscopic suturing skills; 21–23 July 2008.
- 9th ‘Training Course in operative laparoscopy—basic and advanced’; 7–11 July 2008.
- 1st Training course in laparoscopic colorectal surgery; 5–7 May 2008.
- 8th ‘Training Course in operative laparoscopy- basic and advanced’; 31 March–4 April 2008.

Conference Organization

- Organizing Chairman- Trauma 2008, International conference, CME cum Live Workshop and Inaugural conference of the Indian Society Trauma and Acute Care (ISTAC); 28–30 November 2008.

- Organizing Chairman, of Third AIIMS Surgical Week International Minimal Access Surgery Conference, CME cum Live Workshop, Endosurg 2009, All India Institute of Medical Sciences; 13–15 March 2009.

Lectures delivered:

- ‘Laparoscopic Adrenalectomy’, Joint CME and Live Workshop, Oman Medical College, Sohar, Oman; 9–10 April 2008.
- Surgical Meet, BP Koirala Institute of Health Sciences; 25–26 April 2008.
- Inspection of Renal transplant facilities at Base Hospital, New Delhi; 3rd May 2008.
- ‘Laparoscopic Inguinal Hernia Repair with TEP Technique’, participate in the establishment of Micro Invasive a Hernia Repair Therapy and Training Centre, Beijing, China, 20–25 May 2008.
- 2nd National Conference of Indian Hernia Society,, Srinagar; 6–8 June 2008.
- Visited the State Civil Hospital, Naharlagun; 11–12 July 2008.
- Member Constitution of National Task Force on Ksharsutra, Department of Ayurveda, Yoga and Naturopathy, Unani, Siddha and Homeopath (AYUSH), Ministry of Health and Family Welfare; 24–25 August 2008.
- Member, team of Senior Doctors from AIIMS to Ladakh; 1–8 September 2008.
- Faculty, IMRCS Part 3 Examinations, Delhi; 8–12 September 2008.
- Member Technical Experts Committee Review meeting for HDR Brachytherapy and Modular OT’s; 22 September 2008.
- Chaired the prestigious MAMC Golden Jubilee Oration in Surgery Update 2008, Maulana Azad Medical College, New Delhi; 24 September 2008.
- Assisted the Interview board for selection of the GDMOs, FAZAL Chamber, SCOPE Convention Centre, Lodhi Road; 27 September 2008.
- 3rd Annual Surgery CME Series International Upper GI and Hepatobiliary Conference; 8 October 2008.
- 1st North Zone Selsicon 2008, Agra; 18–19 October 2009.
- Successfully completed ATLS Course, UAE; 29– October – 6 November 2008.
- XXXIV Annual Conference of UPASICON 2008, Bareilly; 7–9 November 2008.
- Indo-US Workshop on Low Cost Diagnostic and Therapeutic Technologies, Hydrabad; 18–20 November 2008.
- Chaired a Pubic Lecture on ‘Liver Donation’, Maulana Azad Medical College, New Delhi; 4 December 2008.

- Visited the Imphal committee constituted by Ministry Of Health to look into the additional requirements of RIMS; 22–23 December 2008.
- ‘Developments in Laparoscopic Hepatobiliary Surgery in last 10 years’, Luchiana; 28 December 2008.
- Conducted Symposium on ‘Ethical issues with doctor patient relationship’, Nainital; 11 January 2009.
- Conducted Live Workshop and CME on Laparoscopic Surgery, Chitrakoot; 17–18 January 2009.
- Upgradation in the second phase of PMSSY; 21–22 January 2009.
- Meeting of the Members of the Board—finalization of curriculum in the Specialty of General Surgery.
- Delivered a guest lecture at Baba Raghav Das Medical College, Gorakhpur; 7–8 February 2009.
- Attended Forth Annual Meeting of International Endohernia Society (IEHS) and Live Workshop held in New Delhi; 19–21 February 2009.
- Member, Global Clinical Advisory Board Meeting in North Haven, Ct, USA; 16–17 February 2009.
- Conducted Live Laparoscopic workshop of Gynaecology and Surgery, Singrauli; 27–28 February 2009.
- Guest Faculty for the Indo Australian Workshop on Biomedical Devices being organized; New Delhi; 5 March 2009.
- Laparoscopic workshop cum CME, Shillong; 20–21 March 2009.
- Faculty IMRCS Part 3 Examination, Dubai; 27 March to 3 April 2009.

List of Papers Presented

The following papers were presented at the below mentioned conferences by different residents and senior residents of surgery Unit IV.

- Friction Burn—A clinical Study, 14th Congress of International Society for Burn Injuries, Montreal, Canada; September 2008.
- Laparoscopic Incisional hernia repair using composite mesh, Second National Conference, Indian Hernia Society, Srinagar; June 2008.
- Laparoscopic Incisional hernia using Polypropylene mesh, Second National Conference of Indian Hernia Society, Srinagar; June 2008.
- TAPP vs TEP—Preliminary Results, Second National Conference of Indian Hernia Society, Srinagar; June 2008.
- Balloon dissection vs Telescopic dissection in TEP, Second National Conference of Indian Hernia Society, Srinagar; June 2008.

- TEP Repair in groin Hernia—prospective evaluation in testing care centre, Second National Conference of Indian Hernia Society, Srinagar; June 2008.
- Laparoscopic repair of Parastomal Hernia, Second National Conference of Indian Hernia Society, Srinagar; June 2008.
- Use of Pre-shaped mesh groin Hernia repair, Second National Conference of Indian Hernia Society, Srinagar; June 2008.
- TEP vs TAPP repair for inguinal hernia—a prospective randomized trial presented at International Consensus Congress of International Endohernia Society; New Delhi; 19–21 February 2009.
- Suture v stacker fixation in patients with primary ventral hernia and incisional hernia—a prospective randomized trial presented, International Consensus Congress of International Endohernia Society, New Delhi; 19–21 February 2009.

Dr Babita Gupta

- Course Director, ABCDE workshop concentrating on management of trauma victims, ‘Trauma 2008’ New Delhi; November 2008.

International Presentations

- Cerebral fat embolism: Diagnosis-based on magnetic resonance imaging’, Presented in ‘Asia Pacific Critical Care 2008 Congress’, Sydney, Australia (Presented by Senior Resident Dr Subir Das).
- Use of Aerosolized Polymyxin B for the treatment of pneumonia in critically ill patients: A case series of 4 patients. Presented in ‘ASIA Pacific Critical Care 2008 Congress’, Sydney, Australia (Presented by Senior Resident Dr Subir Das).
- Massive Hydrothorax following PCNL, ‘Asia Pacific Critical Care 2008 Congress’, Sydney, Australia (Presented by Senior Resident Dr Subir Das)

National Presentation

- Massive Hydrothorax following PCNL in ‘ISA’ Delhi Chapter; April 2007.
- An uncommon route of induction of Anaesthesia ‘Intraosseous Route’, A case report presented in Trauma 2008, New Delhi.
- Airway management in the Emergency department: Change in Scenario with protocol-based training programme, Trauma 2008, New Delhi.
- A case report of Anterior Screw extrusion diagnosed during Ryles tube insertion presented in Trauma 2008, New Delhi.
- Use of Aerosolized Polymyxin B for the treatment of pneumonia in critically ill patients: A case series of 4 patients, Trauma 2008, New Delhi.
- Cerebral Fat Embolism: Diagnosis based on magnetic Resonance Imaging’, Presented in Trauma 2008, New Delhi.

Lectures delivered

- ‘Critical care management: What are the controversies?’, Trauma Conference , Dubai; October 2008.
- ‘Coagulopathy in Trauma’ Trauma Conference, Dubai; October 2008.

Lectures in National Conferences

- Management of Head Injury, Indo-US Emergency Medicine Summit, Mumbai; September 2007.
- Management of Head Injury, Indo-US Emergency Medicine Summit, Mangalore; October 2008.
- Trauma in Pregnancy, Obstetric Anaesthesia , B.R. Ambedkar hospital, New Delhi.
- Assessment of Airway in ISACON, Indian Society of Anaesthesiologist , New Delhi.

Dr Chhavi Sawhney

Workshops

- Basics of ECG, INDO-US emergency medicine, Mangalore; 11 October 2008.
- BLS workshop as ‘Bystander care for road accident victims’; 19 October 2008 and 8 November 2008.
- APICON 2009, Noida (30.1.09 – 1.2.09) - Workshop on ‘Fluids and acid-base management’ and Workshop on ‘Mechanical ventilation’.
- BLS workshops for cops, PCR van drivers; 6 March and 28 March 2009.

Presentations

- ‘Recent advances in anaesthesia’, AIIMS (Poster presentation); 30 January – 1 February 2009.

Chapters

- Book on ‘Basic emergency care’.

Lectures

- Infection Control Week (JPNATC) Standard protocols for OR in Infection control week; 20 October 2008.

Dr Sanjeev Bhoi

Workshop

- Course Director, Basic Emergency Care Workshop, Seven such workshops have been conducted; 2008–2009.
- Course Director, ECG workshop, INDUS-EM 2008, Mangalore, India; 11 October 2008,.
- Basic Life Support Courses for Junior Residents, Senior Residents, Nurses, Paramedics, Policeman.
- Advanced Cardiac Life Support Training for Junior Residents, Senior Residents, Nurses.

Lecture delivered

- Speaker: Development of Emergency Trauma Care Systems – AIIMS Experience at National consultation on human capacity building In emergency, trauma and disaster management: A programme for developing and strengthening Medical services and response, Pune; 13 March 2009.
- Speaker: Acid-base and electrolyte workshop, Greater Noida, India; 30 January 2009.
- Speaker: Issues and hurdles in Academic Emergency Medicine Development, INDUS-EM 2008, Mangalore, India; 10 October 2008.
- Speaker: Trauma Care Systems in India, MUHS-CDC workshop, Pune, India; 13 October 2008.
- Speaker: Bombing patterns, CDC workshop, Baroda; 14th October 2008.

National and International Conferences

Paper Presentation

- To assess the door to needle time in patients who died of acute coronary syndrome in a tertiary care Emergency Department, Chicago, USA; 26–30 October 2008.
- Profile of patients presenting to the Emergency Department with poisoning, Chicago, USA; 26–30 October 2008.
- Does simulation as a teaching tool improves skill and coordination among the trauma team of an Emergency Department?, INDUS-EM 2008, Mangalore, India; 10 October 2008.

Dr Shefali K. Sharma

- Basic Life Support Courses for Junior Residents, Senior Residents, Nurses, Paramedics, Policeman.
- Advanced Cardiac Life Support Training for Junior Residents, Senior Residents, Nurses.
- Initial Resuscitation of Trauma Victims.
- Simulation as a teaching tool has been started and seven such sessions has been conducted so far. Clinical Evaluation of Patients: Workshop conducted during Rheumatology Update 2009, AIIMS, New Delhi; 22nd February, 2009.
- Co-Organizing Secretary, Rheumatology Update 2009, AIIMS, New Delhi; 22nd February 2009.

Dr Vinay Gulati

- Basic Life Support Courses for Junior Residents, Senior Residents, Nurses, Paramedics, Policeman.
- Advanced Cardiac Life Support Training for Junior Residents, Senior Residents, Nurses.
- Initial Resuscitation of Trauma Victims.
- DOTS PLUS Training Programme, Central TB Division, Government of India, Hyderabad; March 2009.
- Simulation as a teaching tool has been started and seven such sessions has been conducted so far.

Workshop

- Course Faculty, Mechanical Ventilation Workshop, APICON 2009, Greater Noida.
- Course Faculty, Sleep Workshop, APICON 2009, Greater Noida.
- Organizing Secretary, Medicine Update 2008, AIIMS, New Delhi.

Lectures Delivered

- ‘Immunization in Adults’, Annual conference of the Association of Physicians of India (APICON 2009), Greater Noida; 30 January 2009.
- ‘Liberation from mechanical ventilation’, Mechanical Ventilation workshop, APICON 2009 Greater Noida; 31 January 2009.
- ‘Safe Hospital Practices’, Infection Control Week, JPNA Trauma Centre; 20 October 2008.
- ‘Infection prevention in ICUs and judicious use of antimicrobials’, Infection Control Week, JPNA Trauma Centre; 22 October 2008.
- ‘Malaria’, CME, Indian Medical Association, Panipat Branch, 28 September 2009.

Dr Adarsh Kumar

- Member, Organising Committee, TRAUMA -2008, the inaugural conference of ISTAC; 28–30 November 2008.
- Additional Organizing Secretary, 9th International Conference of ICFMT, SAFCON-2008, jointly organized by AIIMS and Amity University NOIDA; 10–12 October 2008.

Guest Lecture

- Police Officers from India as well as abroad, Advance Course on Scientific Investigation through Central Detective Training School, Chandigarh; 12–14 May 2008.
- Medico legal Aspect of Record Keeping, IMA, Lucknow; 1 March 2009.
- MLC of Dowry Death, Recording of Statement in Burn Cases to Delhi Higher Judicial Services Officers, NICFS, Delhi; 5 March 2009.
- ‘Medical Ethics and Law, Consumer Protection Act and Negligence, Organ transplantation Act’, 30th Annual Conference of Indian Academy of Forensic Medicine, Nagpur; 21–23 February 2009.
- Silver Jubilee World Congress ‘Pathology Update-2009’, Sydney, Australia; 12–15 March 2009. The paper ‘Challenges and remedies in delivering forensic pathology services—an Indian view point’ was accepted for Royal College of Pathologists, Australasia (RCPA) Grant.
- Workshop on ‘Introduction to Mortuary and Autopsy Practices’.

Dr Sanjeev Lalwani

Conferences

- Additional Organizing Secretary- SAFCON-2008, Amity University, Noida (UP); 9–12 October 2008.
- National Workshop on Alcohol: Revisiting the Current Situation and Planning Ahead, NDDTC and Department of Psychiatry; 14–15 October 2008.
- Convenor (Specialty of Forensic Medicine) and Member Organizing Committee, Trauma-2008, JPNATC AIIMS New Delhi; 28–30 November 2008.

Presentations/ Guest Lectures

- Lalwani S. 'Transplantation of Human Organs', NIHFWD, Delhi; Course on 'Health and human rights'; 5th August 2008.
- Lalwani S. Interactive session and made presentation on 'Understanding technology and utilizing it for the benefits of rape victims' in the 'Consultation on guidelines for managing sexual assault', Delhi Commission of Women; 9 August 2008.
- Lalwani S. 'Medico-legal issues in Ear Surgery', Guest lecture delivered in Surgical Workshop and CME-Otology, , Department of ENT, AIIMS, New Delhi. 17–19 August 2008
- Lalwani S. 'Consent for Treatment', Guest lecture delivered in National Conference on Litigation and Violence in Medical Practice; 30–31 August 2008.
- Lalwani S, Kumar Arvind. Consent in medical practice and its use as Defense in cases of Negligence. Paper presented in SAFCON-2008, Amity University Noida (UP); 10–12 October 2008.
- Kumar A, Lalwani S, Aggarwal D, Rautji R, Dogra TD. Fatal Road Traffic Accidents and Their Relationship with Head Injuries: An Epidemiological Survey of Five Years. Paper presented in SAFCON- 2008, Amity University Noida (UP); 10–12 October 2008.
- Kumar A, Lalwani S, Behera C, Rautji R, Dogra TD. A Retrospective Review of Deaths of Homeless Unclaimed Persons in South Delhi (2001-2005). Paper presented in SAFCON- 2008, Amity University Noida (UP); 10–12 October 2008.
- Lalwani S, Karthikeya C Venkata. Medicolegal Issues in Otorhinolaryngology-Head and Neck Surgery. Paper presented in SAFCON- 2008, Amity University Noida (UP); 10–12 October 2008.
- Lalwani S, Behera C. Forensic related issues in Human Trafficking. Paper presented in SAFCON-2008, Amity University Noida (UP); 10–12 October 2008.
- Behera C, Rautji R, Lalwani S, Dogra TD. Accidental fatal fall from Height in Infant and Children: A Study from South Delhi. Paper presented in SAFCON-2008, Amity University, Noida (UP); 10–12 October 2008.
- Behera C, Rautji R, Lalwani S, Dogra TD. A Comprehensive Study of Motorcycle Fatalities in South Delhi. Paper presented in SAFCON-2008, Amity University, Noida (UP); 10–12 October 2008.

- Co-Chairman Scientific Session- SAFCON-2008, Amity University, Noida (UP); 10–12 October 2008.
- Jury Member for best paper award- SAFCON-2008, Amity University Noida (UP); 10–12 October 2008.
- ‘Mortuary Services’ for participants of NIHFW and Hospital Administration, AIIMS on Department of Hospital Administration, AIIMS, New Delhi; 14 October 2008.
- Member ‘Panel Discussion’ on ‘Data on Alcohol and Health Damage’ and presented Alcohol and Violence in National Workshop on Alcohol: Revisiting the Current Situation and Planning Ahead organized by Department of Psychiatry and NDDTC, AIIMS, New Delhi; 14 October 2008.
- ‘Medico legal and Financial Implications in Nosocomial Infections’, Hospital Infection Control Week, Department of Laboratory Medicine, JPNATC, AIIMS, New Delhi; 20–24 October 2008.
- ‘Guidelines for Medico legal Work’ and Panel discussion Trauma-2008 JPNATC, AIIMS New Delhi; 28–30 November 2008.
- Guest Lecture- ‘Functioning of mortuary and disposal of dead bodies’, Trauma-2008 JPNATC, AIIMS New Delhi; 28–30 November 2008.
- Moderator of Session. Session of Scope of Forensic Medicine in Private Practice Gaurav Aggarwal. Symposium on Recent Trends in Forensic Medicine, VMMC and Safdarjung Hospital, Delhi; 20 December 2008.
- Interactive Session in strengthening of South Delhi Juvenile Police Unit DCP (South District, Delhi), 20 March 2008.

Dr Purva Mathur

Workshop organized

- Infection Prevention Week, Department of Laboratory Medicine and the Hospital Infection Control Committee, JPNA Trauma centre, AIIMS; 20–24 October 2008.

Guest Lectures

- ‘Infection control protocols in trauma and its management: Safe surgery saves lives’, Association of Mumbai Consultants. Mumbai; 6 September 2008.
- Overview of Infections in Trauma Patients. Infection Prevention Week, Department of Laboratory Medicine and Hospital Infection Control Committee, JPNA Trauma Centre, AIIMS; 20–24 October 2008.
- ‘HIV and Emergency Care’, Workshop, NACO, Department of Microbiology, AIIMS; February 2009.
- Zero tolerance for nosocomial infections in endoscopic surgery. 3rd Endosurg Conference, Department of Surgical Disciplines, AIIMS; March 2009.

Scientific Papers Presented In Conferences

- Behera B, Das P, Mathur P, et al. Metallo β-lactamase and Amp C β-lactamase producing Pseudomonas aeruginosa at a tertiary care centre in India. Presented in the Indian Association of Medical Microbiologists (Delhi chapter)
- Behera B, Mathur P. Spectrum of nosocomial infections and antimicrobial resistance at a level 1 Trauma Centre of India. Trauma 2008, Delhi, 2008
- Sanghi S, Mathur P, et al. Knowledge, Attitude and Practices of Infection Control amongst nursing staff at a level 1 Trauma Care centre. Trauma 2008, Delhi, 2008
- Singh V, Mathur P, et al. Nosocomial urinary tract infections amongst trauma patients at a level-1 Trauma Centre. Trauma, Delhi; 2008.
- Shally, Poonam, Kanchana RS. Arulselvi, Purva Mathur, Deepak Gupta. Retrospective analysis of CSF on head injury patients. Trauma, Delhi, 2008.

Dr Deepak Kr. Gupta

Papers Presented

- ‘Congenital dermal sinus: A series of 45 cases’, 36th Annual ISPN conference, Cape town, South Africa; 12–16 October 2008.
- Intra-tumoral interstitial radiotherapy in recurrent glioblastoma multiforme: A series of 7 cases, 9th European skull base surgery congress, Rotterdam, Netherlands; 2009
- ‘Chiari malformations: A study of 45 cases’, ESBS Congress, European skull base surgery congress, Rotterdam, Netherlands; 2009

Dr Vijay Sharma

Organising Team

- Trauma 2008, New Delhi.
- Spine Research Society International Meeting 2008, New Delhi.

Faculty Lectures

- Guest Lecture-Paediatric Fractures Indo-US Summit Mangalore; 2008
- Fractures in children, Trauma 2008, New Delhi
- Shock Management in A and E in ABCDE Workshop Trauma 2008, New Delhi;
- Overview of Acetabular Fractures PUNCON; 2008.
- Reduction Techniques in Acetabular Surgery North Zone IOA Rohtak; 13–15 February 2009.

Important Events

- AO Masters course Agra; 2008.
- Short term training in shoulder Arthroscopy, Perth Australia; January; 2009.

Dr John R. Bera

- Joint Organizing Secretary for TRAUMA 2008, JPN Apex Trauma Centre, AIIMS, New Delhi; 28–30 November 2008.

Guest Lectures

- ‘Extremity Injury and its Management in ER’ INDUS EM 2008, Mangalore; 9 October 2008.
- Conducted a Workshop, Splint and SAM Splint. INDUS EM 2008, Mangalore; 12 October 2008.
- Prevention of Implant Related Infection. Infection Prevention Week^h, JPN Apex Trauma Centre AIIMS, New Delhi; 20- 24 October 2008.
- Splint in ER. TRAUMA 2008, New Delhi; 30 November 2008.

Books

Basic Emergency Care

Dr Vivek Trikha

International Presentation

- **‘A typical presentations of Foot and Ankle tuberculosis—time to wake-up’**, Paper presented in the American Academy of Orthopaedic Surgeons Annual Meeting, Las Vegas, USA; 25–28 February 2009.
- **‘Tc99m-MDP Bone Scintigraphy in Evaluation of Treatment Response in Skeletal Tuberculosis’**, **Poster presentation in** American Academy of Orthopaedic Surgeons, Annual Meeting; Las Vegas, USA; 25–28 February 2009.

National Presentation

- ‘Principles and Technique of Locking Plates’, , UP ORTHOCON 2009, Trauma Symposium; 6 February 2009.
- ‘Role of Locking Plate in Periarticular fractures’, LCP Symposium, DOACON 2009; 10 January 2009.
- ‘Distal Femur Locking Plate’, LCP Symposium DOACON 2009; 10 January 2009.
- ‘Pelvis Trauma’, Faculty , Traumacon 2008; November 2008.

Dr Shivanand Gamanagatti

Lectures Delivered

- Complication of Transarterial chemoembolisation at annual registry meet combined with CME on 'Clinical practice guidelines for evidence-based management in cardiovascular and interventional radiology', AIIMS, New Delhi; 26–27 April 2008.
- Percutaneous nonvascular gastrointestinal interventions: 'Gastrointestinal and hepatobiliary imaging', AIIMS-MAMC-PGI imaging course series (CME), AIIMS, New Delhi; 24–25 October 2008.

National Conferences

- 'Chemoembolisation of HCC: Current status', Annual conference of ISVIR, Mumbai; 31 October–3 November 2008.

International Conferences

- 'Radiology of obscure gastrointestinal bleed, Annual conference of Asia Pacific digestive week', New Delhi; 13–16 September 2008.
- Workshop, 'Interpretation of Plain X-rays in major trauma', Trauma 2008, International conference cum live workshop, JPNA trauma centre, New Delhi; 28–30 November 2008.
- Workshop, 'Ultrasound guided Vascular Access', Trauma 2008, International conference Cum live workshop, organized by JPNA trauma centre, New Delhi; 28–30 November 2008.

Dr Atin Kumar

Lectures Delivered

- 'Imaging in abdominal trauma', AIIMS-MAMC-PGI CME on Gastrointestinal and Hepatobiliary Imaging, AIIMS, New Delhi; 23–24 October 2008.
- 'Imaging in abdominal trauma' in Annual CME of Haryana chapter of IRIA, PGIMS, Rohtak; 28 March 2009.

International Conferences

- Radiology workshop, 'CT evaluation of abdominal trauma' Trauma 2008, International Conference cum live workshop, JPNA Trauma Centre, New Delhi; 28–30 November 2008
- Radiology workshop, 'FAST in trauma', Trauma 2008, International Conference cum live workshop, JPNA Trauma Centre, New Delhi; 28–30 November 2008.

Dr Amit Gupta

- Coordinator, 2nd Indo-Israel International Course on 'Trauma system and mass casualty management', JPN Apex Trauma Centre, AIIMS and supported by MASHAV, Ministry of External Affairs Israel; 18–27 November 2008.

- Co-Organizing Secretary- Trauma 2008, International conference, CME cum Live Workshop and Inaugural conference of the Indian Society Trauma and Acute Care (ISTAC); 28–30 November 2008.
- Jt. Secretary, Third AIIMS Surgical week and Endosurg-2009, International CME cum Live Workshop; 13–15 March 2009.
- Workshop Director, Trauma Alert Assembly, Indo-US Emergency Medicine Summit 2008, Mangalore; 8–12 October 2008.

Guest Lectures

International

- ‘Trauma in India: Past Present and Future’, At R Adams Cowley Shock Trauma Centre, University of Maryland, Baltimore, USA; 3 September 2008.
- Trauma Scenario in India: The future dimensions. At Grand Rounds of Emergency and Trauma, Tampa General Hospital and University of South Florida, Tampa, Florida, USA; 24 July 2008.

National

- ABCDE of Trauma, Trauma Alert Assembly. INDO-US Emergency Medicine Summit 2008, Mangalore; 8–12 October 2008.
- Trauma Management in Chemical Accident Victims. In Conference on Chemical (Industrial) Disaster Management – Pipelines, Storages and Medical Preparedness, National Disaster Management Authority and FICCI, FICCI Auditorium, New Delhi; 11–13 February 2009.

Dr Biplab Mishra

- Joint organizing Secretary- Trauma 2008, International conference, CME cum Live Workshop and Inaugural conference of the Indian Society Trauma and Acute Care (ISTAC); 28–30 November 2008.

Guest Lectures

International

- ‘Management of a case of Thoracoabdominal impalement by a metallic bar: A surgical marvel’, 2nd Emirates Emergency Surgery and Trauma conference, Fujairah, UAE; 5–6 November 2008.
- ‘Management of right atrial rupture secondary to blunt trauma chest’, 2nd Emirates Emergency Surgery and Trauma Conference, Fujairah, UAE; 5–6 November 2008.
- ‘New algorithm of non-operative management of blunt injury to spleen and kidney: Leads to zero mortality’, 2nd Emirates Emergency Surgery and Trauma conference; Fujairah, UAE; 5–6 November 2008.

National

- ‘Management of penetrating torso trauma’, 4th Annual Indo-US emergency medicine summit “rescue, resuscitation and research” Mangalore, Karnataka; 8–12 October 2008.

Dr Maneesh Singhal

- Treasurer - Trauma 2008, International conference, CME cum Live Workshop & Inaugural conference of the Indian Society Trauma and Acute Care (ISTAC); 28–30 November 2008.
- Joint -organising Secretary: Third AIIMS Surgical week and Endosurg-2009, International CME cum Live Workshop; 13–15 March 2009.

Guest Lectures

International

- ‘Management of Maxillo-Facial injury at Level 1 Trauma Centre’, 2nd Emirates Emergency Surgery and Trauma Conference 2008, Fujairah Hospital, Fujairah, UAE; 5–6 November 2008.

Dr Subodh Kumar

- Organizing Secretary, 2nd Indo-Israel International Course on ‘Trauma System and Mass Casualty Management’, JPN Apex Trauma Center, AIIMS and supported by MASHAV, Ministry of External Affairs Israel; 18– 27 November 2008.
- Organizing Secretary- Trauma 2008, International Conference, CME cum Live Workshop and Inaugural conference of the Indian Society Trauma and Acute Care (ISTAC); 28–30 November 2008.
- Co-organizing Secretary: Third AIIMS Surgical week and Endosurg-2009, International CME cum Live Workshop; 13–15 March 2009.

Guest Lectures

International

- ‘Sternotomy/Thoracotomy in Bleeding into chest’. 2nd Emirates Emergency Surgery and Trauma Conference 2008, Fujairah Hospital, Fujairah, UAE; 5–6 November 2008.

National

- ‘Surgical Site Infection. In Infection Prevention Week’, JPN Apex Trauma Center, AIIMS, New Delhi; 20–25 October 2008.
- Emergency Room Management of Thoracic Trauma. In Trauma Alert Assembly. INDO-US Emergency Medicine Summit 2008, Mangalore; 8–12 October 2008.
- ‘Sternotomy/Thoracotomy in bleeding into chest’, Trauma 2008, International conference, CME cum Live Workshop and Inaugural conference of the Indian Society Trauma and Acute Care (ISTAC); 28–30 November 2008.
- TEP vs TAPP repair for inguinal hernia- a prospective randomized trial presented at International Consensus Congress of International Endohernia Society, New Delhi, 19–21 February 2009.

Dr Sushma

- Joint organizing Secretary: Third AIIMS Surgical week and Endosurg-2009.
- Scientific convener: Trauma 2008 AIIMS

- Faculty member: Save Life Foundation (NGO) for training of Police personnel and bystanders to provide First Aid to trauma victims.

Guest Lectures

National

- Trauma in Pregnancy and Management of maxillofacial injury. Indo US – Emergency Meet 2008.
- CSSD :Its Guidelines and Functioning at Trauma centre .Presented in the Infection Prevention Week, organized by the Department of Laboratory Medicine and Hospital Infection Control Committee, JPNA Trauma Centre, AIIMS; 20–24 October 2008.
- ‘Integrated approach on Management of Serial bomb blast-medical management’, Training programme for bomb blast management at National Institute of Disaster Management (NIDM), Delhi; 8 June 2008.
- ‘Surgery Census 2008’, Seminar on ‘Injury prevention a social responsibility’, in association with Centre of Disease Control, Atlanta, USA, JPN Apex Trauma Centre AIIMS; 12 March 2009.

Papers presented

International

- Goswami A, Sushma, Singhal M, Sinha T. Friction Burn: A clinical study, Proceedings of 14th conference of International Society of Burn Injuries, Toronto Canada 2008

National

- Gyan S, Sushma, Singhal M, Sagar R; Microsurgical penile re-plantation following self amputation in a patient with psychosis; proceedings of Trauma, AIIMS, New Delhi; 2008.
- Das K, Kumar V, Kumar S, Sushma, Gupta A. Spectrum of Surgical cases managed at level 1 trauma center, Proceedings of Trauma 2008, AIIMS, New Delhi;
- Goswami A, Sushma, Kumar S, Misra MC. Multidisciplinary approach to hemipelvectomy wound: proceedings Trauma, AIIMS, New Delhi; 2008.
- Shadan A, Kumar S, Gupta A, Sushma, Singhal M. An unusual case of blunt abdominal injury: A case report, Proceedings of Trauma, AIIMS, New Delhi; 2008.

RESEARCH

Professor M.C. Misra

Funded projects

1. Cost effectiveness analysis and comparison of single stage vs two stage management of patients with concomitant gall stone disease and common bile duct stones—a randomized controlled trial. Virinder Kumar Bansal, MC Misra, Parmod Garg, CS Pandav. In collaboration with Department of Gastroenterology and Community Medicine. Funded by SAGES. Funds: 30,000 US dollars.

2. A randomized controlled trial of laparoscopic inguinal hernia repair–transabdominal preperitoneal versus total extra peritoneal approach. Funded by Institute Research Grant (2007–2008). Funds: Rs 1,62,500.

Collaborative projects

Completed

1. BhCG expression in patients with benign and malignant breast diseases (June 2008)
2. To study the clinical efficacy of Transvaginal cholecystectomy in patients with uncomplicated gall stones with the new instruments (March 2008)
3. Efficacy of training of laparoscopic hepatico-jejunostomy using porcine model—a prospective study
4. Feasibility study on Injury and road traffic Injury surveillance. MC Misra, Amit Gupta. Funded by MoHSW- WHO-ICMR.

Ongoing

1. A randomized controlled study of comparison of single stage vs two stage treatment for patients with gall stones and common bile duct stones
2. Comparison of chronic groin pain, testicular functions and quality of life after open and laparoscopic inguinal hernia repair- a prospective randomized control trial
3. Comparison of various imaging modalities in the diagnosis and staging of the periampullary tumors and study of various perioperative factors in predicting the outcome of the patients with periampullary tumors
4. Laparoscopic suturing skills acquisition- a comparison between trained and novice surgeons
5. Prospective evaluation of laparoscopic skills acquisition in a short term focused training programme on a phantom model using porcine gall bladder
6. Major trauma outcome study in a level – I Trauma Centre
7. A prospective randomized control trial of sutured vs tacker fixation of mesh in patients undergoing laparoscopic incisional hernia repair.
8. A prospective randomized comparison of TAPP vs TEP repair in patients undergoing laparoscopic inguinal hernia repair.

Dr Babita Gupta

Collaborative projects

Ongoing

1. Phenotypic characterization of invasive Candida isolates, obtained from critically ill trauma patients (with Microbiology, AIIMS and JPNATC, Anaesthesia)

2. A prospective controlled double blind study on the efficacy of tranexamic acid versus aprotinin to reduce blood loss in traumatic spine surgeries.
3. Evaluation of serum Procalcitonin levels for diagnosis of sepsis in trauma patients admitted in ICU (Microbiology, JPNATC, Department of Anaesthesia).

Dr Shefali K. Sharma

Funded projects

1. Applied to CSIR for funding a project: To Study the Profile of Admitted Fracture Patients using DUAL Energy X- Ray Absorptiometry (DEXA), Serum Calcium, Serum Phosphorus, Vitamin D and Parathyroid levels.

Departmental Projects

Ongoing

1. A study of sub-clinical atherosclerosis in Ankylosing Spondylitis
2. Serum IL-6 level as marker of disease activity in Ankylosing Spondylitis without peripheral arthritis

Dr Sanjeev Lalwani

Departmental

1. Acute thalamic involvement in severe head injury: An autopsy study with histo-pathological correlation. Deepak Aggarwal, Sanjeev Lalwani.
2. A Comprehensive Study of Unnatural Death among Children and Women. T.D. Dogra, Sanjeev Lalwani.
3. Histopathological and Morphometric evaluation of surgically excised specimen of Aortic Aneurysm. Ruma Ray, Sanjeev Lalwani.
4. Evaluation of vitreous humour as a biomatrix for the quantification of drugs and chemicals in postmortem forensic investigation. Supriyo Ghosh, (Co- Supervisor and Member Doctoral Committee, Sanjeev Lalwani).

Dr Purva Mathur

Funded Projects

1. Evaluation of serum procalcitonin levels for diagnosis of sepsis in trauma patients admitted to intensive care units. Funded by AIIMS.
2. Molecular and epidemiological study of Streptococcus pyogenes in India. Funded by ICMR.
3. Efficacy of a short course of prophylactic antibiotic treatment for prevention of post operative infections in open reduction and internal fixation of closed fractures. Funded by ICMR.

Short-term trainees

1. Thesis of MSc Short-term trainee: 'Detection of Amp C production in multidrug resistant Gram negative bacteria at a tertiary trauma care centre of India'.

Dr Deepak Agrawal

Funded Projects

1. Role of Thalamus in diffuse axonal injury: An autopsy study with histopathological correlation. Funded by AIIMS. Funds:Rs 2.3 lakh.
2. A registry for comparing catheter-related infection rates among various shunt systems in the treatment of hydrocephalus. Funded by Codman Corporation, USA. Funds: Rs 5 lakh.

Dr Sumit Sinha

Funded Projects

Ongoing

As a Chief Investigator:

1. Role of Simvastatin in prevention of vasospasm and improving functional outcome after aneurysmal sub-Arachnoid haemorrhage: A prospective randomized double blind placebo controlled trial. Department of Neurosurgery, All India Institute of Medical Sciences, New Delhi, India (Intramural Project)
2. A double blind placebo controlled trial of Progesterone with or without hypothermia in subjects with severe traumatic brain injury. Department of Neurosurgery, Jai Prakash Narain Apex Trauma Centre, AIIMSIndia. Partially funded by NIH.
1. Brain trial (Bradykinin B2 receptor antagonist in Neurotrauma): A multicentric randomised trial. Funded London school of Hygiene and Tropical medicine.
2. DECRA trial (Decompressive craniectomy in severe head injury): A multicentric Randomised trial (being conducted in USA)
3. CRASH2 trial: A multicentric randomised trial. Funded by London school of Hygiene and Tropical Medicine.

MCh THESIS PRODUCED

As Co-Guide:

1. Vamsi, Sarat P Chandra, Sharma BS. Paediatric Bony Cranio-vertebral Junction anomalies: Indian Perspective and treatment challenges.
2. Vamsi, Sarat P Chandra, Sharma BS. Evaluation of Fibrillin (FBN-1) gene (Exon-24) for the molecular characterization of developmental bony Cranio-vertebral junction anomalies—A preliminary study.
3. Thapa A, Sinha S, Chandra SP, Sharma BS. Epidemiological Study of Post-traumatic seizures in India.

4. Thapa A, Sinha S, Chandra SP, Sharma BS. Surgical Interventions in Arteriovenous malformations: Outcome analysis and changing scenarios.

Dr John R. Bera

1. Major Trauma Outcome Study at Level 1 Trauma Centre
2. Randomized Control Clinical Trial of Early Versus Late Tracheostomy to compare length of mechanical ventilation; length of ICU stay in Critically Ill Trauma Patient.
3. Study on use of Transexamic acid in patients undergoing surgery post accidents, safety and effectiveness
4. To collect retrospective pilot data on Bomb blast injury in India from multiple cities using CDC blast injury surveillance form

Dr Vijay Sharma

Funded Projects

1. Efficacy of a short course of prophylactic antibiotic treatment for prevention of post operative infections in open reduction and internal fixation of closed fractures. Funded by the ICMR

Thesis

Co-Guide

1. Randomised Controlled Study Comparison of Open Versus Minimal invasive fixation in the management of fractures of the calcaneum.
2. Knee Arthrography

Dr Atin Kumar and Dr Shivanand Gamanagatti

Funded project

Completed

1. Incidence of deep venous thrombosis in high risk patients admitted in medical wards and ICU in a tertiary care hospital (ongoing). S.K. Sharma (Medicine). Atin Kumar, Ashu Seith. Funded by Pfizer (2006–2008). Funds: Rs 5 lakh.

Departmental project

Completed

1. Comparison of Color doppler, CT portography and MR Portography in paediatric EHPVO

Ongoing

1. MR imaging of wrist pain
2. Comparison of MDCT, MRI, Endoscopic Ultrasound and PET-CT in evaluation of suspected pancreatic neoplasm.
3. Percutaneous management of malignant biliary obstructions

4. MRI evaluation of internal derangement of knee
5. Comparative evaluation of image guided and palpation guided core biopsy of palpable breast masses
6. Radiofrequency ablation of varicose veins
7. MDCT and MRI evaluation of renal masses
8. Role of CECT and splenic artery embolisation in management of traumatic splenic injuries
9. Differentiating recurrent gliomas from post radiotherapy changes: Utility of advanced MRI techniques and their correlation with ^{99m}tc-glucoheptonic acid (GHA) brain SPECT
10. Imaging and intervention in vascular malformations of the extremities.
11. Role of MDCT in staging of laryngeal carcinoma with limited MRI correlation
12. Role of ultrasound in mamographically detected breast carcinomas.
13. Radiological evaluation of cystic lesions of the jaw.

Collaborative proects

Completed

1. Assessment of endothelial dysfunction and oxidative stress in chronic kidney disease of varying severity and after renal transplantation (with Nephrology)
2. Role of FDG-PET and MRI in assessment of Osteosarcoma: Prechemotherapy and Post chemotherapy (with Medical Oncology)
3. Comparison of FDG-PET and Dynamic MRI in correlation of VEGF expression on tumour cells in patients with Osteosarcoma (with Medical Oncology)
4. A comparative Evaluation of changes in ultrasonographic dimensions of masseter muscle with EMG activity prior and subsequent to twin block therapy (with Dental Sciences)

Ongoing

1. Study of non alcoholic fatty liver disease and atherosclerosis in Asian Indians (with Medicine)
2. Evaluation of testicular blood flow and volume in patients undergoing laparoscopic inguinal hernia repair (with Surgery)
3. Evaluation of pancreatic tumors (with Surgery)
4. Abdominal fat estimation in patients of obstructive sleep apnoea (with Medicine)
5. Study of clinical and neuro-developmental profile in patients of Tuberous Sclerosis (with Paediatrics)
6. Optic nerve sheath diameter measurement for raised ICP in severe head injury patients (with Neurosurgery)

7. Comparison of minimally invasive techniques and conservative treatment in vertebral collapse (with Orthopedics)
8. Clinico-radiological evaluation of total knee arthroplasty short term retrospective-prospective study (with Orthopedics)
9. Arthroscopic and MR evaluation of elbow in patients with rheumatoid arthritis (with Orthopedics)
10. Intralesional autologous bone marrow stem cell injection in avascular necrosis of femoral head: Follow up with bone scan, PET scan and MRI (with Orthopedics)
11. Randomized controlled trial of Radiofrequency ablation versus Percutaneous acetic therapy for the treatment of small hepatocellular carcinoma (with Gastroenterology)
12. Randomized control trial of Transarterial chemoembolisation (TACE) versus TACE plus oral chemotherapy in the treatment of Unresectable Hepatocellular carcinoma (with Gastroenterology)
13. Randomized control trial of Transarterial chemotherapy (TAC) versus Oral chemotherapy in the treatment of Unresectable Hepatocellular carcinoma (with Gastroenterology)
14. Randomized control trial of N-Acetylcysteine in Prevention of Renal Failure in Hepatocellular Carcinoma patients undergoing Transarterial Chemotherapy and Transarterial Chemoembolisation (with Gastroenterology)
15. Randomized control trial of oral chemotherapy versus supportive therapy in the treatment of Unresectable Hepatocellular carcinoma (with Gastroenterology)
16. Pattern of peripheral arterial diseases in tertiary care surgical practice (Indian scenario) (with Surgery)
17. Safety and efficacy of autologous stem cells in prevention of amputation in patients with chronic critical limb ischemia (with Surgery)
18. A comparative Evaluation of changes in ultrasonographic dimensions of masseter muscle with EMG activity prior and subsequent to twin block therapy (with Dental Sciences)
19. USG evaluation of Intimal-medial thickness of carotid artery in patients with SLE (with Medicine)
20. To study the effect of cricoids split with interpositioning rib cartilage graft for subglottic with or without tracheal or glottis stenosis (with Otorhinolaryngology)

Completed

Dr Subodh Kumar

1. A randomized controlled trial of laparoscopic inguinal hernia repair-Trans-abdominal pre peritoneal versus totally extra peritoneal approach
2. Efficacy of training of laparoscopic hepatico-jejunostomy using porcine model—a prospective study

Dr Sushma

1. BhCG expression in patients with benign and malignant breast diseases (June 2008)

Ongoing

Dr Amit Gupta

1. Prospective randomized control trial of early versus late tracheostomy in critically ill trauma patients. Funded by AIIMS.
2. Immunological changes in patients of shock due to trauma. Funded by ICMR.

Dr Biplab Mishra

1. Ultrasonic debridement of post traumatic wounds
2. Comparative study of sustained silver ion releasing semipermeable 3D foam dressing and conventional paraffin gauze dressing for skin graft donor site
3. Comparison of conventional paraffin gauze dressing and femtotechnology-based sustained silver ion in calcium alginate foam dressing for acute wounds
4. Feasibility of fast track discharge in breast cancer patients undergoing definitive surgery and impact on quality of life
5. Percutaneous management of malignant biliary obstruction
6. Role of CECT and splenic artery embolization in management of blunt splenic injury

Dr Maneesh Singhal

1. Comparison of Sustained silver ion releasing foam based dressing with conventional paraffin gauze dressing in donor area
2. Ultrasonic debridement of post traumatic wounds
3. Role of silver releasing femto technology based dressing on acute traumatic wound

Dr Subodh Kumar

1. Role of computed tomography and splenic artery embolisation in blunt splenic trauma
2. Major Trauma Outcome Study in a level – I Trauma Centre
3. Comparison of chronic groin pain, testicular functions and quality of life after open and laparoscopic inguinal hernia repair- a prospective randomized control trial
4. Comparison of various imaging modalities in the diagnosis and staging of the periampullary tumours and study of various perioperative factors in predicting the outcome of the patients with periampullary tumours
5. A prospective randomized comparison of TAPP vs TEP repair in patients undergoing laparoscopic inguinal hernia repair

Dr Sushma

1. Major trauma outcome study at level I Trauma Centre
2. Comparison of Sustained silver ion releasing foam based dressing with conventional paraffin gauze dressing in donor area

3. Ultrasonic debridement of post traumatic wounds
4. Role of silver releasing femto technology-based dressing on acute traumatic wound

PUBLICATIONS

Journals

1. Khan RN, Bansal VK, Kumar S, Jindal V, Misra MC, Bhatia V. Duodenal gastrinoma: a diagnostic dilemma. *Am J Surg* 2009;**197**:e48–e50. (Epub 2009 Feb 23.PMID: 19233342 [PubMed - in process])
2. Misra MC, Bhowate PD, Bansal VK, Kumar S. Massive scrotal hernias: Problems and solutions. *J Laparoendosc Adv Surg Tech A* 2009;**19**:19–22. (PMID: 19196090 [PubMed - indexed for MEDLINE])
3. Becerra Garcia FC, Misra MC, Bhattacharjee HK, Buess G. Experimental trial of transvaginal cholecystectomy: An *ex vivo* analysis of the learning process for a novel single-port technique. *Surg Endosc* 1 Jan 2009. (Epub ahead of print)PMID: 19118415 [PubMed-as supplied by publisher])
4. Buess G, Becerra-Garcia F, Misra MC. Instruments for transluminal laparoscopic surgery or 'NOTES'. *Minim Invasive Ther Allied Technol* 2008;**17**:331–5. (PMID: 19003593 [PubMed - indexed for MEDLINE])
5. Misra MC, Aggarwal S, Guleria S, Seenu V, Bhalla AP. Clipless and sutureless laparoscopic surgery for adrenal and extra-adrenal tumors. *JLS* 2008;**12**:252–5. (PMID: 18765047 [PubMed - indexed for MEDLINE])
6. Misra MC, Kumar S, Bansal VK. Total extraperitoneal (TEP) mesh repair of inguinal hernia in the developing world: Comparison of low-cost indigenous balloon dissection versus direct telescopic dissection—a prospective randomized controlled study. *Surg Endosc* 2008;**22**:1947–58. (Epub 2008 Apr 24. PMID: 18437480 [PubMed - indexed for MEDLINE])
7. Saeed O, Gupta V, Dhawan N, Streja L, Shin JS, Ku M, et al. Knowledge of modifiable risk factors of Coronary Atherosclerotic Heart Disease (CASHD) among a sample in India. *BMC Int Health Hum Rights* 2009;**9**:2.
8. Singh J, Bhoi S, Gupta V, Goel A. Clinical profile of venomous snake bites in north Indian military hospital. *Journal of Emergencies, Trauma and Shock* 2008;**1**:78–80.
9. Dhawan N, Saeed O, Gupta V, Desai R, Ku M, Bhoi S, Verma S. Utilizing video on myocardial infarction as a health educational intervention in patient waiting areas of the developing world: a study at the emergency department of a major tertiary care hospital in India. *Int Arch Med* 2008;**1**:14.
10. Wanchu, Ajay BS, Sharma S, Sharma S, Bambery A, Pradeep. High dose prednisolone and bolu cyclophosphamide in interstitial lung disease associated with systemic sclerosis: A prospective open study. *International Journal of Rheumatic Diseases* (Manuscript ID: APLAR-0019-2009.R2, Manuscript Type: Original Article, Date Submitted by the Author: 14-Apr-2009)

11. Gulati V. Immunization in Adults, Jaya Prakash Sugunraj. *Medicine Update* 2009;19:128–38.
12. Gulati V. Influenza vaccine, Jaya Prakash Sugunraj. *Adult Immunization* 2009;1:95–103.
13. Jaiswal AK, Kaur A, Milo T, Kumar A. Detection of Malathion in blood and urine using thin layer chromatography. *J Ind Acad Forensic Med* 2008;30:15–21.
14. Kumar A. Exhumation—plugging of pitfalls. *Indian Internet J Forensic Med and Toxicology* 2008;6:48–51.
15. Jaiswal AK, Kumar A. Determination of Quinolphos in biological samples using high performance thin layer chromatography (HPTLC). *Malaysian Journal of Forensic Pathology and Sciences* 2008;3:89–114.
16. Behera C, Rautji R, Lalwani S, Dogra TD. A comprehensive study of motorcycle fatalities in South Delhi. *JIAFM* 2009;31.
17. Kumar A., Lalwani S, Behera C, Rautji R, Dogra TD. A retrospective review of deaths of homeless unclaimed persons in South Delhi (2001-2005). *Med Sci Law* 2009;49:46–50.
18. Lalwani S, Mishra MC, Bhardwaj DN, Rajeshwari S, Rautji R, Dogra TD. Common bile duct injury in laparoscopic cholecystectomy- inherent risk of procedure or medical negligence -a case report. *World J of laparoscopic Surgery* 2008;1:49–51.
19. Behera C, Rautji R, Lalwani S, Dogra TD. Sudden death due to aortic rupture while swimming—a case report. *JIAFM* 2008;30:79–81.
20. Behera C, Rautji R, Lalwani S, Dogra TD. Drowning Deaths in South Delhi (1999–2005). *Indian Medical Gazette* 2008;CXL:359–62.
21. Kumar A, Lalwani S, Agarwal D, Rautji R, Dogra TD. Fatal road traffic accidents and their relationship with head injuries: An epidemiological survey of five years. *Indian Journal of Neurotrauma (IJNT)* (Online) 2008;5:63–67.
22. Mathur P. Infections in traumatised patients: A growing medico-surgical concern. *Indian J Med Microbiol* 2008;26:212–6.
23. Mathur P, Samantaray JC, Samanta P. High prevalence of functional liver derangement in visceral leishmaniasis at an Indian tertiary care centre. *Clin Gastroenterol Hepatol* 2008;6:1170–2.
24. Behera B, Mathur P, Das A et al. An evaluation of four different phenotypic techniques for detection of metallo-beta-lactamase producing *Pseudomonas aeruginosa*. *Indian J Med Microbiol* 2008;26:233–7.
25. Behera B, Das A, Mathur P, Kapil A. High prevalence of carbapenem resistant *Pseudomonas aeruginosa* at a tertiary care centre of north India. Are we under-reporting? *Indian J Med Res* 2008;128:324–5.
26. Dahiya S, Kapil A, Kabra SK, Mathur P, Sood S, Lodha R, Das BK. Pertussis in India. *J Med Microbiol* 2009;58:688–9.

27. Behera B, Das A, Mathur P, Kapil A, et al Tigecycline susceptibility report from an Indian tertiary care hospital. Accepted for publication in IJMR.
28. Behera B, Mathur P. Erroneous reporting of vancomycin susceptibility for Staphylococcus Spp. by vitek software version 2.01. Accepted for publication in the Japanese Journal of Infectious Diseases.
29. Kumar A, Lalwani S, Agrawal D, Rautji R, Dogra TD. Fatal road traffic accidents in South Delhi region and their relationship with head injuries: An epidemiological survey over five years. *IJNT* 2008;**5**:63–67.
30. Mahapatra AK, Agrawal D, Kumar R. Minor Head Injury. *IJNT* 2008;**5**:69–72.
31. Behera B, Naik V, Mathur P, Agrawal D. Identification of Kocuria rosea by Vitek 2 GP Card. *The Internet Journal of Medical Informatics* 2008;**3**:2.
32. Ahmad FU, Agrawal D, Singh MM, Mahapatra AK. Acute epidural haematoma following Ventriculoperitoneal shunt in an adult. *Pan Arab J Neurosurg* 2008;**12**:118–20.
33. Tripathi AK, Agrawal D. Hydrocephalic Holoprosencephaly: An Oxymoron? Insights into etiology and management. *J Pediatr Neurosci* (In print)
34. Kurwale SN, Agrawal D, Sharma BS. Astroblastoma: A radio-histological diagnosis. *J Pediatr Neurosci* 2008;**3**:160–62.
35. Mahapatra AK, Agrawal D, Satyarthee GD. Surgery of Petroclival Tumors: A Series of 45 Cases. *Pan Arab J Neurosurg* 2008;**12**:31–6.
36. Gupta DK, Kasliwal MK, Suri A, Suri V, Rishi A, Sharma BS. Sphenoid wing inflammatory pseudotumor mimicking a clinoidal meningioma: Case report and review of the literature. *Surg Neurol.* 2008;**70**:509–13; (discussion 513. Epub 2008 Jan 22. Review).
37. Gupta DK, Kasliwal MK, Mahapatra AK, Sharma MC. Multicentric cerebello pontine angle glioblastoma multiforme: A case report. *Pediatric Neurosurgery* 2008;**44**:224–8.
38. Gupta DK, Kasliwal MK, , Sharma BS, Suri V, Garg A. Isolated spinal neurocysticercosis with clinical plemorphism. *Turkish Neurosurgery* 2008;**18**:294–7.
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Abstracts

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4. Das K, Kumar V, Kumar S, Sushma, Gupta A. Spectrum of Surgical cases managed at level 1 Trauma Centre: In proceedings of Trauma 2008, International conference, CME cum Live Workshop and Inaugural conference of the Indian Society Trauma and Acute Care (ISTAC), New Delhi; November 2008.
5. Goswami A, Sushma, Kumar S, Misra MC. Multidisciplinary approach to hemipelvectomy wound: In proceedings of Trauma 2008, International conference, CME cum Live Workshop and Inaugural conference of the Indian Society Trauma and Acute Care (ISTAC), New Delhi; November 2008.
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Chapters in Books

1. Vajpayee M, Mathur P. Laboratory diagnosis of HIV/AIDS. Chapter 69. In: IADVL Textbook and Atlas of Dermatology, 3rd ed; PP 1042-50.
2. Vajpayee M, Mathur P. Laboratory Diagnosis of Syphilis. Chapter 15. In: IADVL Textbook and Atlas of Dermatology. 3rd ed. 1042–50.
3. Kato Y, Sinha S, Sano H, Watabe T, Oda J, Oguri D, et al. Microsurgical management of thrombotic aneurysms.
4. Sharma BS, Sinha S. Neurocysticercosis. In: Textbook of Neurosurgery. (In Press)
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7. Srivastava DN, Gamanagatti S. Gastrointestinal haemorrhage. In: Gupta AK, Chowdhury V, Khandelwal N (eds). Gastrointestinal and hepatobiliary imaging. 3rd ed AIIMS-MAMC-PGI imaging course series. New Delhi: Jaypee Brothers; 2008:382–93.
8. Srivastava DN, Gamanagatti S. Interventional Treatment of Liver Tumours. In: Gupta AK, Chowdhury V, Khandelwal N (eds). Gastrointestinal and hepatobiliary imaging. 3rd ed. AIIMS-MAMC-PGI imaging course series. New Delhi: Jaypee Brothers; 2008:403–14.
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10. Kumar A, Thulkar S. Imaging in abdominal trauma. In: Gupta AK, Chowdhury V, Khandelwal N (eds). Gastrointestinal and hepatobiliary imaging. 3rd ed. AIIMS-MAMC-PGI imaging course series. New Delhi: Jaypee Brothers: 2008.
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Articles

1. Khan RN, Bansal VK, Kumar S, Jindal V, Misra MC, Bhatia V. Duodenal gastrinoma: A diagnostic dilemma. *Am J Surg* 2009 Feb 20. [Epub ahead of print].
2. Misra MC, Bhowate PD, Bansal VK, Kumar S. Massive Scrotal Hernias: Problems and Solutions. *J Laparoendosc Adv Surg Tech A* 2009 Jan 15. [Epub ahead of print]
3. Gupta A, Gupta E. Challenges in Organizing Trauma Care Systems in India. *Indian J of Community Med*; Jan 2009.
4. Gupta A, Peckler B, Schoken D. Introduction of hi-fidelity simulation techniques as an ideal teaching tool for upcoming emergency medicine and trauma residency programs in India. *J Emerg Trauma Shock* 2008;**1**:15–8
5. John Bera, S.Bhoi. Assessment of Duration of Emergency department Stay, Admission and Transfer –Out Rates in Patients Presenting with Orthopaedic Injuries in a Level 1 Trauma Centre. *Prehospital and Disaster Medicine* 2009;**24**: No 2, 3.

AWARDS/HONOURS

Dr Babita Gupta

- Successfully completed ‘ACLS Instructor Course’; September 2008.
- Successfully completed the ‘Indo-Israel Mass Casualty Training Course’, Israeli Team October, 2008.
- Successfully completed ‘ATLS’ instructor course conducted by American Heart Association in Fijirah, UAE; October–November 2008.

Dr Chhavi Sawhney

- Compiled Book on Basic Emergency Care.
- BLS and ACLS training: Provider as well as instructor course done.

Dr Sanjeev K Bhoi

- Academic Secretary: Indo-US Emergency Medicine Summit 2008, Mangalore www.indusem.com
- Co-Director: **Emergency Medicine and Trauma Education Centre for Health**
- Assistant Editor: *Journal of Emergencies, Trauma and Shock*
- <http://www.onlinejets.org/editors.asp>
- Member Editorial Board: Cases Journal <http://www.casesjournal.com/edboard/default.asp#Editor%2Din%2DChief>
- Reviewer: *Journal of Paediatric Infectious Disease, Emergency Medicine Journal, Journal of Emergencies, Trauma and Shock*

Dr Shefali K. Sharma

- Member of the Scientific Committee and Core Group for forming Consensus Recommendations on Adult Immunization in India

- Advanced HAZMAT Life Support, Provider course, March 2009.
- Indo-US Emergency Ultrasound Workshop, New Delhi, January 2008.

Dr Vinay Gulati

- Reviewer: *Indian Journal of Chest Diseases and Allied Sciences*
- Member of the Scientific Committee and Core Group for forming Consensus Recommendations on Adult Immunization in India
- Member Editorial Board: Adult Immunization, published March 2009
- Organizing Secretary: Annual conference of department of Medicine, Medicine Update, August 10, 2008, AIIMS, New Delhi
- Advanced HAZMAT Life Support, Provider and Instructor course; March 2009.
- Indo-US Emergency Ultrasound Workshop, New Delhi; March 2009

Dr Adarsh Kumar

- ‘Future trends in medico legal documentation—pros and cons of virtopsy’ was adjudged one of the best poster at International Conference SAFCON–2008; 10–12 October 2008.

Dr Sanjeev Lalwani

- Awarded Fellowship, ICFMT- 2008, SAFCON-2008
- Award for Meritorious Performance, Presented a Scroll of Honour, Pakistan Society of Forensic Medicine and Toxicology, Professor Mian Abdul Rashid, Pakistan, SAFCON 2008.
- Member, Indian Society of Trauma and Acute Care.
- Associate Editor and Reviewer of articles- *International Journal of Medical Toxicology and Legal Medicine*.
- Deputy Executive Editor and Reviewer of Articles—*Journal of Forensic Medicine and Toxicology*.
- Article Reviewer, *Indian Police Journal*.
- Medico-legal assistance for Cadaver donation of ‘Liver and kidneys at JPNATC’.

Teaching experience

- Undergraduate and postgraduate teaching, AIIMS.
- Participation and Organization of numerous training lectures and autopsy demonstration for participants from
- LNJNI National Institute of Criminology and Forensic Sciences, Delhi
- CBI Academy Ghaziabad
- Delhi Judicial Academy, Delhi
- Amity University, Delhi

- Delhi Police (HRD Cell), CR Park, Delhi
- Delhi Police Training School, Jharoda Kalan, Delhi

Dr Deepak Agrawal

- Awarded the ‘CSNS young neurosurgeon of the year-2008’ award by the American Congress of Neurological surgeons (CNS) for indigenization of fiducials for image guided neurosurgery.
- Received best paper award for co-authoring the study titled ‘Effect of PEEP on CVP in ventilated patients’, DNACON, AIIMS, New Delhi; 7–8 February 2009.
- Awarded the AK Banerjee award for best paper in Neurotrauma for co-authoring the study titled ‘CSF lactate with CSF sugar compared with conventional CSF analysis in suspected postoperative meningitis: A prospective controlled study’, Trauma 2008, New Delhi; 29–30 November 2008.
- Awarded the AK Banerjee award for best paper in Neurotrauma for co-authoring the study titled ‘Papilloedema as a non-invasive marker for raised intra-cranial pressure post decompressive craniectomy in patients with severe head injury’, Trauma 2008, New Delhi; 29–30 November 2008.
- Awarded the ‘V.S. Mehta award for best research in cranio-spinal trauma’ for co-authoring the study titled ‘Leukocytosis after routine cranial surgery: A potential marker for brain damage in intracranial surgery’, Trauma 2008, New Delhi; 29–30 November 2008.

Dr Deepak Gupta

Invited speaker in conference

- Chaired session on Posterior fossa lesions in 9th European skull base surgery congress, Rotterdam, Netherlands; 2009.
- Intratumoral immunotherapy in high grade gliomas: A single Institution experience in Delhi Neurological association conference, AIIMS, New Delhi; 7–8 February 2009.
- Penetrating gun shot injuries in civilian practice: Outcome prognosticators. National neurotrauma conference, Bhubaneswar, Orissa, August; 2008.
- Management of Cervical spine injuries: Indian society of Trauma and Acute Care; November 2009.
- Neurotrauma workshop on ICP monitoring and Spinal instrumentations in ISTAC; November 2009.

Scholarships

- World federation of neurological sciences and World international initiative committee fellowship for attending Middle East Workshop, Amman, Jordan; (7–9 January 2009).
- ISPN (International Society of Paediatric Neurosurgery) travelling fellowship for attending 33rd ISPN congress, Capetown, South Africa; 12–16 October 2008.
- Karl Storz stipendia and fellowship for attending 9th European skull base Surgery Congress, Rotterdam, Netherlands; 2009.

Executive committee membership

- Executive committee Member, National Neurotrauma Society, India.
- Executive committee member, Delhi Neurological Association, India.

Dr Sumit Sinha

Fellowships

- ‘Cerebrovascular, Skull base, Spine, Cadaveric dissection and Endovascular neurosurgery’, Fujita Health University (Programme Director- Professor Hirotooshi Sano); 18 August 2008 – 18 November 2008.

Memberships

- Member of Skull Base Surgery Society of India (SBSSI)
- Member of Indian Society of Paediatric Neurosurgery (ISPN)
- Member of Asian Conference of Neurological Surgeons (ACNS)
- Member of International Society for Brachial Plexus and Peripheral Nerve Injury (ISBPPNI)
- Member of AO Spine Surgeons International
- Member of Association of Spine Surgeons of India (ASSI)
- Member of Neurotrauma Society of India (NTSI)
- Member of American Association of Neurological Surgeons (AANS)
- Member of Congress of Neurological Surgeons (CNS)
- Member of National Neurotrauma Society (NTS)
- Member of American Spinal Injury Association (ASIA)

Dr John R. Bera

- Invited as faculty for the discussion of Osteo Arthritis of joints, the treatment and prevention in Lok Sabha TV; 10 September 2008.
- Invited as faculty for the discussion of Spinal Injury in patients, the treatment available now, the future perspective in advances in treatment and the Rehabilitation in Lok Sabha TV program; 12 December 2008.
- Awarded Life Membership, World Association for Disaster and Emergency Medicine, USA.
- Awarded Life Membership, Indian Society for Trauma and Acute Care (ISTAC).

Dr Vijay Sharma

- Life Member, Punjab Orthopaedic Association 2009.

Dr Vivek Trikha

- Johnson *n* Johnson IOA Traveling Fellowship, the most prestigious inland fellowship awarded by the Indian Orthopaedic Association; December 2008–January 2009.

Dr Shivanand Gamanagatti

- Editorial Member of International Journal of Bio Sciences and Technology
- Editorial Member of International Journal of Medical Sciences and Technology
- Editorial Member of International Journal of Life Sciences and Technology
- Editorial member of International Journal of BioSciences, Alternative and Holistic Medicine (IJBSAHM)
- Editorial member of International Journal of Biological Sciences and Technology (IJBLST)
- Editorial member International Journal of BioSciences, Psychiatry and Technology (IJBSPT)

Dr Amit Gupta

- Awarded the Indian Council Medical Research (ICMR) International Fellowship, for Young Bio-Medical Scientists 2007–2008. Application of Hi Fidelity Simulation in Trauma and Acute Care Education. Tampa General Hospital and University of South Florida, Tampa, Florida, USA.
- Qualified the Advanced Trauma Life Support Course ATLS® of American College of Surgeons – Committee on Trauma. USF, USA
- Member Committee to draft the EMS Legislation for Government of NCT Delhi. Under the Emergency Medical Council, Government of NCT Delhi.
- Member (Technical), Project Review Committee. PPP Project for Ambulance Services in Delhi. Government of National Capital Territory (NCT), Delhi.
- Member (Technical), Core Committee: Centralized Accident and Trauma Services (CATS) Government of National Capital Territory (NCT), Delhi
- Member, Proposal Review Committee for the PPP Project of the Pre-Hospital Emergency Medical Response (Ambulance) Service. Government of National Capital Territory (NCT), Delhi
- Member, CBRN co-ordination committee, National Disaster Management Authority, Government of India.
- Awarded membership, World Association for Disaster and Emergency Medicine (WCDEM), USA.

Dr Biplab Mishra

- Nominated by Ministry of Health and Family Welfare, Government of India to attend Advanced Trauma Life Support (ATLS), Provider and Instructor courses, Fujairah Hospital, Fujairah, UAE; 30 October – 4 November 2008.
- Nominated by AIIMS to attend 2nd Indo-Israel international course on ‘Trauma System and Mass Casualty Management’, JPN Apex Trauma Centre, AIIMS and supported by MASHAV, Ministry of External Affairs Israel; 18–27 November 2008.
- Shaurya Puraskar – awarded by HR Entertainment, Mumbai, in appreciation for the exemplary performance and bravery; 17 January 2009.

Dr Maneesh Singhal

- Nominated by Ministry of Health and Family Welfare, Government of India, to attend Advanced Trauma Life Support (ATLS) Provider and Instructor courses, Fujairah Hospital, Fujairah, UAE; 30 October – 4 November 2008.
- Nominated by AIIMS to attend 2nd Indo-Israel international course on ‘Trauma system and mass casualty management’, JPN Apex Trauma Centre, AIIMS and supported by MASHAV, Ministry of External Affairs Israel; 18–27 November 2008.

Dr Subodh Kumar

- Nominated by Ministry of Health and Family Welfare, Government of India to attend Advanced Trauma Life Support (ATLS) Provider and Instructor courses, Fujairah Hospital, Fujairah, UAE; 30 October– 4 November. 2008.
- National Programme Coordinator, ATLS–India programme
- Member, CBRN co-ordination committee, National Disaster Management Authority, Government of India.
- Awarded membership, World Association for Disaster and Emergency Medicine (WCDEM), USA.
- Awarded life membership, Indian Medical Association.

Dr Sushma

- Member, Editorial board, AIIMS annual report
- Member, Editorial board, Journal of Society for Wound Care and Research (JWSCR)
- Awarded membership, World Association for Disaster and Emergency Medicine (WADEM)
- Awarded membership, European Society for Trauma and Emergency Surgery (ESTES)
- Examiner, AIIMS undergraduate professional examinations
- Awarded certificate of Education, 2nd Annual Emergency Sonography Course, an Indo- US Emergency and Trauma Collaborative, AIIMS, 2–4 March 2009.

SIGNIFICANT EVENTS

‘Trauma 2008’

International conference, CME cum Live Workshop and Inaugural conference of the Indian Society Trauma and Acute Care (ISTAC)

28–30 November 2008

J.P.N. Apex Trauma Centre at AIIMS aims to provide quality trauma patient care facilities, which can act as a role model to other trauma centres of the country. More than providing best patient care facilities the role of this apex trauma centre has been envisaged as an apex research and training institution which will help the nation’s administrators to formulate policies regarding organization of trauma care facilities throughout the country.

Training of manpower in Acute Care and pre-hospital services should be taken on priority. Proper organization and administration of trauma Services along with Legislative backup will go a long way in strengthening India's Essential Trauma Care Services. Keeping this in mind 'Trauma 2008'—an International Conference, CME cum Live Workshop and Inaugural Conference of the Indian Society for Trauma and Acute Care (ISTAC[®]) was organized under the chairmanship of Prof. M.C. Misra.

The theme of the conference was 'Resuscitation to Rehabilitation'. The conference was inaugurated by the chief guest Lt. Governor Hon'ble Shri Tejendra Khanna. The main attraction of the inauguration ceremony was a panel discussion on 'Injury prevention and Road Safety' by eminent panelists representing all sections of the society. All the specialists working in the field of trauma were brought under one roof. This was for the first time that a conference dedicated to trauma care was organized under the leadership of Apex Trauma centre AIIMS. Seven workshops (ABCD, Maxillo-facial, Trauma radiology, Neurosurgery, Cost-effective computerization in hospital, Trauma nurse- coordinator and Physiotherapy workshops) interactive lectures, symposia, and panel discussions were attended by more than 700 delegates and 100 international and national faculties. Trauma nurse coordinator workshop and Physiotherapy workshop were the highlights of the conference and were especially organized for the first time to spread a message about holistic care of a trauma victim. Postgraduate medical students, nurse and technicians were awarded for best paper presentations. The conference was considered a huge success as reflected by the feedback forms received from delegates.

PATIENT CARE

Department of Anaesthesia

Total number of cases under Anaesthesia

Total cases	3761
Orthopaedics	1470
Surgery	1044
Neurosurgery	1247

Total number of patients treated in general ICU

Total admissions	284
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DEPARTMENT OF EMERGENCY MEDICINE

1. 30-bedded divided into red area, yellow and green area
2. 7 Resuscitation bay including paediatric resuscitation bay
3. Each bay is equipped with its monitor
4. Protocol-based treatment
5. Trained manpower
6. Emergency sonography
7. ABG

8. Fluid warmer
9. Minor OT
10. Plaster room
11. Ultrasound guided Nerve Blocks ,Vascular access and ocular Ultrasound in the ED (By Emergency Physicians)

DEPARTMENT OF SURGERY

• Total patients attended ED	37,177(4–5 patients /hr)
• Total surgical patients attended ED	21,456
• Total patients who stayed < 24 hrs	19,226
• Total surgical cases admitted(>24hrs)	1,128
• Operative procedures done under anaesthesia	971
• Mortality rate: 55/1128	(4.4%)
• Follow up OPD attendance	6547

DEPARTMENT OF RADIOLOGY

Routine X-rays

S. No.	X-rays	Number
1.	Portable X-rays	11,645
2.	Casualty X-rays	51,541
	Total routine X-rays	63,186

II. Special Investigations

S. No.	Investigation	Number
10.	Digital subtraction angiography	50
14.	MRI	1,576
15.	Ultrasound + Doppler	5,191
20.	CT	16,375
	Total	23,192
	Grand total	63,186 + 23,192 = 86,378

New equipment

Digital subtraction angiography (DSA)

DEPARTMENT OF LABORATORY MEDICINE

Tests conducted in the Department of Laboratory Medicine, JPNA Trauma Centre

1. Haematology

Hemoglobin	17,856
Total leukocyte count	14,453
Differential count	8,471
HCT	14,180
RBC	9,941
MCH	8,469
MCHC	8,469
MCV	8,469
RDW	8,469
Platelet count	14,441
Reticulocyte count	34
ESR	1,436
Peripheral smear	65
Total	1,16,851

Coagulation

PT	9,929
APTT	9,241
TT	1,052
Fibrinogen	333
D-dimer	373
Total	20,928

Fluid tests

Urine routine	605
Fluid routine	576
Total	1181
<u>Grand total</u>	<u>1,38,960</u>

2. Biochemistry

Total	2, 09,508
Sugar	4497
Urea	23,423
Creatinine	17,718
Calcium	10,446
Phosphate	9285
Uric acid	7397
Sodium	23,134
Potassium	23,134
TBIL	13,644
DBIL	13,603
TP	7594
ALB	8,882
AST	9,239
ALT	9,222
ALP	9,253
AMY	3,051
CK	14
CKMB	22
CRP	207

Lipid Profile

CHOL	2,925
HDL	1,725
LDL	1,726
TG	1,729
VLDL	1,729

Fluids

CSF sugar	785
CSF M-TP	785
Peritoneal sugar	256

Peritoneal M-TP	271
Urine sugar	755
Urine M-TP	755

3. Microbiology

A. Total bacterial cultures:	8664
<u>B. Antibiotic sensitivity</u>	
By VITEK	1,718
By Disc diffusion	1,718
Total	3,436
C. HIV serology:	286
D. Hepatitis B serology:	255
E. Hepatitis C serology:	196
Viral Markers Total	737
F. Hospital Infection surveillance cultures:	1467
Microbiology Grand Total	12,837
Grand Total	3,62,772

DEPARTMENT OF BLOOD BANK

Total Statistics of Blood Bank JPNATC						
Total donor screened	Donor bled	Donor Tested for HIV	Donor Tested for HBV	Donor Tested for HCV	Donor Tested for VDRL	Donor Tested for MP
9241	5973	5973	5973	5973	5973	5973
		% Pos 0.45%	% pos 2%	% Pos0.6%	% pos 1.25%	%Pos 0.06%
Total X-match done	Total Blood issued	Total FFP issued	Total platelet issued	Total cryo issued	Total donor grouping done	Total patient grouping done
18,518	8128	5783	5649	313	17919	8000

Blood and blood component stock

Total blood stock record	6901
Total FFP stock record	5533
Total platelet stock record	4701

Total cryoprecipitate stock record 221

Work load of blood donation complex from 28th March 2008 to 31 March 2009

Total number blood donors screened 9,241

Total number of donors found unfit for donation 3,227

Total number blood donors bled 5,973

Number of replacement donors 5,477

Number of voluntary blood donors 496

Work load of issue (emergency lab) of JPNATC Blood Bank AIIMS

Total cross match done 18,518

Total blood issued 8,128

Total FFP Issued 5,783

Total platelet issued 5,649

Total cryoprecipitate issued 313

Work load of component laboratory

Total pack RBC prepared 5,961

Total FFP prepared 5,905

Total platelet prepared 5,580

Quality control of Blood and Blood Component 40 Bags

Blood and blood component issued to main blood bank, CNC blood bank and other hospitals

Blood issued to CNC blood bank 219 units

Blood issued to main blood bank 151

Blood issued to other hospital 08 units

FFP issued to main blood bank 25 units

FFP issued to other blood bank 52 units

Platelet issued to main blood bank 2217 units

Cryoprecipitate issued to main blood bank 10 units

Work load of infection marker laboratory Percentage of reactive blood donor

HIV	0.45%	HBsAg	2%		
HCV	0.6%	VDRL	1.25%	MP	0.06%

Record of blood sent for incineration (Blood and FFP)

Platelet units sent for Incineration due to viral marker reactive report, leakage, lipeamic plasma units and expired units

Total blood sent for incineration	556 units
Total FFP Sent for Incineration	596 units
Total platelet sent for incineration	922 units
Total cryoprecipitate sent for incineration	49

DEPARTMENT OF FORENSIC MEDICINE

Total number of autopsy at JPNATC- 893 (April 2008 – March 2009)

The department provided consultation services to the CBI, crime branch and other investigating agencies from various states in complicated medico-legal postmortem conducted at other centres of the country and also participated in board postmortems.

Court attendance by the members of the department

Faculty of the department also attended court on behalf of the Medical Superintendent, other doctors who have left AIIMS, as directed by the court.

Clinical Forensic Medicine

The department examined cases of age estimation, medical examination, marriage disputes, potency, DNA fingerprinting etc referred by the court, CBI and other investigating agencies.

Community services

The department participated in training programme organized by the Academy of CBI and NICFS. Lectures and demonstrations were held for CBI officials, police officers, medical officers, judges public prosecutors and Forensic Science experts from all over country.

MEDICAL RECORD SECTION

Faculty In-Charge: Dr Adarsh Kumar

Jr M R O

Mr Raju Yohunna

M R T

Mr Saurabh

Mr Aditya

M R A

Mr Rajender Singh and Mr Tasvir Singh

Receptionists

Mr Shailendra Jaiswal

Ms Kakujyoti Borha

Beside above mentioned regular staff few DEO and Sulabh workers are also helping in day-to-day management of various functioning of medical record section. The statistical data for the period is as under.

Total ED attendance	42,050
Total Number of admissions	4,640
Total number of operations performed	3,978
Total number of follow-up OPD attendance	23,359

MRS of JPNATC is the first Government Hospital who has started Online registration of death at NDMC.

MRS is also disposing of summons from various Hon'ble Courts in Delhi as well as other states (total 16 summons). MRS is also handling various Insurance Policy matters of patients who attended JPNATC in any case whether alive or dead. MRS has also entertained police requests for issuing x-rays. During Mehrauli Bomb Blast episode, the MRS efficiently handled various information pertaining to deceased as asked by Delhi Government for proper compensation. Several RTI queries were also answered by MRS during the year. MRS is striving for computerization of whole registration process.

MEDICAL SOCIAL WELFARE UNIT

Faculty In-Charge	Sup. MSSO	MSSO
Dr Adarsh Kumar	Mr S. Bhattacharya	Mr Naveen Kumar

The MSW Unit was developed with the help of one MSSO and afterwards one Sup. MSSO and one NGO, i.e. SAPNA. Initially the primary work was providing financial help, medicines, clothes, etc. to poor and needy patients by certifying as 'BPL' which afterwards extended to rehabilitation of unknown and without attendant patients. During the period of reporting 46 such patients was rehabilitated at various Ashrams/ Shelter Homes and 413 patients were handed over to their relative by following various administrative procedures.

Afterwards with the help of various agencies like CISF, CRPF and companies; Blood Donation Camps were arranged for Blood Bank of JPNATC. First camp was organized on occasion of Teacher's Day (5 Sept 2008) and afterwards two more camps were organized with approximately 100 units of donations.

MSW Unit is coordinating with CMET and Sr Administrative Officer for providing information to various media agencies, TV channels in case of Unknown patients.

MSW Unit is coordinating with IHBHAS in rehabilitation of mentally ill (Psychiatric) patients, who were admitted as victim of trauma.

MSW Unit arranged to get One Dead Body donated for teaching purpose to Department of Anatomy

11.1 B.B. Dikshit Library

Professor in-charge

Rani Kumar
(up to 7.7.2008)

Chitra Sarkar
(from 8.7.2008)

Chief Librarian

K. P. Singh
(from 5.12.2008)

TIMINGS AND MEMBERSHIP

The library is kept open round the clock on all days of the week including Sundays and holidays. It has 2300 regular members and an average of 800 readers visit the library every day.

SERVICES

The library continued to extend the following services to the users. These services had been modernized, updated and strengthened.

Book alert service

This is a monthly service listing of new books, monographs and pamphlets added to the library.

Periodical alert service

This is a fortnightly listing of new periodicals received in the library during the previous fortnight.

Bibliographies on demand

The staff of the library compiled bibliographies on various topics as and when requested by the readers.

Interlibrary loan services

Interlibrary loan services with several local libraries are being maintained to help users procure documents that are not available in the library.

Reprographic services

The library has eight machines to meet the demands of the readers, viz. two Modi Xerox 1025, two 5834, one Duplex digital copier model WCPR0-35, two WC5638 WRH and one WC 7242 colour. During the year 1,13,892 pages were photocopied, on payment basis, as a service to the readers.

CD-ROM printout services

During the year 13,427 computer printouts containing abstracts of articles were made available to the readers on a payment basis.

Book Bank

The Book Bank has 92 students (undergraduates and interns) as its members. It has 2,600 books which are issued on a long-term basis to the students.

Microforms section

The library is equipped with two microfilm readers and one microfilm/microfiche reader-cum-printer. The library has 1,627 microforms in its collection.

Audiovisual section

The library has four colour television sets and four video cassette recorders. The number of video cassettes available in the library is 308. It also has four audio cassette playback decks and 109 audio cassettes.

CD-based services

The library has different databases on CD-ROM, i.e. MEDLINE, POPLINE, ONCO DISC and LISA, etc. Different encyclopaedias and dictionaries have also been acquired on CD-ROM. The number of CDs currently is 807.

CD-NET

A CD-NET workstation has been operational in the library since January 1993. At a time, fifteen users can search different databases loaded in a CD-NET tower. A printing facility is also available. The library has expanded this facility by adding one more CD tower with 28 drives.

Library automation

The library has an ALPHA Digital Personal Workstation (DPW) 433 AU with 16 terminals, 10 laser printers, one line printer and three local dot matrix printers. Housekeeping operations of the library (viz. acquisition, cataloguing, series control and circulation) have been automated. An upgraded version of the existing LIBSYS software named LS Premia, a web-centric library management software package has been installed and is used regularly.

Computerized thesis search

Over 5,000 theses received so far in the library can be retrieved through a computer search. Information about each thesis such as author, title, department, guide's name, co-guides and other bibliographical details are available on the computer.

Online journals

The library received 300 online journals for the current year, made available to it by the publishers along with the print versions of the journal.

OPAC (Online public access catalogue)

All the records from 1985 onwards can also be retrieved through the Online Public Access Catalogue (OPAC). The searchable databases (through OPAC) are video cassettes, audio cassettes and compact discs. Six online public access terminals are placed in the lobby at the entrance of the library where users can search bibliographic databases and find specific information online. Information about journals and recent arrivals can also be retrieved through OPAC.

Multimedia

The library has two multimedia sets. Few multimedia titles are also available.

E-mail

The library participates actively in DELNET (Developing Library Network). An e-mail modem has been provided by DELNET for communicating with other libraries. Besides this, the library also has an e-mail connection provided by the Institute.

Internet

This facility is available in the library from 10 am to 10 pm from Monday to Friday and till 8:30 pm on Saturdays. Eighteen nodes are available to the users. Fifteen wireless access points have been installed inside the library building to access the internet facility through Wi-Fi technology.

New additions

The library added 682 new books to its collection and now has a total of 71,496 books. Also 146 bound volumes of journals and 68 pamphlets/reports were added to the collection. The total number of bound volumes of journals and reports/pamphlet are increased to 66,496 and 16,805, respectively. The library subscribes to 633 journals in various fields of health sciences, 300 of these are online along with their print versions. Twenty-eight journals subscribed in print and electronic version on behalf of the National Drug Dependence Treatment Centre (NDDTC) are also being received

AWARDS, HONOURS AND SIGNIFICANT EVENTS

1. **Mr K. P. Singh**, Chief Librarian presented a paper on 'RFID: Multifidous technology' at the International symposium on 'Emerging trends and technologies in libraries and information sciences', JIIT University, Noida, UP, 18–20 December 2008, published on pages 357–66 of the proceedings; presented a paper on 'Information retrieval and Meta data: Digital library' at the 10th Annual National Convention of MANLIBNET held, KIIT University, Bhubaneswar, Orissa, 22–24 January 2009, published on pages 225–7 of the proceedings.
2. **Mr M. K. Vishwakarma**, Librarian Grade-II attended and presented a poster on 'Electronic resources: a boon for health science professionals' at the International Conference of Asian Special Libraries (ICoASL-2008), New Delhi, 25–28 November 2008.
3. **Mr Jahangir Khan**, Librarian Grade-III attended the training programme 'I.T. application in libraries and information management' held at National Institute of Health and Family Welfare, New Delhi, 20–24 October 2008; attended and presented a paper 'Changing scenario of journals from print to online' at National Conference on Digitization and Digital Presentation held at DESIDOC, DRDO, New Delhi, 11–12 December 2008.
4. **Mr Rakesh Rawat**, Data Entry Operator was awarded first prize in Hindi Typing examination, Department of Official Language, Ministry of Home Affairs, Government of India.

11.2 Cafeteria

Chairman

Deputy Director
(Administration)

Faculty-in-charge

O.P. Kharbanda

Accounts Officer

S. K. Gupta

General Manager

S. K. Kaushik

Deputy General Manager

K. K. Sharma

AIMS AND OBJECTIVES

The AIIMS cafeteria, established in 1972, provides wholesome food at reasonable prices to AIIMS employees. In 1983 it was registered with the Director of Canteen, Department of Personnel and Training, Government of India. In October 1991, the cafeteria was taken over by the Institute and since then all employees are treated at par with other AIIMS employees. The cafeteria is being run in accordance with guidelines issued by Department of Personnel and Training, Government of India from time to time on No-Profit, No Loss basis, without any financial assistance from the Institute.

MANAGEMENT COMMITTEE

A managing committee constituted by Director, AIIMS takes policy decisions pertaining to the Cafeteria. The members of the committee during the year were:

- | | |
|--|-----------------|
| 1. Deputy Director, Administration | Chairperson |
| 2. Professor S. Rastogi | Member |
| 3. Professor V.K. Paul | Member |
| 4. Professor Bir Singh | Member |
| 5. Shri Sandeep Lal, Sr F.A. | Member |
| 6. Smt Basanti Dalal, F.A. | Member |
| 7. Shri B.S. Anand, S.E. | Member |
| 8. Shri S.K. Gupta, Accounts Officer | Member |
| 9. Smt Preeti Ahluwalia, Welfare Officer | Special Invitee |
| 10. Dr (Smt) Parmeet Kaur, Chief Dietician | Member |
| 11. Representative of RDA | Member |

12. Representative of Officers' Association	Member
13. Representative of Nurses' Union	Member
14. Representative of Karamchari Union	Member
15. Representative of FAIMS	Member
16. Professor O. P. Kharbanda	Member Secretary
17. Shri S.K. Kaushik, General Manager, Cafeteria	Member

SERVICE FACILITIES

The cafeteria runs 7 units to provide services to about 9000 employees of the Institute. These are:

1. Main cafeteria (24-hour service) situated near Jawahar Lal Nehru Auditorium
2. Main Operation Theatre cafeteria on the 9th floor of the main hospital
3. Cardiothoracic Neurosciences Centre cafeteria on the 2nd floor of the centre
4. Dr Rajendra Prasad Centre Operation Theatre cafeteria on the 5th floor of the centre
5. Apex Jaiprakash Narain Trauma Centre
6. Faculty Room cafeteria near the Main cafeteria
7. Dr B.R. Ambedkar Institute Rotary Cancer Hospital cafeteria on the 3rd floor of the centre

In addition, the cafeteria provides services to the Director, Dean, Deputy Director (Administration), Medical Superintendent and Faculty Members for their day-to-day as well as special requirements for important meetings. It also provides catering services for the examinations conducted by the Examination Section at AIIMS as well as for meetings of the Institute body, Governing body and other Standing Committees.

STAFF STRENGTH

Eighty-five employees (regular/ad hoc/temporary) are on the rolls of the Cafeteria Department. Catering services were provided for official meetings, conferences and symposia held at AIIMS.

ANNUAL TURNOVER

The total turn over of the cafeteria is approximately Rs 1 crore 83 lakh.

DEVELOPMENT ACTIVITIES

Several changes were introduced in the cafeteria. Complete renovation of the kitchen and store area which includes proper ventilation using the latest technology is in progress.

FUTURE PLANS

There is a proposal for complete renovation of the Cafeteria, to be equipped with the latest technology to maintain more healthy and hygienic conditions in the Cafeteria Department.

11.3 Central Workshop

Faculty Co-ordinator

Shashi Kant (from June 2008)

Chief Technical Officer

Adarsh Kumar Sharma (from 4.7.2008)

Technical Officers

Kalu Ram
Harinder Pal

Swaraj Kumar
Nitin Srivastava

The Central Workshop has been mainly engaged in the repair and maintenance of instruments used for medical education, scientific research and hospital services. In spite of increased load of above-mentioned activities, it has also continued to cater for fabrication and design of new instruments. It has the following sections:

1. Electronic
2. Electrical
3. Refrigeration
4. Mechanical
5. Carpentry
6. Painting

STAFF STRENGTH

The Central Workshop has the following staff:

Technician (Grade I)	7	Store Clerk (UDC)	1
Technician (Grade II)	7	Assistant (NS)	1
Workshop Assistant (Painter)	2	UDC	1
Workshop Assistant	6	Peon	1
<i>Khalasi</i>	7		

FABRICATION AND GUIDANCE

The Central Workshop has been able to continue to help the research activities of the Institute by modification of instruments and fabrication of useful gadgets. In many cases it has been possible to design and fabricate items that were previously imported by departments with locally available components. A total of 79 jobs of fabrication were carried out. Some of the important specialized fabrication jobs done for various departments include:

1. Testicular prosthesis (Department of Paediatric Surgery)
2. Fumigation chamber (Main operation theatre 6 and 7)
3. Ampoule cutter box (Main operation theatre)
4. Sample/Specimen carrying tray (Private ward III)
5. Paediatric rolls (Main operation theatre 6 and 7)

- | | |
|--|---------------------------------------|
| 6. Wooden block for skin graft | (Main operation theatre 10 and 11) |
| 7. Auto CPAP connector | (Department of Medicine) |
| 8. Metal stand for remote control | (Main operation theatre 10 and 11) |
| 9. Bender | (Neurosurgery operation theatre) |
| 10. UV Light Stand for operation theatre | (Department of Surgery) |
| 11. CO2 chamber | (Department of Anatomy) |
| 12. Elevated plus Maze with camera stand | (Clinical Epidemiology Unit) |
| 13. Foot fault apparatus | (Clinical Epidemiology Unit) |
| 14. Signal wire for Sleep lab | (Department of Physiology) |
| 15. OT table Mattress | (MTP operation theatre) |
| 16. Stillete | (NS2 ward) |
| 17. Abduction stand for arthroscopy | (Orthopaedics operation theatre) |
| 18. Hand rest stand for arthroscopy | (Orthopaedics operation theatre) |
| 19. Part of MRI machine as per sample | (NMR Department) |
| 20. Copper strip for boiler | (CSSD Department) |
| 21. Wooden block as per sample | (Private Ward 5th floor) |
| 22. Slide rack | (Department of Anatomy) |
| 23. Operation theatre light handle | (Department of CTVS) |
| 24. Aluminum angle piece | (Orthopaedics operation theatre) |
| 25. Cushion for Settee | (CNC Blood Bank) |
| 26. Hangers for intravenous fluid bottles | (COPD) |
| 27. Garbage trolley | (Cardiothoracic Neurosciences Centre) |
| 28. Plexi glass chamber | (Department of Physiology) |
| 29. X-ray container | (Central Animal Facility) |
| 30. Rat chamber with massy table and perspex box | (Department of Anatomy) |
| 31. Perspex box as per sample for research | (Department of Anatomy) |
| 32. Rat restrainer | (Department of Neurology) |
| 33. Panel with trolley for display | (Dr BRA IRCH) |
| 34. Bakelite support board for patients | (Cardiac Catheterization Laboratory) |
| 35. Supporting stand for rats | (Department of Anatomy) |
| 36. Filter plate for MRI machine | (NMR Department) |

- | | |
|-----------------------|--|
| 37. Wet box (Perspex) | (Department of Anatomy) |
| 38. Metal dies | (Centre for Dental Education and Research) |
| 39. Hip spica stand | (Orthopaedics OPD) |
| 40. 'L' support | (Orthopaedics operation theatre) |

REPAIR AND MAINTENANCE

The Central Workshop has been carried out repair and maintenance of all types of biomedical equipment including blood pressure instruments, electrosurgical units, ECG machines, infusion pumps, multiparameter monitors, defibrillators, patient warmers, operation theatre tables, refrigerators, ice machine, cold labs, water chillers, cryostats, deep freezers, UV spectrophotometer, electronic weighing machines, audiometer, ultrasound therapy unit, operation theatre light, tissue processor, cold centrifuge, microscope, needle destroyer, water bath, X-ray view box, OT care machine, suction machine, oxygen regulator flowmeter, servo stabilizer, boilers, hot plates, tabletop centrifuge, microwave ovens, incubators, patient bed, patient trolley, loading trolley, intravenous stands, wheel chair, side screen, bedside locker, push carts, stainless steel drum, surgical instruments, etc.

The Central Workshop has been economically and successfully repairing many electronic types of equipments declared irreparable by the manufacturing companies. These include patient monitors, defibrillators, infusion pumps, patient warmers, etc.

The Central Workshop has been taking repair and painting jobs of all hospital furniture such as patient beds, patient lockers, intravenous stands, instruments trolleys, loading trolleys, fowler beds, etc. The Central Workshop attended to a total of 6,820 repair jobs.

SHORT-TERM TRAINING

The Central Workshop has been actively involved in providing guidance and imparting short-term summer training (4–6 weeks) to eight B. Tech students from Dayal Bagh Engineering College, Agra and other technical institutes.

11.4 K.L. Wig Centre for Medical Education and Technology

Professor-in-Charge

Rita Sood
(up to 3.2.2009)

Siddharth Datta Gupta
(from 4.2.2009)

Coordinator

O. P. Kharbanda

Educationist

B. V. Adkoli (on leave)

Education Media Generalist

Yogesh Kumar

Adjunct faculty

Faculty members covering all undergraduate disciplines besides Dental, Nursing, Hospital Administration and Computer Facility

Suneeta Mittal	V.K. Paul	Anurag Srivastava
Nibhriti Das	Manju Vatsa	Manju Mehta
Bir Singh	Peush Sahni	Radhika Tandon
Lalit Dar	A. Shariff	Nalin Mehta
Sandhya Gupta	S.K. Maulik	Sanjay Arya
Smriti Hari	Rajiva Gupta	Vandana Jain
Kalpana Luthra		S.N. Ragukumar

EDUCATION

Undergraduate, postgraduate, paramedical

Dr Rita Sood coordinated an 'Orientation Programme for Interns' on 6–7 February 2009 for the new batch of interns at AIIMS. Many CMET adjunct faculty were resource persons for the programme; provided inputs to the MB,BS curriculum committee deliberations of phase 1 and phase 2; organized and moderated a panel discussion for undergraduates on 'How to be a good doctor'.

Mr Yogesh Kumar conducted 10 sessions (2 hours each) for MSc Nursing students of College of Nursing, AIIMS on topics related to media and communication.

Continuing Medical Education

Conferences/workshops organized

CMET organized 5 in-house workshops: Three on Tips and Tricks in MS Word and PowerPoint, one on Information Retrieval in health sciences and one on Ethics in Medical Education for the faculty, junior, senior residents and secretarial staff. Adjunct faculty participated as resource persons delivered lectures.

CMET also provided space and facility to conduct 22 CMEs/workshops organized by other departments of AIIMS.

National and International Conferences

CMET organized a 3-day national workshop, 'Teaching Learning Methods in Health Professions' Education: TLM-HPE 2008', 10–12 November, 2008. This workshop was planned to facilitate development and improve teaching practices among health professions' teachers. The programme was planned to deliberate on good teaching practices based on adult learning principles, and building interactivity into large group and small group learning. The programme also dealt with teaching of communications skills, professional and ethical behaviour, and clinical and procedural skills. The sessions on appropriate use of technology to improve instructional methods and microteaching were also planned.

Dr S. Datta Gupta, Rita Sood, Lalit Dar, Nalin Mehta and Kalpana Luthra, and Mr Yogesh Kumar participated in the International Conference organized by Medical Council of India to celebrate its Platinum Jubilee.

Lectures delivered

Dr Rita Sood

- 'Long case examination' Workshop on 'Skills teaching and Assessment', Christian Medical College, Ludhiana; 5 April 2008.
- Conducted sessions on (i) Student assessment, (ii) Validity and reliability in assessment, (iii) Project management, and (iv) Developing educational scholarship at 2nd PSG-FAIMER regional institute faculty development program in medical education, Coimbatore, Tamil Nadu; 15–23 April 2008.
- 'Giving effective educational feedback' Workshop on 'Assessment and student feedback', Sikkim Manipal Institute of Medical Sciences, Gangtok, Sikkim; 12–14 May 2008.
- Conducted sessions on (i) Project management, (ii) Qualitative research, and (iii) Educational scholarship, 4th GSMC-FAIMER regional Institute Course in Medical Education, KEM hospital and GSMC, Mumbai; 15–18 June 2008.
- Conducted sessions on (i) Student assessment, (ii) MCQs and item analysis, (iii) One-minute preceptor, and (iv) Giving effective feedback, First Advanced MUHS workshop for medical teachers, MUHS, Pune; 6–8 August 2008.
- 'What is integrated teaching and why do we need it?', National workshop on Integrated teaching at Kameinini Institute of Medical Sciences, Narketpally, Andhra Pradesh; 25–26 July 2008.
- Panelist for a panel discussion 'Healing head and heart' (Teaching values in health care), 15th National conference on Mind, Body and Medicine, Mount Abu, Rajasthan; 27–29 July 2008.
- 'Teaching of ethics to students/residents', Workshop on Ethics in healthcare, AIIMS; 7–9 August 2008.
- 'Essentiality of spirit of scientific enquiry (research) – An integral part of medical curriculum at undergraduate and postgraduate level', International update on Excellence in Medical Education, MGIMS, Sewagram, Wardha; 12–13 September 2008.

- ‘One Minute Preceptorship as a Teaching Method’, ‘Learning theories and adult learning principles’, National workshop on ‘Teaching learning methods in Health Professions’ Education’, AIIMS; 10–12 November 2008.
- ‘Written communication’, Interns orientation programme, AIIMS; February 2009.
- Faculty, MUHS Deans’ consultation meeting on ‘Capacity building in medical education and leadership’, 12–13 January 2009.
- ‘Quality based Medical Education–A vision’, Commemorative International workshop of Medical Council of India, New Delhi; 1–3 March 2009.

Dr Kalpana Luthra

- National workshop , Assessment methods for learning evaluation in Basic Medical Sciences, September 2008
- Invited speaker, Workshop, ‘How to plan a research project and write a proposal’ for PG students, AIIMS, October 2008,
- ‘MCQs as assessment tool’, Department of Physiology, AIIMS, August 2008

Dr Nalin Mehta

- Convener, In-house workshop, ‘Ethics in Medical Education’, Conducted most of the sessions.

Mr Yogesh Kumar

- Demo lecture, ‘Tools in Word for Scientific Writing’, Workshop ‘Research in Reproductive Biology’, Department of Obstetrics and Gynecology and CMET, 4 July 2009.
- In-house workshop, ‘Tips and Tricks in Word and PowerPoint’ for Secretarial Staff, 7–10 July 2009.
- ‘Table and Graphs’, 1st Annual Clinical and Epidemiological Research Methods and Leadership Training workshop, INCLIN in collaboration with CMET, 13 July 2009.
- ‘Ethics in Medical Photography’, In-house workshop on Ethics in Medical Education, 7–9 August 2008.
- In-house workshops ‘Tips and Tricks in Word and PowerPoint’ for Resident doctors, 3–4 and 11–12 September 2009.
- ‘Advantage of Poster and Video Session’, 9th Asian Congress of Urology, Urological Association of Asia, 2–5 October 2008
- Demo lecture, Effective presentation for PG students and faculty of Centre for Community Medicine, 26 March 2009.

Mr S.N. Ragu Kumar

- Convener, In-house workshop on ‘Information Retrieval in health sciences’, conducted all the sessions.

PUBLICATIONS

Journals

1. Sood R. Medical Education in India. *Medical Teacher* 2008;**30**:585–91.
2. Sood R. Principles of thesis writing (Book review). *Indian J Pharmacol* 2008;**40**:134.
3. Sood R. Essentiality of ‘spirit of scientific enquiry (research) – An integral part of medical curriculum at undergraduate and postgraduate level’ In: Proceedings of International update on Excellence in medical education at MGIMS, Sewagram, Wardha, 12–13 September 2008.

Books

1. Proceedings of National workshop on ‘Teaching Learning Methods in Health Professions’ Education’ 2008.

SERVICES

Media production

Type of media produced	Items
Clinical photography	2135 (408 requisitions)
X-ray, specimen, gel, etc.	4980 (512 requisitions)
Photographic prints (black and white, and colour)	562 (215 requisitions)
Scanning of images (slides, documents)	475
Scanning of slides	300
Video recording, editing (non-linear) including tape to CD conversion	437
Designing/printing of large format posters	1200
Book binding, paper cutting and offset printing	65

Highlights of media work

- Produced 2 series of video films for WHO funded modules developed by Department of Paediatrics: (1). Optimal feeding of low birth weight infants, (2). Essential newborn care course for nursing. Total: 19 films of 5–10 minute duration were produced.
- Institute day 2008: Exhibition was organized by CMET. More than 200 large size posters, especially designed for public health education were displayed.

AWARDS, HONOURS AND SIGNIFICANT EVENTS

- **Dr Rita Sood** was Member, International Advisory Board, 7th edition of Text book of Clinical Medicine by Kumar and Clark; Executive Committee Member, South East Asian Regional Association of Medical Education (SEARAME); Member, Association for the Study of Medical Education in Europe (ASME); Editorial Board, South East Asian Journal of Medical Education

(SEAJME), Published from Chulalongkorn University, Bangkok, Thailand; Commissioned to write a paper on Medical Education in India for the series 'Medical education around the world' in the journal *Medical Teacher*; invited expert, Medical Council of India for undergraduate and postgraduate curriculum revision in Medicine and Family Medicine, October 2008 and develop Curriculum for Basic and Advanced courses on Medical education for teaching faculty, March 2009; Reviewer for *Int J Med Edu*, *Med Teacher*, *Yonsei Med J*, *Natl Med J India* and *Postgrad Med J*; Temporary Advisor to WHO, Expert group meeting to review and finalize module on 'Teaching of ethics in undergraduate medical curriculum', WHO, SEARO, New Delhi, 25–26 September 2008; Coordinated a collaborative learning programme for undergraduate medical students at CMET, AIIMS with 10 institutes across the world for a session on Stroke delivered from Dundee, UK.

11.5 Computer Facility

Deputy Director and Head

R.S Tyagi

Systems Analyst

S.Kailash

S.N. Ragu Kumar

Satish Prasad

Senior Programmers

Sushil Kumar Meher
S.P.Singh

Sanjay Gupta
Vinay Pande

V.K Jindal

Programmers

Hari Shankar
Tripta Sharma
Sanjeev Kumar

Pawan Kumar
Sushma Dhama
Amit
Shyama Barua

Manoj Kumar Singh
Amit Kumar Yadav
Ankita Saini

EDUCATION

Postgraduate

Computer programming classes covering both theory and practical aspects were conducted for postgraduate students of the Department of Biotechnology and of the College of Nursing. Bioinformatics classes for students of the Department of Biotechnology were also conducted. Training was provided to Armed Force officers deputed to study Medical Informatics. This training was for a period of 2-years

Undergraduate

A three-month course on basics of computers, internet, Windows applications, computer-aided learning, database and biostatistics was given to the BSc (Hons) Nursing students of AIIMS. A computer course for students of BSc Nursing (Post-certificate) was also conducted.

Continuing Medical Education

Members of the facility participated in and delivered lectures in continuing medical education programmes, symposia, international and national conferences. Members of the facility also guided various software projects for students of Computer Applications (leading to BCA, BE, BTech, MCA and MCM) from various engineering colleges in and outside Delhi. Lectures of faculty members of AIIMS for medical colleges/hospitals all over the country were organized through videoconferencing.

SERVICES

Hospital computerization

The following software design, development and implementation activities were done by the computer facility during this year.

Continuous maintenance and enhancement/upgradation of modules developed for Dr BRA IRCH OPD (New and Old patients) and Inpatients, New patients OPD registration for Main hospital, Dental OPD at CDER, Casualty registration, Admission registration (for both short- and long admission) for the Main hospital and centres except RP Centre and discharge summaries for clinical departments such as Gastroenterology, Orthopaedics, Cardiothoracic and Vascular Surgery and Physical Medicine and Rehabilitation.

Software for Main Hospital for OPD, Central Admission and Casualty for Main Hospital and software for Dental Centre have been developed. Functionalities covered for all these modules are available

The software that has been updated include:

1. Main hospital: MRI patient information system
2. BRA IRCH: Successfully implemented Day care registration, Appointment for Day care patients and discharge of cancer patients, e-billing during the period April 2008–March 2009. All these modules are running successfully.
3. CT and NS Centre: Successfully implemented electronic registration of new patients both for OPD and clinics at Cardiac and Neurosciences Centre since February 2009. Backlog entries of old records are being entered at both Cardiac and Neurosciences Medical Record Section and more than 20,000 records are stored in the system. A LAN based discharge summary for Neurosurgery in-patients has been developed and is running successfully.

Academic Section Management and Information System

This system is under development and will enable complete automation of the undergraduate, postgraduate and para-medical courses covering all functionalities from the beginning till completion of the course. It will also have (i) Report generation package for the academic Section, (ii) Modifications and maintenance in CMET requisition system and (iii) Maintenance of hostel reservation system.

Research section

The modules automated and running successfully include

1. Administration including (i) Research project management, (ii) recruitment management, (iii) project employee management, (iv) project employee EHS management, and (v) research fellowship management.
2. Accounts including (i) payroll and tax management, (ii) grand register, (iii) cash book, (iv) ledger, (v) TA/DA reimbursement, and (vi) balance sheet.
3. Stores including requisition, supply order and financial transaction.

The computer facility has migrated to SQL server 2005. A web-based application is under development and some of the functionalities are being implemented.

Administrative computerization

- Continued the payroll processing, administrative, accounts and finance systems using in-house software development.

- Technical co-ordination for the new telephone directory committee at AIIMS.
- Software for cheque printing for Budget section

Examination section computerization

- Computer Facility has coordinated and conducted the computerized online counseling for MD/MS/MDS and the selection of Junior Residence (non-Academic) for the year 2008–09.
- Hosted all examination results and notices online on the AIIMS website servers.

IT infrastructure and Networking, Internet and Intranet management activities

1. Implemented the User Id based internet access system, also demonstrated it to all computer facility staff.
2. Conducted an END point protection system demonstration at computer facility.
3. Prepared the Network audit and ISMS audit requirement study and RFP proposals, tendering, demonstrations, presentation, evaluation analysis, and award contract- Study, design, development and co-ordination done.
4. Network based endpoint antivirus system: Requirement study, RFP proposal development, Technical specification development and co-ordination in technical specification committee, tender document preparations, demonstration and evaluation analysis through evaluation committee co-ordination, draft of award contract, and implementation plan and execution.
5. Facility Management for Wireless Networking: System requirement, contract development, implementation of support systems and call centers for student support.
6. Web portal RFP proposal development in consultation with all department and centres at AIIMS.
7. Proposal for DHCP and authentication systems for wired network.
8. New webmail system testing and installation done.
9. Unified Treat Management system, version upgradation and installation done for security of computer networks.
10. User room upgradation done with new personal computer and internet for students and doctors.
11. Conducted website content provider meetings with all departments for continuous updating and upgradation of the AIIMS website and its updating policies.
12. Based on meetings of content providers, the Web portal RFP proposal is under development in consultation with all the department and centres.
13. Successfully implemented the wireless networking zones at 18 hostel locations, creating wi-fi zones for internet, information and online journals access to students and resident doctors. So far 230 students have availed of this facility and during the next year all the students at hostels will be enrolled for this facility.

Details of wireless connection users (course-wise) up to March 2009

Course	Number
1. BSc	9
2. DM	7
3. Junior residents	24
4. MCh	9
5. MSc	11
6. MB,BS	52
7. MD	31
8. MS	5
9. PhD	51
10. Computer facility	4
11. Senior residents	27
Total	230

Details of wireless connection users (location-wise) up to March 2009

Location	Number
Number 1	18
Number 2	13
Number 3	13
Number 4	7
Number 5	12
Number 6	17
Number 7	34
Number 8	31
Number 9	6
Number 10	11
Number 11	2
RPC -1	14
RPC-2	1
F-type	3
Faculty transit accommodation	5
Type III, Ayurvigyan Nagar	2
Computer facility	4
Masjid Moth Resident doctors	35
Masjid Moth Nurses	2
Total	230

14. Co-ordination of the training programme for concerned staff and officers on 'the Indian Government tenders information system' for online tender information.
15. Implementing wi-fi zone at B.B. Dikshit Library for internet and online journal access for students.
16. Networking requirements study for Brain Lab, Neurosciences facility.
17. Networking requirements study for ADMIN, Radiology new OPD.
18. Continuation of UTM based perimeter network security and webmail facility.
19. The website of *www.aiims.edu*, *www.aiims.ac.in* are being maintained in-house by the department.
20. Internet facility for faculty and students was maintained 24x7x365 days on the AIIMS network at around 1500 nodes
21. Full commissioning of 45 Mbps (1:4) leased line with Radio link backup facility from Education and research network (ERNET India, Ministry of information and communication technology, GOI)
22. Creation and maintenance of users accounts for 665 *www.aiims.ac.in* domain email users.
23. Total number of visitors to AIIMS website were approx. 24 lakhs.
24. Maintenance of Web server, Proxy server, Messaging server 24x7x365 days.
25. Provision of new internet connections to faculty and officers on regular basis.
26. Facility management and call maintenance for internet and network users complaints and resolution.
27. The software modules for the website are developed in house.
28. Design, Development and Modifications in the entrance exam's online information System.
29. Technical co-ordination for Online journal access and provision of journal access using internet and PC at the Duty rooms and common rooms for scholars and Sr. / Jr. Resident doctors at AIIMS.

Details of pages updated and created on AIIMS website

Details	No. of pages
Total pages (under departments and centres)	505
Conferences, workshops, lectures and orations	215
Recruitment for faculty and other posts	42
Admission notices, results and others under 'Current events'	600
Members of Institute body and other standing committees	89
Central facilities	32
RTI information, notices, health information, hostel, etc.	145
Administration, Academic, About AIIMS, Annual report, etc.	901
Total	2520

Other web-based activities

Data uploaded on Exam server	124 MB (approx)
Number of email users at www.aiims.ac.in	665
Number of tenders uploaded on http://tenders.gov.in website	1,187
Number of internet users at the user room	22,267
Number of virus mails detected	3,888
Number of valid mails	4,44,600
Number of spam mails detected and filtered	73,79,556
Total data transferred (as of June 2008)	1,86,444 MB
Number of internet nodes	1500 approx

Other facilities

The following were maintained during the year:

1. Email and FTP facility
2. Medical and educational information access facility
3. Laser printing and scanning
4. Consultancy for software and hardware

SIGNIFICANT EVENTS

Dr R. S. Tyagi was awarded the CIO Connect Award 2008; attended the United Kingdom and India Education and Research Initiative meeting for the development of Telemedicine at University of Loughborough, UK, 11–26 October 2008.

Mr S. Kailash was nominated by the Ministry of Communication and Information Technology, Government of India to attend a meeting of Project Review and Steering Group (PRSG) for Projects ‘Development of Framework for Logging and Analysis of Network Traffic for Securing Network Infrastructure at Assam, Gauhati and Manipur Universities; Selection Committee expert for promotion of S and T officers of ERNET, Ministry of Information Technology, Government of India in December 2008; attended and chaired a scientific session in the Silver Jubilee National Conference of Indian Society for Medical Statistics (ISMS), Nainital, Uttarakhand, 7–9 November 2008.

Mr S.N. Ragu Kumar delivered a talk on ‘Role of Information Technology in healthcare education & research organization’, 2nd National Conference on Education and Research ‘Confer-2009’, Cochin, Kerala, 11–14 March 2009; invited as an author delegate to attend the eIndia/eHealth national conference, New Delhi; attended 11th Association of anti-virus Asia researchers International Conference, New Delhi, 10–12 December 2008; conducted one-day session on Information retrieval and management in bioinformatics as part of 2 Bio-informatics workshops organized by Department of Biophysics for ICMR sponsored participants (April 2008 and January 2009); conducted a session

on Literature search using Internet for reproductive health research as part of National Workshop organized by Department of Obstetrics and Gynaecology, AIIMS; conducted a session on Literature review using Internet for clinical research as part of National Workshop organized by INCLEN, AIIMS; As Organizing Secretary conducted a workshop, 'Effective information retrieval in health sciences using Internet and Intranet' spanning 3 half day sessions by delivering lecture, demonstrations and hand-on training covering topics such as Search engines, Database, advanced Google, Pubmed, NCBI, NLM resources, etc. to Faculty and Residents doctors; co-ordinated the technical setup for 'web-based interactive learning through online collaboration software' involving students from many parts of the world as a prototype testing for the Centre for Medical Education and Technology; Delivered a talk on 'Telemedicine experiences', Symposium on Advances in information technology in medical sciences, Lady Hardinge Medical College, New Delhi, 28 February 2009; Delivered lecture on 'DP and R 201 Informatics in Disaster Preparedness and Rehabilitation' as part of PG diploma course, Guru Gobind Singh IP University, New Delhi; Nominated expert for IT infrastructure development at Indian National Science Academy, New Delhi; Nominated expert member for Computerization in Safdarjang Hospital and VMMC, New Delhi; Co-opted Expert member, 'National Health Information Network', Ministry of Health and Family Welfare for implementation of recommendations of National Knowledge Commission.

Mr S.K. Meher invited speaker, 'Emerging Technologies and Best Practices in Medical Imaging, RIS and PACS', 4th Annual Indian ICT Conference and Exhibition—eINDIA 2008, New Delhi 29–31 July 2008; Attended CSI/SEARCC 2008 Annual Conference, Chennai, 10–12 September 2008; Attended 2nd India Software Engineering Conference, Pune, 23–26 February 2008; Organized Workshop on 'e-Health Development in 3rd World Developing Countries: Bridging the Digital Divide', International conference on Information Technology ICIT 2008, Xavier Institute of Management, Bhubaneswar, Orissa, 18 December 2008; 'Distance Care—Awareness and attitude among physicians and patients at AIIMS' presented at TeleMed and eHealth '08: Optimizing Patient Centred Care - the role of eHealth, 24–25 November 2008, Royal Society of Medicine, London, UK; 'Barriers in Telehealth care for treatment of rural patients at AIIMS, New Delhi', 17th Annual Medicine Meets Virtual Reality Conference MMVR–2009, 19–22 January 2009, Long Beach, California, USA; Invited speaker at International workshop on 'Surveillance, Monitoring, Prevention and Control of Dengue Fever DHF and DSS through IT', AIIMS, Delhi; Research work has been carried out by the three students of Amity Institute of Biotechnology: Classifying Different Protein Gene Families According to SNP'S Using Est Database. Sushil K Meher, Rajeshwar S Tyagi, and Tanushree Chaudhry Awareness and attitudes to telemedicine among doctors and patients in India Telemed Telecare 15(3): 139—141 2009.

Mr Sanjay Gupta attended 2nd India Software Engineering Conference (ISEC-2009), Pune, Maharastra, 23–26 February 2009; Attended International Conference on Wireless Information Networks & Information System (WINBIS), Kathmandu, Nepal, 27 February–1 March 2009 and presented paper 'Wireless Network in Healthcare: Improve efficiency, high availability, reliability and saving cost'.

Mr Hari Shankar attended Computer Society of India (CSI) Conference, Kochi, Kerala, 11–14 March 2009.

11.6 Electron Microscope Facility

Officer-in-charge

Shashi Wadhwa

Associate Professor

Taposh K. Das

T.C. Nag

Technical Officer

Rajesh Pathania

Technical Assistant

Mr Sandeep Arya

EDUCATION

1. Twenty-four students along with two faculty members from North Bengal University visited EM laboratory on 12 February 2009.
2. A training programme on Scanning electron microscopy (SEM) and Transmission electron microscopy (TEM) was conducted for 13 MTech (Nanotechnology) and MSc (Nanoscience) students of Amity Institute of Nanotechnology, Amity Campus, Noida, 16–21 February 2009.
3. Four Postgraduate Anatomy students attended the EM course, 20 February–6 March 2009.
4. Five WHO fellows visited EM laboratory on 13 March 2009 and were instructed on principles of electron microscopy and processing of biological samples for EM observation.
5. Eight MBiotech students of the Department of Biotechnology, AIIMS, received 2 weeks training, 18–29 August 2008.

Continuing Medical Education

1. The 24th National Training Programme in Electron Microscopy for Scientific Investigators was held from 3rd to 18th November 2008. Sixteen candidates from different parts of the country participated in this training programme.
2. The 19th National Training Programme in Electron Microscopy for Technical Personnel was held from 2nd to 10th February 2009. Nine technical personnel from different parts of the country participated in this course. In all, 20 lectures were delivered by Professor Shashi Wadhwa, Dr Taposh K. Das and Dr T.C. Nag to the participants of the above courses.
3. A 6-week Summer Training Course for Technical Personnel in Electron Microscopy was held from 15th May to 30th June 2008. Four candidates from Central Marine Fisheries Research Institute, Kerala, National Institute of Nutrition, Andhra Pradesh and IARI, New Delhi, were trained in sample processing, microtomy, CPD, sputter coating, TEM and SEM viewing, photography and routine maintenance.

RESEARCH

Funded projects

Ongoing

1. Mechanism of Müller glial activation in aging human retina. T.C. Nag. Funded by AIIMS for 2 years (2008–10). Funds: Rs 2 lakhs.
2. To study the regional differences in amyloid beta induced microglia activation *in vivo*. Taposh K. Das. Funded by AIIMS for 1 year (2008–09). Funds: Rs 1 lakh.

Completed

1. Role of free radical scavengers and the effect of antioxidants on their levels in patients with ankylosing spondylitis—to investigate the possible role of antioxidants as therapeutic agents in ankylosing spondylitis. Taposh K. Das. Funded by ICMR for 3 years (2005–08). Funds: Rs 14.23 lakh.
2. Ultrastructural localization of proteins modified by fluoride induced lipid peroxidation and to study the preventive role of dietary antioxidants. Taposh K. Das. Funded by AIIMS for 1 year (2007–08). Funds: Rs 1 lakh.

Departmental projects

Ongoing

1. Effect of amyloid-beta on the morphology and protein profile of the rat hippocampus. Taposh K. Das.
2. Role of oxidative stress in fluorosis. Taposh K. Das.
3. Microtubule changes in aging human photoreceptors. T.C. Nag.
4. Müller cell changes in the aging human retina. T.C. Nag.

Collaborative projects

Ongoing

1. Development of a potential biopolymer to serve as an alternative substrate of human amniotic membrane for *ex-vivo* expansion of corneal epithelial stem cells (with R. P. Centre, AIIMS) T. C. Nag.

PUBLICATIONS

Journals

1. Chaudhury S, Nag TC, Wadhwa S. Effects of prenatal auditory stimulation on numerical synaptic density and mean synaptic height in the post hatch day 1 chick hippocampus. *Synapse* 2009;**63**:152–9.
2. Dutta R, Mondal AM, Arora V, Nag TC, Das N. Immunomodulatory effect of DDT (bis[4-chlorophenyl]-1,1,1-trichloroethane) on complement system and macrophages. *Toxicology* 2008;**252**:78–85.

3. Jain D, Sharma MC, Sarkar C, Suri V, Sharma SK, Singh S, *et al.* Tubular aggregate myopathy: A rare form of myopathy. *J Clin Neurosci* 2008;**15**:1222–6.
4. Shamsi MB, Kumar R, Bhatt A, Bamezai RNK, Kumar R, Gupta NP, *et al.* Mitochondrial DNA mutations in etiopathogenesis of male infertility. *Indian J Urol* 2008;**24**:150–4.

Abstracts

5. Nag TC, Wadhwa S. Age related changes in the human optic nerve. *Annals Neurosci* 2008;15 (Supl):69.

PATIENT CARE

Special laboratory facilities

During the year, special laboratory facilities provided for research and patient care were as follows:

Facility	Users (n)		Specimens analysed	
	Internal	External	Internal	External
Transmission electron microscope	117	278	584	1171
Scanning electron microscope	68	197	248	969
Immuno-electron microscope	3	6	8	31
Elemental analysis (EDAX)	2	5	15	12

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Dr Taposh K. Das delivered a keynote talk on ‘Recent Advances in Electron Microcopy’ at the Electron Microscope Workshop at BRD School of Bioscience, Sardar Patel University, Vallabh Vidyanagar, Gujarat, 19 January 2009; delivered a lecture on ‘Current concept in Electron Microscopy: Applications in Biomedical Sciences’ at Jamia Milia Islamia, New Delhi, 12 February 2009.

Dr T.C. Nag attended and delivered an oral presentation at XXVI Annual Conference Indian Academy of Neurosciences, CUSAT, Cochin, 12–25 December 2008. He was invited to review a paper for *Histol Histopathol*.

VISITING SCIENTISTS

Professor M.G. Stewart of Milton Keynes Open University, UK, delivered guest lectures to trainees of the XXIV National Training Programme in Electron Microscopy for Scientific Investigators, 10 November 2008.

11.7 Central Animal Facility

Professor-in-Charge

D.N. Rao

Senior Veterinary Officer

P.K. Yadav

Veterinary Officer

Vijender Singh

Various activities of the facility are categorized as follows.

SMALL ANIMALS FACILITY (RODENTS)

The following small animals (average/month) have been maintained throughout the year:

Rats (Wistar)	1,538
Mice (Swiss)	1,453
Rabbits (New Zealand)	83
Guinea Pigs (Dunkin Hartley)	99

A total of 3,070 small animals (rats, mice, rabbit and guinea pigs) were supplied to various departments of the Institute and considerable numbers of animals were also sold to other institutions in and outside Delhi, i.e. rats—145, mice—70 and guinea pigs—12. Rabbits (25) and guinea pigs (30) purchased from the Indian Veterinary Research Institute, Izatnagar, Bareilly, UP were used for breeding purposes.

LARGE ANIMALS (SHEEP)

The facility housed 6 sheep for research work conducted by the Department of Microbiology.

NON-HUMAN PRIMATES (MONKEYS)

Census report

Total number of monkeys on 1 April 2008	58
Number of deaths	4
Born in the colony	13
Total number of monkeys on 31 March 2009	67

Breeding programme

Breeding of monkeys was done in cage and in open run. A total of 13 female monkeys were mated by cage breeding and 6 female monkeys were put in run formatting. While 4 monkeys have been born in the colony another 9 have been conceived and pregnancies are in progress. Monkeys have three indoor runs that are used for providing exercise to all those that are housed in cages.

Rehabilitation facility

A programme for rehabilitation of monkeys was started in 2000. All monkeys that had been used in experiments were 3–5 years old and older monkeys were put in open run and monkey cages. Most

of these monkeys were permanently rehabilitated (after experiment with old monkeys) to animal welfare organizations.

Clinical procedures conducted

Blood samples collected	95
Physical examination, testing for tuberculosis and weight	94
Haematology	95
Blood chemistry	95
X-ray	105
Rectal palpation	13
Parasitology (stool examination)	Nil
Other procedures	251

(Management of trauma, obstetrics procedures, ASD treatment, etc.)

EXPERIMENTAL SURGERY

Fifty-eight surgical procedures and radiological investigations were performed by various departments of the institute. These include Surgery, Biomedical Engineering Unit, Neurosurgery, Paediatric Surgery, and Endocrinology and Metabolism

INSTITUTIONAL ANIMAL ETHICS COMMITTEE (IAEC)

The IAEC cleared 26 projects on small animals (rodents) and 1 project (continuing) on large animals (monkeys).

SERVICES PROVIDED

A wing has been operational for maintaining animals belonging to the departments of Microbiology, Biomedical Engineering Unit, Biochemistry, Biotechnology, Paediatric Surgery, Reproductive Biology, Anatomy, Psychiatry, Pathology, Laboratory Medicine, Neurosurgery, and Endocrinology and Metabolism. This facility housed the following number of animals—rats 55–146, mice 510–800, rabbits 30–41, guinea pigs 2–6 and monkeys 5.

The facility provided laboratory support to various investigators for vacuum drying of sera and storage of serum samples, haematology, clinical biochemistry, X-ray and Microscope facility.

SIGNIFICANT EVENTS

Dr P.K. Yadav attend the training programme for training on Laparoscopic Neutering at Thane Municipal Corporation, Maharashtra, 14–16 July 2008; attended the CPCSEA National Conference on Ethical use of Animals in Research and Education and Dissemination of Norms & Guidelines of CPCSEA at Dr Marri Chenna Reddy Human Resource Development Institute, Hyderabad, Andhra Pradesh, 29–30 January 2009; Delivered lecture ‘Care, breeding and management of laboratory animals’ at 1- and 2-week training programme on animal welfare of the National Institute of Animal Welfare, Ministry of Environment and Forest.

Dr P.K. Yadav and **Mr Dhananjay Kumar**, Animal House Attendant assisted with animals in the Minimally Invasive Surgery Training Centre, Department of Surgical Disciplines, AIIMS.

11.8 Hostel Section

Superintendent of Hostels

H.H. Dash

Deputy Superintendent of Hostels

S. Datta Gupta	L.R. Murmu	Seema Mishra
Buddhadev Choudhary	Sanjeev Lalwani	Rachel Andrews
	Bhupinder Paul	

Senior Warden

Krishna Dhaka

Warden

Shashi Prakash Pandey	Mohan Sharma
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Deputy Wardens

Remani Thoams	Seema Pruthi	Sat Prakash Kalia
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Assistant Wardens

Suchita Kumari	Sukhpal Mallick
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Junior Wardens

Babu Lal Meena	Rani Varghese	Triptha Sharma
Dinesh Desai	Nirmala	Rajesh Rawat
	Sunil Devi	

Ministerial Staff

Neelam Rani		Vimal Thakral
Assistant (NS)		UDC
Sudhir Thakur	D. Poongothai	Veena Bhatia
LDC	LDC	LDC

There are several halls of residents with a capacity of 1221 single/double rooms and 176 rooms for married personnel, 422 rooms for nurses and nursing students. These are spread over different hostels and residences in the AIIMS Main campus, Masjid Moth, Ayurvigyan Nagar, Faculty Transit Accommodation Hostel and Jai Prakash Narain Apex Trauma Centre Hostel (Raj Nagar).

RESIDENCES

Sl. No.	Hostel	Location	Single room	Double/Three/ Four/Five seater	Guest rooms capacity (with 2 beds)	Total
GENTS HOSTELS						
1.	I (Charak)	Main Campus	62	3	–	68
2.	II (Jivak)	Main Campus	55	2	1	60
3.	III (Sushruta)	Main Campus	70	6	1	83

4.	IV (Madhava)	Main Campus	53	7	–	67
5.	V (Nagarjuna)	Main Campus	53	5	–	63
6.	VI (Vagbhatta)	Main Campus	69	7	–	83
7.	VII (Ashwini)	Main Campus	110	2	1	115
8.	VIII (Bharadwaj)	Main Campus	108	1	1	111
9.	RPC-I (Dhanwantri)	Main Campus	72	–	1	73
10.	MMRDH (Single)	Masjid Moth	154	–	6	160
11.	JPNATC	Raj Nagar	56	–	2	58
12.	NNH	Masjid Moth	160	90+4+0+0	2	422
		Staff nurses			34	
		Total				1,363
LADIES HOSTELS						
1.	IX (Saraswati)	Main Campus	62	16+1+1+0	1	102
2.	X (Parvati)	Main Campus	91	0+0+1+1	1	101
3.	RPC-II (Lakshmi)	Main Campus	20	13	1	47
4.	Ladies Hostel XI	Main Campus	–	15+0+0+0	–	30
		Total				280
MARRIED QUARTERS						
1.	F type (married)	Ansari Nagar (West)		–	9 (two seater)	18
2.	MMRDH	Masjid Moth	42	–	–	42
3.	Ayurvigyan Nagar	Ayurvigyan Nagar80		–	–	80
4.	FTA	Ayurvigyan Nagar29		–	–	29
5.	JPNATC	Raj Nagar	7	–	–	7
		Total				176
		Grand Total				1,819

SIGNIFICANT EVENTS

1. Ground floor mess of hostel no. VIII has been renovated. The mess kitchen has been fully renovated with tiles and new civil/electrical fittings in Resident Doctors hostel and New Nurses Hostel, Masjid Moth. The mess hall, kitchen and store of JPNATC hostel have been renovated. The renovation work of Co-operative mess in hostel no. II is continuing.
2. Main staircase of Resident doctors Hostel, Masjid Moth has been renovated with tiles.
3. Wi-Fi internet facility has been introduced in all the 19 hostels.
4. Five married quarters with attached kitchen and bathrooms have been renovated in the Resident Doctors Hostel, Masjid Moth.

5. Staff Nurses vacant rooms on first and second floor have been renovated.
6. Reverse osmosis plants have been installed in all hostels in the Main Campus as well as in the mess hall in JPNATC hostel.
7. New electrical fittings wiring/rewiring has been done in all Gents hostels (Hostels I to VIII) bathrooms and corridors.
8. Lavatory numbers 1, 3 and 5 in Hostels I and III, lavatory numbers 2, 4 and 12 in Hostel IX, lavatory numbers 1 to 15 in Hostel X and all lavatories in Hostel VII have been renovated.
9. The outer open area behind Hostels VII and VIII has been cemented with tiles. The entrance floor in Hostels I and II has been cemented with tiles.
10. The water tanks on the roof of JPNATC hostel have been covered by I.R.C. fabric for the safety of drinking water.
11. Two temporary shops have been constructed under the staircases till permanent shops are provided.
12. The following items have been purchased and issued to Mess/Café, students/residents and guest rooms in the hostels: 100 steel chairs with arm, 165 mattress, 20 tables, 10 dining tables, 60 plastic moulded chairs, new bed sheets and pillow covers.
13. The hostel office has been augmented with 4 new computers and peripherals and one new computer with accessories has been provided to RPC-I hostel.
14. A new photocopier machine has been purchased for the hostel office.

FUTURE PLANS

1. Construction of new hostel with modern amenities to accommodate 1000 students and resident doctors.
2. Installation of air conditioners in hostel section or to shift the office to another building with proper roof as the existing office has a tin roof.
3. Renovation of store in hostel II, mess in hostel VII, lavatories in hostel IX, 37 married rooms in Resident Doctors Hostel at Masjid Moth, Ground and first floor co-operative messes of hostel IV, bathrooms and mess in RPC-I hostel, attached bathrooms on 3rd to 7th floor and common bathrooms from 1st to 7th floor in New Nurses Hostel, Masjid Moth.
4. Replacement of three lifts in Resident Doctors Hostel at Masjid Moth.
5. Allotment status and updated waiting list of hostels on AIIMS website.
6. All the computers of hostel section to be connected through LAN/Networking.
7. Installation of reverse osmosis system in hostel XI and in all floors of RPC-I hostel.

11.9 Institution Ethics Committee

Chairperson

J. S. Guleria
(up to 13 July 2008)

J. P. Wali
(from 14 July 2008)

Member-Secretary

Nikhil Tandon
(up to 13 July 2008)

Renu Saxena
(from 14 July 2008)

Ethics Committee Members

The members from **1 April 2008 to 13 July 2008** were:

1. Professor J.S. Guleria, New Delhi, Chairman
2. Professor R.C. Deka, Dean, AIIMS, Member
3. Professor Kusum Verma, Ex-Dean, AIIMS, Member
4. Professor M.C. Misra, Head, Department of Surgery, AIIMS, Member
5. Professor K.S. Reddy, Head, Department of Cardiology, AIIMS, Member
6. Professor Y.K. Gupta, Head, Department of Cardiology, AIIMS, Member
7. Professor P.P. Kotwal, Department of Orthopedics, AIIMS, Member
8. Professor K.K. Deepak, Department of Physiology, AIIMS, Member
9. Justice Balakrishna Eradi, New Delhi, Member
10. Dr B.N. Dhawan, Lucknow, Member
11. Dr K. Satyanarayana, Indian Council of Medical Research, New Delhi, Member
12. Professor Nikhil Tandon, Department of Endocrinology and Metabolism, AIIMS, Member-Secretary

The members from **14 July 2008 to 31 March 2009** were:

1. Professor J.P. Wali, New Delhi, Chairman
2. Professor R.C. Deka, Dean, AIIMS, Member
3. Professor Suneeta Mittal, Head, Department of Obstetrics and Gynaecology, Member
4. Professor Y.K. Gupta, Head, Department of Pharmacology, Member
5. Justice S.R. Singh, New Delhi, Member
6. Dr Ganga Prasad Vimal, New Delhi, Member
7. Dr Vijay Kumar, Indian Council of Medical Research, New Delhi, Member

8. Professor R.P. Anand, Member, Jawaharlal Nehru University, New Delhi, Member
9. Dr Peush Sahni, Member, Editor, *The National Medical Journal of India*, AIIMS, Member
10. Professor Renu Saxena, Head, Department of Hematology, Member-Secretary

An **Institution Ethics Sub-Committee** was formed in July 2008 to assist the **Institution Ethics Committee** in evaluation of ethical issues of DM/MCh/PhD/MD/MS/MDS/MHA/MBiotech/MSc thesis/dissertation. Its members were:

1. Professor Ravinder Kumar Batra, Department of Anaesthesiology, AIIMS, Chairman
2. Professor Renu Saxena, Head, Department of Haematology, AIIMS, Convenor
3. Professor Kamal Kishore, Department of Pharmacology, AIIMS, Member
4. Dr Kalpana Luthra, Associate Professor, Department of Biochemistry, AIIMS, Member
5. Professor Arvind Bagga, Department of Paediatrics, AIIMS, Member.
6. Professor Ashok Kumar, Department of Obstetrics and Gynaecology, Maulana Azad Medical College, New Delhi, Member
7. Dr Vineet Ahuja, Associate Professor, Department of Gastroenterology, AIIMS, Member
8. Professor Praveen Aggarwal, Department of Emergency Medicine, AIIMS, Member
9. Dr Raju Sharma, Additional Professor, Department of Radiodiagnosis, AIIMS, Member
10. Dr Pradeep Venkatesh, Associate Professor, Dr R.P. Centre for Ophthalmic Sciences, AIIMS, Member
11. Dr Rajinder Parshad, Additional Professor, Department of Surgery, AIIMS, Member
12. Professor Shashi Kant, Centre for Community Medicine, AIIMS, Member
13. Dr Rakesh Yadav, Associate Professor, Department of Cardiology, AIIMS, Member
14. Dr Rakesh Mahajan, Senior Vascular Surgeon, Apollo Hospital, New Delhi, Member
15. Dr Sanjay Thulkar, Associate Professor, Department of Radiodiagnosis, Dr BRA IRCH, AIIMS, Member
16. Dr Sunil Chumber, Sub-Dean (Academic), AIIMS, Member-Secretary

EDUCATION

Continuing Medical Education

Two Workshops on ‘How to plan a research project’ and ‘Write a protocol’ were held for DM/ MCh/PhD/MD/MS/MDS/MHA/MBiotech/MSc students. Topics included were:

- | | |
|--|----------------|
| 1. Selection of topic and guide | Dr Renu Saxena |
| 2. Introduction and need for this workshop | Dr R.C. Deka |

3. Purpose and process of thesis	Dr Ravinder K. Batra
4. Study design and Types of study	Dr Kalpana Luthra
Presentation, review of the protocol and ethical considerations	Dr Sunil Chumber
5. Submission of the protocol	Dr Ravinder K. Batra

Short-term training

Three months training in 'Ethics in Research' was provided to one student.

The meetings of ethics committee were held as follows:

Institution Ethics Sub-Committee for Thesis and Dissertation	Institution Ethics Committee
	5 May 2008
2 August 2008	4 August 2008
29 August 2008	1 September 2008
3 October 2008	6 October 2008
31 October 2008	3 November 2008
28 November 2008	1 December 2008
2 January 2009	5 January 2009
30 January 2009	2 February 2009
27 February 2009	2 March 2009
Total	9

Number of projects reviewed by the Institution Ethics Committee and Institution Ethics Sub-Committee

New: 617

Old: 174

In addition the ethics committee continued to receive notification of serious adverse reactions, six monthly progress report and completion report, etc.

The Institutional Ethics committee Standard Operating Procedures (SOPs) were formulated and made available on the AIIMS website.

SIGNIFICANT EVENTS

1. AIIMS website for Institution Ethics Committee: A link has been created at the AIIMS website, which gives the following information:
 - a. Constitution of the Committees.
 - b. Notices and Circulars

- c. **Institution Ethics Committee:** Submission Format, Model Participant Information Sheet, Model Participants Informed Consent Form, Participant Informed Consent Form (Hindi), Model Six-monthly report format and Standard Operating Procedure.
 - d. **Institution Ethics Sub-Committee:**
Submission Format, Model Participant Information Sheet, Model Participants Informed Consent Form, Participant Informed Consent Form (Hindi), Model Six-monthly report format and Standard Operating Procedure.
 - e. Downloadable forms in MS-word Format for both Institutional Ethics Committee and Institutional Ethics Sub-Committee for Thesis and Dissertation: Submission Format, Model Participant Information Sheet, Model Participants Informed Consent Form, Model Six-monthly report format and Standard Operating Procedure.
2. Dr J.P. Wali and Dr R. Saxena participated in the GCP Workshop for Ethics Review Board organized by Clinsys Clinical Research, 31 January 2009, New Delhi.

12.1 Finance Division

Senior Financial Advisor

Sandeep Lall

Financial Advisor (Offtg.)

Basanti Dalal

F&CAO

S.P. Mahla

Account Officers

D.P. Gangal

S.K. Yadav

Bhom Singh

S.K. Gupta

N.D. Sharma

M.S. Negi

M.J. Rajdan

M.K. Bhatt

R.K. Sharma

The Institute gets grants under the Heads 'Plan' and 'Non-Plan' from the Government of India, Ministry of Health and Family Welfare. In addition, Plan grants are received for National Drug Dependence Treatment, VVIP care and College of Nursing, etc. Besides, extramural grants are also received from various external funding agencies such as ICMR, DST, CSIR, WHO, UNICEF, DBT, etc. for various research projects. Plan and Non-Plan grant received from the Government of India and other agencies are further allocated to Superspecialities Centres/Departments/Research Projects as per their projections/ requirements.

Finance Division of the Institute monitor/control the expenditure against the above funds/budget by obtaining monthly expenditure from the respective centers/units/departments and also administers day to day financial matters, payment of salaries to faculty and staff, payment of personal claims, pension and GPF in respect of the employees of the Institute. At the time of making the payment, all the checks which have been prescribed by the Government of India are being exercised by the respective DDOs. Apart from this Finance Division do the internal audit.

All the above works are executed by the Financial Advisor, Finance and Chief Accounts Officers (F&CAOs)/Accounts Officer under the overall control of Senior Financial Advisor.

ALL INDIA INSTITUTE OF MEDICAL SCIENCES

BALANCE SHEET AS ON 31.03.2009

AIIMS(Main) (A)

<u>LIABILITIES</u>		<u>2008-09</u>	<u>2007-08</u>	<u>ASSETS</u>		<u>2008-09</u>	<u>2007-08</u>
<u>AIIMS (MAIN)</u>				<u>AIIMS (MAIN)</u>			
1	<u>BALANCE</u>			1	<u>CASH IN HAND</u>		
a)	Amount due but not paid (Scheme Cell)	44500	47200	a)	Imprest (AIIMS CASHIER)	246024	222024
				b)	Amount due but not paid (Scheme Cell)	44500	47200
2	<u>CAPITAL GRANTS FROM GOVT. OF INDIA</u>			2	<u>Cash at Bank</u>		
i)	Upto 2007-2008	6469153198		a)	(i) AIIMS (Main)	609833159	
ii)a)	During 2008-09 (AIIMS)	1225000000			(ii) Unspent Balance of		
b)	Received from IRCH	1600000			Specific Grants remained with AIIMS (Main)	223462880	833296039
iii)	Non-Plan Capitalisation	2430754		b)	Scheme Cell	131137563	192600145
iv)	Less on account of Machinery & Equipment condemned during 2008-09	21126299		3	GPF BANK ACCOUNT	17231023	10859651
v)	Less Books weeded out during 2008-09	3599		4	NPS Bank Account After correction as per Audit para A.2.2	23713651	26980605
vi)	Less on account of furniture condemned during 2008-09	1118475		5	Investment (Appendix-C)	1870911889	1765368899
vii)	Less on account of vehicle condemned during 2008-09	1970729	7673964850	6	Silver Jubilee Fund	200000	200000
3	Grant received from Ministry of Welfare		6469153198	7	Sundry Debtors Scheme Cell		

	for P.M.R. ADIP Scheme Upto 08-09	1218	1218		(Appendix-B)	3440306	3207437
4	Centralised Accident and Trauma Services	29142	29142	8	Misc. Deposits (Appendix-E)	330986	330986
5	Diabetes Control	420000	420000	9	Recoverable Advances		
6	AIDS	2400000	2400000	i)	Car	2535716	2447380
7	<u>NON-INSTITUTE SCHEMES</u>			ii)	Motor Cycle-Scooter	970183	1128108
	Unspent balance of grants received for specific purpose (APPENDIX-A)	358040749	325291129	iii)	Bicycle	129028	124528
8	<u>Donated Vehicles</u>			iv)	Computer Advance	3594493	3293569
a)	Up to 2008-2009	3036507	3036507	v)	House Building Advance	18772400	23386764
9	Donated books			10	Outside Recoveries	3955237	
a)	Upto 2008-09	143673	143673	11	Employee Insurance Scheme		
10	Donations (Appendix-C)	10902514	11059524	12	Furniture & Fixture (AIIMS)		
				a)	Upto 2007-2008	1245438	
				b)	During 2008-2009	51126	
				c)	Furniture condemned During 2008-2009	1118475	178089
11	Miscellaneous Donations (Appendix-D)			13	Machinery & Equipment		
a)	Up to 2007-2008	1925912		A	AIIMS (MAIN)		
				a)	Upto 2007-2008	3244916623	
b)	Receipts during 2008-2009	1118605		b)	During 2008-2009	269120604	
c)	Less Expenditure During	522581	2521936	c)	Goods received during 2008-2009	293619960	
				d)	Machinery Condemned		

	2008-2009					during 2008-09	21126299	3786530888	3244916623
12	Employees Insurance Schemes	1053941	749485	B	AIDS			820600	820600
13	Outside Recoveries		26872	C	NACO				
14	Deposit Work			14	Machinery & Equipment purchased			1932605	1932605
(a)	Starford India	1589098		A	Advance Payments				
	(i) Receipts during 08-09	-		A	Material & Supply (Non-Plan)				
	(ii) Expenditure during 08-09	-	1589098	1589098	a)	Upto 2007-2008	3657930		
					b)	During 2008-2009	10944119		
(b)	Rajgarhia Vishram Sadan	700224			c)	Less Material & Supply received			
	(i) Receipts during 08-09	1500000			During 2008-2009	7727923		6874126	3657930
	(ii) Expenditure during 08-09	723391	1476833	700224	B	For Foreign purchase of Machinery & Equipment (PLAN)			
(c)	Surekha Vishram Sadan				a)	Upto 2007-2008	259440319		
	(i) Receipts during 08-09	34015			b)	During 2008-2009	636644327		
	(ii) Expenditure during 08-09	32030	1985		c)	Less equipment received			
15	Security Deposits/ Earnest Money				During 2008-2009	293619960		602464686	259440319
a)	Upto 2007-08	70200060			C	Advance payment to P&AO for purchase of Building Material			
b)	During 2008-09	35684731			a)	Upto 2007-2008	35351186		
c)	Payment against receipts Upto 2007-08	18215216			b)	During 2008-2009	60608519		
d)	Payment against receipts of year 2008-09	1400000	86269575	70200060	c)	Less Adjustment in 2008-2009	18191193	77768512	35351186
16	Caution Money				D	Temporary Contingent Advance			
a)	Upto 2007-08	1167433			a)	Upto 2007-2008	3001664		
b)	Receipts during 2008-09	54700	1222133	1167433	b)	During 2008-2009	2797271		
17	G.P.F. Account (Appendix F)	1800424488	1740553116		c)	Adjustment during 2008-2009 of previous year	2934914	2864021	3001664
18	NPS (Appendix F)				E	Private Firms for stores			
					a)	Upto 2007-2008	6892423		
					b)	during 2008-2009	2450334		

	After correction as per Audit para A.2.2		100913651	51980605	c)	Less adjustment during 2008-2009	3458781	5883976	6892423
19	Pot Fund				F	Secretary, NDMC for AC plant			
	i) Upto 2007-2008	827944				for Administrative Block		730000	730000
	ii) During 2008-09	306114	1134058	827944		Secretary, NDMC for security for electric connection		670950	670950
20	N.A.C.O.				G	P. & AO (for procurement of stores)			
a)	Machinery & Equipment	-	1932605	1932605	H	Upto 2007-08	3373401		
21	Revolving funds				a)	During 2008-09	2400000		
a)	Upto 2007-08	70998310			b)	Adjustment of advances made during 2008-09	2123234	3650167	3373401
i)	Receipt	60006547			c)	Custom duty for Machinery & Equipment			
ii)	Expenditure	39390883	91613974	70998310	a)	Upto 2007-08	6465820		
22	Post Partum Programme				b)	Add during 2008-09	2079901	8545721	6465820
a)	Upto 2007-08	425105			J	For Books & Journals			
b)	Receipts during 2008-09	400000			a)	Upto 07-08	24030458		
c)	Expenditure during 2008-09	738000	87105	425105	b)	Add during 08-09	23652608		
23	V.V.I.P.		1207055	1207055	c)	Adjustment of advance made during 06-07	3880078		
24	College of Nursing				d)	Adjustment of advance made during 07-08	13704944	30098044	24030458
(i)	Upto 07-08	68630			K	For Cochelar Implant Patient Treatment A/c			
(ii)	Expenditure During 2008-09	68630	0	68630	a)	Upto 07-08	14132000		
25	VVIP Care at Parliament House Annexe Upto 08-09		7600	7600	b)	Add during 08-09	14424000		
26	Cochelar Patient treatment A/c				c)	Adjustment during 08-09	7168000	21388000	14132000
	Upto 2007-08	16283526			L	For Vehicle purchase			
a)	Receipt	32887000				Upto 07-08	521124		
b)	Expenditure	17977000				Adjustment during 08-09	521124	0	521124
c)	Expenditure against advance payment	7168000	24025526	16283526	M	M/s Shreve Cement Ltd. for purchase of cement for construction		1503458	1503458

N	Central Public Works Department, SJHPD for Nallah	118000000	118000000
O	Central Public Works Department, SJHPD for Dr.Hostel	1181250	1181250
P	Central Public Works Department, SJHPD for construction of sub-station	5000000	5000000
Q	M/s Delhi Metro Rail Corporation a) Upto 07-08 60000000 b) during 08-09 842700	60842700	60000000
R	New Delhi Municipal Corporation for augmenting L.T-Line in Eastern & Western Campus	12755500	12755500
S	New Delhi Municipal Corporation for HT Transformer and laying of cable	7463500	7463500
T	Covering of Nallah	153383000	153383000
U	Central Public Works Department for Lift	14000000	14000000
V	Central Public Works Department for Surgical Ward	1711770	1711770
W	Caryair Equipment India Private limited for building construction	192602	192602
X	Indian Oil Corporation for Lubricant Diesel Oil (a) Upto 07-08 3194680 (b) during 08-09 1780106	4974786	3194680
Y	New Delhi Municipal Corporation for Building Construction	18723000	18723000
Z	Upgrading Architectural cell of Engineering Services Department at AIIMS	45132	45132
AA)	Chief Controller of Accounts (M/s Deepak Elect. Co.) for Electric works	190890	
AB)	Chief Controller of Accounts (M/s Sanico Ind.)		

	for Electric works	98486
AC)	Chief Controller of Accounts (M/s Surya Roshni)	
	for Electric works	266165
AD)	M/s Blue Star Ltd.(for A/c works)	1742488
	for maintenance	
AE)	M/s Blue Star Ltd.(for A/c works)	
	for Const.	222853
AF)	M/s Compton Greaves Ltd.(for Electric Works)	180807
AG)	M/s Universal comfort (for A/c work)	1262512
AH)	M/s Carrier Air Conditioning (for A/c work)	2415422
AI)	Central Public Works Department (Civil Works)	1313000
AJ)	M/s Videocon Ind. Ltd.(A/c work)	1083247
AK)	M/s Voltas Ltd. for A/c work	859688
AL)	Chief Controller of Accounts for purchase of stores	3343957
AM)	M/s Inderprastha for CNG Pipeline	10405000
AN)	Directorate General Supply & Disposal M/s Rashmi Industry	2976242
	for A/c work	
AO)	M/s LG Elect. Split A/c for A/c & Electric Work	1192355
AP)	Ex. Engg. SJH(CPWD) for sewage Treatment plant	11344542
AQ)	M/s Hitachi flames for A/c work)	1032950
15	Books & Publications	
i)	Books & periodicals (purchased)	

	a) Upto 2007-2008	180871583		
	b) During 2008-2009	12227020		
	c) Less books weeded out during 2008-09	-3599		
	d) Adjustment of advance made during 2006-07	3880078		
	e) Adjustment of advance made during 2007-08	13704944	210680026	180871583
ii)	Books donated			
	a) Upto 2007-2008	143673		
	b) During 2008-2009	-	143673	143673
16	Building Construction AIIMS (Main)			
	a) Upto 2007-2008	2038002588		
	b) during 2008-2009	153988031		
	c) Add Adjustment during 08-09	18191193	2210181812	2038002588
17	Advance Payment			
i)	Indian Iron & Steel Company		572139	572139
ii)	Tata Iron & Steel Company		654154	654154
iii)	Hindustan Steel Limited		520295	520295
iv)	Indian Iron & Steel Company		594000	594000
18	Land Account			
	Upto 2008-09		112832263	112832263
19	Vehicles			
A	Vehicle (purchased for AIIMS)			
	a) Up to 2007-2008	32366962		
	b) During 2008-09			
	(i) Transport Office			
	(ii) Hospital Store	536416		
	c) Less Vehicles Condemned	1970729		
	d) Adjustment of vehicle advance Made during 2007—08	521124	31453773	32366962
B	Vehicles donated for AIIMS			
	a) Upto 2008-09		3036507	3036507
22	Hospital receipts			

HOSTELS

Security Deposits

i) Upto 2007-08	1367280		
ii) receipts during 2008-09	1391500		
iii) less refunds during 2008-09	1155000	1603780	1367280

EXCESS OF INCOME OVER EXPENDITURE

1	AIIMS (Main)			
	(i) Upto 2007-08	354169676		
	(ii) During 2008-2009 (-)	43698824	310470852	354169676
2	HOSTEL			
	i) Upto 2007-08	1606246		
	ii) During 2008-09	167318	1773564	1606246
	Sub-Total (A)		10517513462	9158687944

DR. RAJENDER PRASAD CENTRE FOR OPHTHALMIC SCIENCES(B)

1	<u>Balances</u>			
	Amount due but not paid		-	
2	<u>Capital Grant from Govt. of India</u>			
a)	Upto 2007-2008	694753330		
b)	During 2008-2009	7000000		
c)	Furniture condemned during 2008-09	185790		
d)	Machinery & Equipment condemned During 2008-2009	17144530	747423010	694753330
3	NPCB as per last year Balance Sheet		25629000	25629000
4	Donated vehicle	896357	896357	
5	Vehicle purchase under DBCS/NPCB	455574	455574	
	Non-RPC Scheme			
(i)	<u>ICMR</u>			

HOSTELS

1	Cash in hand	8991	18221
2	Cash at Bank	202429	732202
3	FDR's	3165924	2223103

EXCESS OF EXPENDITURE OVER INCOME

1	<u>CASH IN HAND</u>			
	Imprest	20000		10000
2	Cash at Bank	32586560		31108947
3	<u>RECOVERABLE ADVANCE</u>			
a)	Scooter			
i)	Upto 2007-08			
ii)	Paid during 2008-09	50000		
iii)	Recovered during 07-08		50000	0
b)	H.B.A.			
i)	Upto 2007-08	1808525		
ii)	Paid during 2008-09			
iii)	Recovered during 07-08	334140	1474385	1808525
c)	Computer Advance			
i)	Upto 2007-08	30000		
ii)	Paid during 2008-09			
iii)	Recovered during 07-08	13500	16500	30000

a)	Upto 2007-2008	1680489							
b)	Received during 2008-2009	675008							
c)	Expenditure during 2008-2009	663698	1691799	1680489					
(ii)	<u>USP</u>								
a)	Upto 2007-2008	2745525							
b)	received during 2008-2009	-							
c)	Expenditure during 2008-2009	141406	2604119	2745525					
(iii)	<u>Savers International</u>								
a)	Upto 2007-2008	72180							
b)	received during 2008-2009	1634999							
c)	Expenditure during 2008-2009	1177964	529215	72180					
(iv)	<u>DST Evaluation Tear Fluid Surgeries</u>								
a)	Upto 2007-2008	237057							
b)	received during 2008-2009	600000							
c)	Expenditure during 2008-2009	419980	417077	237057					
(v)	<u>Indeye</u>								
a)	Upto 2007-2008	3559							
b)	received during 2008-2009	-							
c)	Expenditure during 2008-2009		3559	3559					
(vi)	<u>ORBIS</u>								
a)	Upto 2007-2008	71872							
b)	received during 2008-2009	-							
c)	Expenditure during 2008-2009	-	71872	71872					
					4	<u>Machinery & Equipment (Plan)</u>			
					i)	Upto 2007-08	579336377		
					ii)	During 2008-09	46471340		
					iii)	Machinery & Equipment condemned during 2008-09	17144530	608663187	579336377
					5	<u>Machinery & Equipment (Non-Plan)</u>			
						Upto 2007-08	5872266	5872266	
					6	<u>Building Construction</u>			
					i)	Upto 2007-08	89723905		
					ii)	During 2008-09	3974420	93698325	89723905
					7	NPCB (M & E)		7002852	7002852
					8	ICMR (M&E)		605150	605150
					9	<u>Vehicles</u>			
					i)	RPC Vehicle			
						Upto 2007-08	3178768	3178768	3178768
					ii)	Vehicle purchase during 08-09			
					b)	Donated Vehicles			
						Upto 2008-09	896357		
					ii)	Vehicle purchased under NRCB	455574	1351931	1351931
					10	<u>Furniture & Fixture</u>			
					i)	Upto 2007-08	2488379		
					ii)	During 2008-09	443645		
					iii)	Furniture condemned during 2008-09	185790	2746234	2488379
					11	Sundry debtors		76253	76253
					12	<u>Advance Payment made to Foreign Purchase</u>			

(vii)	<u>Collabrative Study DES</u>				i)	Upto 2007-08	31726112		
a)	Upto 2007-2008	92871			ii)	Advance during			
b)	received during 2008-2009	250000				2008-09	32014342		
c)	Expenditure				iii)	Machinery & Equipment received			
	during 2008-2009	197548	145323	92871		during 2008-09	12903662	50836792	31726112
(ix)	<u>NAB</u>				13	<u>Material & Supply</u>			
a)	Upto 2007-2008	741932			i)	Upto 2007-08	76352		
b)	received during 2008-2009	1419185			ii)	Advance payment made to			
c)	Expenditure					foreign purchase 2008-09	13254618		
	during 2008-2009	2155550	5567	741932	iii)	Material received			
						during 2008-09	11036856	2294114	76352
(x)	<u>LCIF</u>								
a)	Upto 2007-2008	3044							
b)	received during 2008-2009								
c)	Expenditure								
	during 2008-2009		3044	3044					
(xii)	<u>NPCB-SSU</u>								
a)	Upto 2007-2008	87507							0
b)	received during 2008-2009	100000							
c)	Expenditure								
	during 2008-2009	152200	35307	87507					
(xiv)	<u>DBT-MUTIONAL(M.A.)</u>								
a)	Upto 2007-2008	1902							
b)	received during 2008-2009	797000							0
c)	Expenditure								
	during 2008-2009	572547	226355	1902					
(xv)	<u>MBDL</u>								
a)	Upto 2007-2008	64479							
b)	received during 2008-2009	75169							
c)	Expenditure								0
	during 2008-2009	85227	54421	64479					
xvi)	<u>DOS-Training</u>								
a)	Upto 2007-2008	78827							
b)	received during 2008-2009	450000							

c)	Expenditure during 2008-2009	485527	43300	78827	0
xvii)	<u>CSIR</u>				
a)	Upto 2007-2008	-			
b)	received during 2008-2009	1548959			
c)	Expenditure during 2008-2009	1548959	0	0	0
xviii)	<u>NIAF</u>				
a)	Upto 2007-2008	1169633			
b)	received during 2008-2009	50000			
c)	Expenditure during 2008-2009	27323	1192310	1169633	
xix)	<u>CRP</u>				0
a)	Upto 2007-2008	22194			
b)	received during 2008-2009	187500			
c)	Expenditure during 2008-2009	201500	8194	22194	
xx)	<u>DBCS</u>				0
a)	Upto 2007-2008				
b)	received during 2008-2009	180500			
c)	Expenditure during 2008-2009	180485	15	-	
xxi)	<u>ORBIS-PECP</u>				0
a)	Upto 2007-2008	214086			
b)	received during 2008-2009	1228947			
c)	Expenditure during 2008-2009	1441453	1580	214086	
xxii)	<u>Allargan International</u>				
a)	Upto 2007-2008	1843			
b)	received during 2008-2009	-			
c)	Expenditure during 2008-2009	1843	0	1843	
xxiii)	<u>Neema-International Pilot study</u>				
a)	Upto 2007-2008	34343			
b)	received during 2008-2009	-			
c)	Expenditure	20000	14343	34343	

	during 2008-2009			
xxiv)	<u>Workshop</u>			
a)	Upto 2007-2008	36144		
b)	received during 2008-2009	44400		
c)	Expenditure during 2008-2009	35500	45044	36144
xxv)	<u>DST/DBT (Stem)</u>			
a)	Upto 2007-2008	46817		
b)	received during 2008-2009			
c)	Expenditure during 2008-2009	46817	0	46817
xxvi)	<u>WHO Short term Training Programme</u>			
a)	Upto 2007-2008	1191		
b)	received during 2008-2009	-		
c)	Expenditure during 2008-2009		1191	1191
xxvii)	<u>Evaluation Study on glaucoma</u>			
a)	Upto 2007-2008	45800		
b)	received during 2008-2009	-		
c)	Expenditure during 2008-2009	40000	5800	45800
xxviii)	<u>ORP-VISION 2020</u>			
a)	Upto 2007-2008	10467		
b)	received during 2008-2009	-		
c)	Expenditure during 2008-2009	10467	0	10467
xxix)	<u>Multifocal IOL</u>			
a)	Upto 2007-2008	159177		
b)	received during 2008-2009	150000		
c)	Expenditure during 2008-2009	211941	97236	159177
xxx)	<u>DST(CYCLO)</u>			
a)	Upto 2007-2008	22186		
b)	received during 2008-2009	-		
c)	Expenditure during 2008-2009		22186	22186
xxxii)	<u>Reliance/Clinical Research</u>			
a)	Upto 2007-2008	117410		

b)	received during 2008-2009	102473		
c)	Expenditure during 2008-2009	144364	75519	117410
xxxiv)	<u>Clinical Evaluation B&C(AM0)</u>			
a)	Upto 2007-2008	25513		
b)	received during 2008-2009	60000		
c)	Expenditure during 2008-2009	68300	17213	25513
xxxv)	<u>Cataract Surgery (NPCB)</u>			
a)	Upto 2007-2008	280000		
b)	received during 2008-2009	176000		
c)	Expenditure during 2008-2009	253636	202364	280000
xxxvi)	<u>CGD In Primary Angle Closure Glucoma</u>			
a)	received during 2007-2008	305444		
b)	During 2008-2009	-		
c)	Expenditure during 2008-2009	263999	41445	305444
xxxvii)	<u>FAME Study</u>			
a)	Upto 2007-2008	1468973		
b)	received during 2008-2009	1018976		
c)	Expenditure during 2008-2009	960992	1526957	1468973
xxxviii)	<u>CLINICAL STUDY ON KRECTRO CONJECTIVITIES(Allergan India Ltd.)</u>			
a)	Upto 2007-2008			
b)	received during 2008-2009	45000		
c)	Expenditure during 2008-2009	45000	0	0
xxxix)	<u>PDT-Visudune</u>			
a)	Upto 2007-2008	1797		
b)	received during 2008-2009	96489		
c)	Expenditure during 2008-2009	92894	5392	1797
xli)	<u>AKROSOFT (BAUCH & LOMB)</u>			

a)	Upto 2007-2008	798		
b)	received during 2008-2009	-		
c)	Expenditure during 2008-2009		798	798
xliv)	<u>DME</u>			
a)	Upto 2007-2008	116160		
b)	received during 2008-2009	1404538		
c)	Expenditure during 2008-2009	1153419	367279	116160
xlvi)	<u>WHO DSTG (SEIND/NCD 001 BB06)</u>			
a)	Upto 2007-2008	80000		
b)	received during 2008-2009	-		
c)	Expenditure during 2008-2009	67950	12050	80000
xlvi)	<u>INMAS Humas Pharmacology</u>			
a)	Upto 2007-2008	485000		
b)	received during 2008-2009			
c)	Expenditure during 2008-2009	219451	265549	485000
xlvi)	<u>INMAS Biomedical Products</u>			
a)	Upto 2007-2008	485000		
b)	received during 2008-2009			
c)	Expenditure during 2008-2009	30000	455000	485000
xlvi)	<u>Lux-PRA International</u>			
a)	Upto 2007-2008	32537		
b)	received during 2008-2009	246154		
c)	Expenditure during 2008-2009	274877	3814	32537
xlvi)	<u>Indgen (LSTM)</u>			
a)	Upto 2007-2008	3199437		
b)	received during 2008-2009	1247417		
c)	Expenditure during 2008-2009	3338749	1108105	3199437

xlviii)	<u>WHOGS.</u>			
a)	Upto 2007-2008	15956		
b)	received during 2008-2009			
c)	Expenditure during 2008-2009		15956	15956
xlix)	<u>Pink Eye(Baush & Lomb)</u>			
a)	Upto 2007-2008	178840		
b)	received during 2008-2009			
c)	Expenditure during 2008-2009	59664	119176	178840
l)	<u>Evaluation Polyherbal (ozone)</u>			
a)	Upto 2007-2008	107028		
b)	received during 2008-2009			
c)	Expenditure during 2008-2009	106413	615	107028
li)	<u>Evaluation on Polyherbal in AOD</u>			
a)	Upto 2007-2008	721		
b)	received during 2008-2009	375000		
c)	Expenditure during 2008-2009	309692	66029	721
l)	<u>Acute bacterial Conjenctivities</u>			
a)	Upto 2007-2008			
b)	received during 2008-2009	230717		
c)	Expenditure during 2008-2009	26922	203795	
l)	<u>DNB Examination</u>			
a)	Upto 2007-2008			
b)	received during 2008-2009	15000		
c)	Expenditure during 2008-2009	10000	5000	
l)	<u>ROP Workshop</u>			
a)	Upto 2007-2008			
b)	received during 2008-2009	57000		

c)	Expenditure during 2008-2009	51710	5290
l)	<u>PVD Study/VRT</u>		
a)	Upto 2007-2008		
b)	received during 2008-2009	820226	
c)	Expenditure during 2008-2009	312604	507622
l)	<u>Posudex Allergan Internation</u>		
a)	Upto 2007-2008		
b)	received during 2008-2009	217382	
c)	Expenditure during 2008-2009	41097	176285
l)	<u>ABN AMRO Natra Raksha</u>		
a)	Upto 2007-2008		
b)	received during 2008-2009	104000	
c)	Expenditure during 2008-2009	11920	92080
l)	<u>Lux-201 Omnicare</u>		
a)	Upto 2007-2008		
b)	received during 2008-2009	526835	
c)	Expenditure during 2008-2009	230205	296630
l)	<u>AMD View II Study</u>		
a)	Upto 2007-2008		
b)	received during 2008-2009	3370414	
c)	Expenditure during 2008-2009	1057186	2313228
l)	<u>FTG</u>		
a)	Upto 2007-2008		
b)	received during 2008-2009	15000	
c)	Expenditure during 2008-2009	15000	0
l)	<u>Pediatric eye care</u>		
a)	Upto 2007-2008		
b)	received during 2008-2009	100000	
c)	Expenditure		

CARDIO-THORACIC & NEUROSCIENCES CENTRE (C)

1	Amount due but not paid (Cashier)								
i)	Office contingency		4400						
2	<u>Capital Grant from Govt. of India</u>				1	<u>Cash in hand</u>			
i)	Upto 2007-2008	2825275466			a)	Imprest (CNC Cashier) 2008-2009	40000	40000	
ii)	During 2008-2009	260000000			b)	Amount due but not paid	4400		
iii)	Less Machinery Condemed	1076000							
ii)	Less Furniture Condemed	1003957	3083195509	2825275466	2	Cash at Bank	171281243	158648226	
3	Amount transfer from IRCH		1478400	1478400	3	<u>Recoverable Advance</u>			
4	Cost of the vehicle donated by Sai Bhakta Samaj		613384	613384	a)	Computer	318450	295350	
5	CT Patient A/c Machinery & Equipment Transfer Sai Bhakta Samaj		49025000	49025000	b)	Car	705056	472548	
6	<u>Neurology Patient A/c</u>				c)	Cycle	450		
i)	Upto 2007-2008	16973620			d)	Scooter	985046	1052248	
ii)	Receipt during 2008-2009	8966566			e)	House Building Advance	7102076	8193238	
iii)	Less refund/Exp. 2008-2009	8796602	17143584	16973620	4	<u>Mach. & Equip.</u>			
7	<u>Outside recoveries</u>				i)	Upto 2007-2008	2029635507		
i)	Upto 2007-2008	302845			ii)	During 2008-2009	67648684		
ii)	2008-2009 (+)	142			iii)	Machinery & Equipment received against payment	231815178		
iii)	Comp. Adv. Recovered	200	303187	302845	iv)	Less Machinery condemned	1076000	2328023369	2029635507
8	<u>Donations</u>				5	Machinery & Equipment Transfer From CT Patient A/C	49025000	49025000	
i)	Upto 2007-2008	2021384			6	<u>Advance payment for Foreign purchase Machinery & Equipment</u>			
					a)	Upto 2007-2008	291699893		
					ii)	During 2008-2009	185941729		
					iii)	Less Equip. received	231815178	245826444	291699893

ii)	Receipt during 2008-2009	615100			7	<u>Building construction</u>			
ii)	Less expenditure 2008-2009	17314	2619170	2021384	i)	Upto 2007-2008	202549674		
					ii)	During 2008-2009	20644166	223193840	202549674
9	<u>Security Deposits</u>				8	Advance against works		174596762	174596762
i)	Upto 2007-2008	20826964			9	<u>Amount due from outside patients</u>			
ii)	During 2008-2009	7259000				Upto 2007-2008	1532441		
iii)	Less refund	3496000	24589964	20826964		During 2008-2009	284920		
10	<u>Thallium</u>					Less amount Recd.	89000	1728361	1532441
i)	Upto 2007-2008	1303920			10	<u>Vehicles</u>			
ii)	During 2008-2009	3188750			i)	Ambulance ORBO		2025954	2025954
iii)	Less Expenditure 2008-2009	3888642	604028	1303920	11	Furniture & Fixture			
11	<u>Heart Transplant Donation</u>				i)	Upto 2007-08	636431		
i)	Upto 2007-2008	318543			ii)	During 2008-09	1037303		
ii)	During 2008-2009	-			iii)	Furniture condemned	1003957	669777	636431
iii)	Less Expenditure	43624	274919	318543					
12	<u>Lab Test</u>								
i)	Upto 2007-2008	3725240							
ii)	During 2008-2009	5058760							
iii)	Less Expenditure 2008-2009	5677505	3106495	3725240					
13	<u>Cardiac Test</u>								
i)	Upto 2007-2008	5244328							
ii)	During 2008-2009	3530335							
iii)	Less Expenditure 2008-2009	2167191	6607472	5244328					
	<u>POOR PATIENT A/C</u>					<u>POOR PATIENT A/C</u>			
1	N.S. Centre				1	N.S. CENTRE			
a)	Cash/Bank	81429			a)	Cash/Bank		95562	81429

b)	Donations	25243		
c)	Payments	11110		
d)	Closing Balance		95562	81429

C.T.PATIENTA/C

C.T.PATIENTA/C

1	Fixed Deposits	25000000	23000000
2	Cash at Bank	16978464	12970986

ANGIOGRAPHYPATIENTA/C

ANGIOGRAPHYPATIENTA/C

1	Cash recoverable from Sh. Dal Chand Verma, Cashier	3245441	3245441
2	Fixed Deposits	5000000	7500000
3	Cash in hand	32769115	2803934

GAMMA KNIFE PATIENTA/C

GAMMA KNIFE PATIENTA/C

1	Fixed Deposit	11750000	119138203
2	Cash at Bank	21748291	3304760

NEURO SURGERY PATIENTA/C

NEURO SURGERY PATIENTA/C

1	Fixed Deposits	3200000	3200000
2	Cash at bank	3831850	10902678

EXCESS OF INCOME OVER EXPENDITURE

EXCESS OF EXPENDITURE OVER INCOME

1	<u>C.N.C.</u>		
a)	During 2008-09 correction as per Audit Par No.B.1.2 SAR for the year 2007-08	22666538	
b)	Excess of expenditure Over income (2007-08)	6705822	15960716
2	C.T. PATIENTA/C		
i)	Upto 2007-08	242970986	

1	C.N.C.		-
(i)	Upto 2007-08 (-)		
(ii)	During 2008-09		6705822

ii)	Add excess of income over expenditure 08-09	25032527				
iii)	Less fresh cheques issued against cancelled cheques	1025049	266978464	242970986		
3	ANGIOGRAPHY PATIENT A/C					
i)	Upto 2007-08	81049375				
ii)	(-) Excess of income over expenditure 2008-09	5906614				
iii)	Less fresh cheques issued against cancelled cheques	941433	86014556	81049375		
4	GAMMA KNIFE PATIENT A/C					
i)	Upto 2007-2008	122442963		109323583		
ii)	during 2008-09	16805328		13049480		
iii)	Cancelled Cheque		139248291	69900		
5	NEURO SURGERY PATIENT A/C					
i)	Upto 2007-08	42902678				
ii)	(-) Excess of expenditure over income 2008-09	6783197				
iii)	Fresh Cheques	287631	35831850	42902678		
	Sub-Total (C)		3733694951	3416556525		3733694951 3416556525

Dr. B.R.A. INSTITUTE ROTARY CANCER HOSPITAL (D)

1	Capital Grant Upto 2007-08	1239828660				
(a)	Add during 2008-09	90000000				
(b)	Less Grant refunded to AIIMS(M)	5000000				
(c)	Less Funds Transfer to Urology	1600000				
(d)	Less condemnation of Machinery & Equipment	7997907				
1	Cash at Bank				27792396	34272417
2	<u>Furniture & Fixtures</u>					
a)	Upto 2007-2008			10892588		
b)	During 2008-09			94978		
c)	Less condemnation of Furniture as per CSD/ Store Section letter No. X-1-4/2004-05/Budget/Vol.V			5270	10982296	10892588

(d)	As per CSD/Store Section letter No.X-1-4/2004-05/ Budget/Vol.V	5270	1315225483	1239828660	3	Computer Advance			
					(i)	Upto 07-08	259340		
					(ii)	During 08-09			
						Less recoveries	31320	228020	259340
2	R.T. Revolving Fund								
(i)	Upto 2007-2008	3864200							
(ii)	Add during 2008-2009	3415409			4	Car/HBA/Scooter Advance	171750		
(iii)	Less payment during 2008-09	2340625	4938984	3864200	(ii)	Less recoveries during 08-09	29116	145651	171750
3	Medical Oncology Fund				5	Mach. & Equip.			
(i)	Upto 2007-2008	756890			a)	Upto 2007-2008	587311836		
(ii)	Add during 2008-2009	601855			b)	Add adjustment of advances (LCs) during 2008-09	19230014		
(iii)	Less payment during 2008-09		1358745	756890	c)	Less M&E refund by bank	18574917		
					d)	Add during 2008-09	43834821		
					e)	Less condemnation of M&E As per CSD/Store Section Letter No.X-1-4/2004-05/ Budget/Vol.V	7997907		
					f)	Add Custom Duty/PDA adjusted	7789973		
					g)	Custom Duty/PDA unadjusted as per DGACR Audit Party Para No.A23 of SAR for 2007-08	2640389	634234209	587311836
					6	Advance Payments to foreign purchase for Machinery & Equipment			
					a)	Upto 07-08	315492935		
					b)	Add during 2008-2009(+)	46048051		
					c)	Less adjustment of advances (LCs) during 2008-09	19230014		

d)	Less Custom Duty/PDA unadjusted	5340633		
e)	Less Custom Duty unadjust as per DGACR Audit Party Half Margin Memo No.-10 dated 18.08.2008	2640389	334329950	315492935
8	Security Deposit with New Delhi Municipal Corporation as per Audit Objection during 2004-05 vide objection under SAR advised vide Para No.2.6		2626000	2626000
9(i)	Building Construction Upto 2007-08	296256915		
(ii)	Less received from HSCC during 2008-09	1800000	294456915	296256915
10	Vehicle			
a)	Upto 2007-2008	1909596		
b)	During 2008-09	-	1909596	1909596
11	Capital Works			
a)	Upto 2007-08	12292016		
b)	During 2008-09	8570446	20862462	12292016
12	Advance payment to Custom Duty & PDA Account			
(i)	Upto 2007-08	5340633		
(ii)	Add during 2008-09	15800000		
(iii)	Less Custom Duty adjust.	7789973	13350660	

POOR PATIENT A/C

Dr.B.R.A.I.R.C.H.

a)	Cash/Bank	1821020
b)	Receipts	
	i) Grants	290300
	ii) Interest on FDR's	562742

POOR PATIENT A/C

1 Dr.B.R.A.I.R.C.H

Cash/Bank	2036817	1821020
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(iii) Wrongly debited by
Bank 2000
(iv) Payment 635245

c) Closing Balance
Cash/Bank 2036817 1821020

PATIENT TREATMENT A/C

Dr.B.R.A.I.R.C.H.

a) Opening Balance 11991652
b) Short Term Investment 10000000
c) FDR 6000000
d) Receipts
i) Grants 45172567
ii) Cheque Cancelled 569924
iii) Dly. Interest 15838
iv) Interest 1254900
v) Payments 39945429
vi) Miscellaneous Receipts 92145
c) Closing Balance
i) Cash/Bank 28967307 11991652
ii) Short Term Investment 10000000
iii) FDR's 6000000 6000000

EXCESS OF INCOME OVER EXPENDITURE

(I) Upto 2007-08 17038660
(ii) During 2008-09 2356283 19394943 17038660
Sub-Total (D) 1377922279 1291301082

NATIONAL DRUG DEPENDENCE TREATMENT CENTRE & UNDCP PROJECT (E)

1 Capital fund of DAC
a) Upto 2007-2008 145923725
b) Machinery & Equipment 3324648
c) Motor Vehicle 1179461
d) Furniture 396925
e) Books & Publication 1869838 152694597 145923725

PATIENT TREATMENT A/C

Dr.B.R.A.I.R.C.H.

a) Cash/Bank 28967307 11991652
b) Short Term Investment 10000000
c) FDR's 6000000 6000000

EXCESS OF EXPENDITURE OVER INCOME

1 Cash at Bank 17215421 9897962
2 Machinery & Equipment
a) Upto 2007-2008 26011833
b) During 2008-2009 3324648 29336481 26011833
3 Books & Publication

2	Institute Recovery				a)	Upto 2007-08	11014431		
	i) Upto 2007-08	113215			b)	During 2008-09	1869838	12884269	11014431
	ii) 2008-09	-	113215	113215					
3	Security Deposit				4	<u>Furniture & Fixture</u>			
a)	Upto 2007-08	135000			a)	Upto 2007-08	2832966		
b)	During 2008-09	130000			b)	During 2008-09	396925	3229891	2832966
c)	Refund 2008-09	-	265000	135000	5	<u>Building Construction</u>			
					a)	Upto 2007-08	101953715		
					b)	During 2008-09		101953715	101953715
					6	<u>Vehicle</u>			
					a)	Upto 2007-08	4474406		
					b)	During 2008-09	1179461	5653867	4474406
					c)	Vehicle condemned			
					7	Outside recovery			
					a)	Upto 2007-08	40708		
					b)	During 2008-09	-	40708	40708
					8	Car Advance			
					a)	Upto 2007-08	51840		
					b)	Adjustment during 2008-09	34560	17280	51840
					9	Material & Supply			
					a)	Upto 2007-08	460978		
					b)	Refund	460978		
					c)	Add during 2008-09		0	460978

NATIONAL DRUG DEPENDENCE TREATMENT CENTRE (N.D.D.T.C.)

(UNDCP PROJECT)

Opening balance 407834 316153

NATIONAL DRUG DEPENDENCE TREATMENT CENTRE (N.D.D.T.C.)

(UNDCP PROJECT)

Cash in hand 239532 407834

(iii)	Adjusted during 08-09	-136810		
(iv)	Add as per correction			
	Audition 2.4 S.A.R.	576200	1392730	953340
5(i)	Construction of Building transferred from AIIMS(M)		449825743	449825743
(ii)	Capital Works upto 07-08 during 2008-09		10572435	10572435
			40301899	
6	Land Account transferred from AIIMS(M) Account		9900000	9900000
7 A	Machinery & Equipments			
	(i)Upto 2007-08	500888986		
	(ii) Add during 08-09	34441322		
	(iii) Machinery & Equipment received during 2008-09	66683176		
	(iv) Add correction Audit para A 2.55 A.R.	55614499	657627983	500888986
B	Custom duty adjusted			
	Upto 07-08	24415702		
	(ii) Adjusted during 08-09	4999508		
	(iii) Add correction Audit para A/2.4 S.A.R.	7711509	37126719	24415702
C	(i)PDA adjusted upto 07-08	2118080		
	(ii)Adj. during 08-09	136810		
	(iii) Less Correction Audit para A.2.4 SAR	-576200	1678690	2118080
8	Furniture & Fixtures			
(i)	Upto 07-08	4582060		
(ii)	Add during 08-09	744864	5326924	4582060

EXCESS OF INCOME OVER EXPENDITURE

i)	Upto 2007-08	4954370		
ii)	Add during 2008-09	11529018		
iii)	Add correction as per Audit para A/2.5 SAR	55614499	72097887	4954370
	Sub-Total (F)		1371401295	1212920005

EXCESS OF EXPENDITURE OVER INCOME

			1371401295	1212920005
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CENTRE FOR DENTAL EDUCATION AND RESEARCH (G)

1	Capital Grant				1	Cash in Hand		5000	
(i)	Upto 07-08 transferred from AIIMS Main A/c	366245904			2	Cash at bank		4800935	1864040
(ii)	During 2008-09				3	Machinery & Equipment(Plan)			
(a)	EFC	19300000			(i)	Upto 2007-08	48456485		
(b)	Non-EFC	80700000			(ii)	During 2008-09	25680195		
(iii)	Less transferred to Income & Expenditure A/c	44083442	422162462	366245904	(iii)	Add Machinery & Equipment received against advances during 2007-08	15912829	90049509	48456485
2	Security Deposits				4	Advance Payment made to foreign purchases			
(i)	Upto 2007-08	312200			(i)	Upto 2007-08	15912829		
(ii)	During 08-09	1839742			(ii)	During 2008-09	26188764		
(iii)	Less refunded during 2008-09		2151942	312200	(iii)	Less advances adjusted during 2008-09	15912829	26188764	15912829
					5	Building			
					(i)	Upto 07-08 transferred from AIIMS Main A/c	253993864		
					(ii)	During 08-09			
					(iii)	Capital Works		253993864	253993864
					6	Advance paid to HSCC			
					(i)	Upto 07-08 transferred from AIIMS Main A/c	45668116		
					(ii)	During 08-09			
					(iii)	Less adjusted during 08-09		45668116	45668116
					7	Advance to New Delhi Municipal Corporation			
					(i)	upto 07-08	2404500	2404500	
					(ii)	During 08-09	4040000	6444500	
					8	Advance to Directorate General of Supply & Disposal	469471	469471	
					9	Advance to Voltas	184589	184589	

EXCESS OF INCOME OVER EXPENDITURE

1	CENTRE FOR DENTAL EDUCATION & RESEARCH			
i)	Upto 07-08	1741730		
ii)	Add during 08-09	1748614	3490344	1741730
	Sub-Total (G)	427804748	368299834	
	Grand Total (A) to (G)	18409666326	16359353138	

EXCESS OF EXPENDITURE OVER INCOME

	Sub-Total (G)	427804748	368299834	
	Grand Total (A) to (G)	18409666326	16359353138	

Note:

- 1 The accounts have been prepared on actual Receipts and Expenditure basis.
- 2 No depreciation on Machinery & Equipment, vehicles etc. has been provided as the Institute is fully funded by the Govt. of India.
- 3 A statement showing the expenditure made by various Project Investigators during 2008-09 is attached at Appendix-A-I. It may be mentioned that on completion of Research Projects, the equipments are either returned to the funding agencies or used in the Departments.
- 4 Institute is exempted from Income-Tax under Section 8G(5)(vi) of the Income Tax Act, 1961.
- 5 The amount shown under four patient Accounts viz. C.T. Patient A/c, Angio Patient A/c, N.S. Patient Account and Gammaknife Patient A/c on the asset side of the Balance Sheet represents the amount as "Excess of Income over Expenditure" and the same is invested in term deposits. The amount is accumulated during the previous years on introduction of package charges in the year 1995. Package was introduced for convenience of patients and to ensure that quality products are used at reasonable rates. The package rates included service charges and ICU charges which were approved by Standing Finance Committee and ratified by Governing Body. Later on it was decided not to levy such charges from the patients and was withdrawn in the year 2000. During that period(1995-2000) accumulated balance amount and also the earned interest were invested in term deposits. A part of the interest only has however been utilised for treatment of poor patients as is reflected in the Receipt & Payment Account. The accumulated balance has not been utilised during the years as such in the absence of a guideline regarding its utilisation. Institute is in the process of framing some guidelines for using this accumulated amount.

(Smt. Basanti Dalal)
Financial Advisor(Offtg.)

(Sandeep Lall)
Senior Financial Advisor

(R.C. Deka)
DIRECTOR

ALL INDIA INSTITUTE OF MEDICAL SCIENCES
INCOME AND EXPENDITURE ACCOUNT
FOR THE YEAR 2008-2009

AIIMS(Main) (A)

<u>EXPENDITURE</u>	<u>2008-09</u>	<u>2007-08</u>	<u>INCOME</u>	<u>2008-09</u>	<u>2007-08</u>
<u>NON-PLAN</u>			<u>GRANT-IN-AID</u>		
			Non-Plan	3014269246	2253869772
			<u>REVENUE RECEIPTS</u>		
1 Pay & Allowances	1929134498	1218187969	1 Hospital Receipts	127265504	125569837
2 Stipend	9687144	5666711	2 Tution Fee and Examination Fee	4633276	4736602
3 Travelling Allowances	15614269	12193800	3 Employees Health Scheme	10425849	10241433
4 Pensionary Benefits	285896228	210233184	4 Licence fee	17305909	20354267
5 Material & Supply	710639750	635857868	5 Interest	66689587	67297799
6 Office Contingency	317957405	291958773	6 Miscellaneous Receipts	112045786	60112090
7 Repair & Maintenance of Machinery & Equipment	35067164	47969028			
8 Maintenance of Buildings	66290027	50961015			
9 New Pension Scheme	35801016				
i) Less Receipts	10494000	13920330			
10 L.S.P.C.	560480				
i) Less Receipts	560480	666342			
11 Deposit Linked Insurance Scheme	180000				
<u>HOSTELS</u>			<u>HOSTELS</u>		
1 Miscellenous Expenditure	60726	42190	1 Miscellenous Receipts	63270	46915
			2 Interest	164774	68030
<u>EXCESS OF INCOME OVER EXPENDITURE</u>			<u>EXCESS OF EXPENDITURE OVER INCOME</u>		
1 AIIMS (Main)		54566780	1 AIIMS(Main)	43698824	
2 Hostel	167318	72755			
Sub-Total (A)	3396562025	2542296745		3396562025	2542296745

AIIMS 2008-2009 / 852

DR. RAJENDER PRASAD CENTRE FOR OPHTHALMIC SCIENCES(B)

1	Pay & Allowances	249173341	161873575	1	Non-Plan	330000000	190000000
2	Daily Wages	9498709	6712700	2	Hospital Receipts	114124152	94364844
3	Travelling Allowances	1626930	1489447	3	Interest on Recoverable Advances	213155	102345
4	Material & Supply	165403278	100147351	4	Miscellaneous Receipts	2915223	1253684
5	Office Expenses	10103043	8851379	5	Interest on CLTD	1962009	3040085
6	Maintenance of Buildings	4121891	5283600				
7	Repair & Maintenance	6340081	1345201				
8	Cash withdrawal Tax		-				
9	Cheque Book Charges		-				
<u>EXCESS OF INCOME OVER EXPENDITURE</u>				<u>EXCESS OF EXPENDITURE OVER INCOME</u>			
	Dr. R.P. Centre	2947266	3057705				
Sub-Total (B)		449214539	288760958			449214539	288760958

CARDIO-THORACIC & NEUROSCIENCES CENTRE (C)

Non-Plan

1	Pay & Allowances & Wages	573806219	370262517
2	Travelling Expenditure	1308353	1277253
3	Material & Supply	166557398	130367956
4	Office Contingency	3309267	2867004
5	Repair & maintenance of Machinery & Equipment	18013112	12501251
6	Maintenance of Buildings	14552478	10039988

1 Grant-in-Aid

(a)	Plan				
(b)	Non-Plan	740000000	480000000		
2	Revenue Receipts				
a)	Hospital Receipts	29122403			
b)	Amount received from outside patients 2008-2009	89000			
c)	Amount due 2008-09	284920	29318323	26144396	
3	Misc. Receipts	20225320	4577376		
4	Rent Charges/ Licence Fee	771972	730147		
5	Refund & Recoveries	992524	1548797		
6	Interest earned	8520766	6286506		
7	Levy Charges	384460	394400		

C.T. PATIENT A/C

1	Purchase for Stores	216701908	192396154
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C.T. PATIENT A/C

1	Patient's Receipts CT A/c from Angio Pt. A/c	197308470	196141082
		10000000	

2 Bank Charges 3463 490

ANGIOGRAPHY PATIENT A/C

1 Purchase for Stores 144078074 172040687
 CT A/c from Angio Pt. A/c 10000000
 2 Bank Charges 840 330

GAMMA KNIFE PATIENT A/C

1 Purchase of Stores 7002642 3066960
 2 MRI Charges 821000 1526000
 3 Bank Charges 1450

NEURO SURGERY PATIENT A/C

1 Purchase of Stores 43118719 39554196
 2 Contingency
 3 Bank Charges 630 310

EXCESS OF INCOME OVER EXPENDITURE

1 C.N. CENTRE 22666538
 2 CT PATIENT A/C 25032527 10402155
 3 ANGIO PATIENT A/C 5906614
 4 GAMMA KNIFE PATIENT A/C 16805328 13049480

Sub-Total (C) 1269686560 959352731

2 Interest during 29209626 4776021
 2008-2009
 3 Cancelled Cheque 5219802 1881696

ANGIOGRAPHY PATIENT A/C

1 Patient's Receipts 150699416 157836863
 2 Interest during the 6228288 3620313
 year 2008-2009
 3 Cancelled Cheques 3057824 1120871

GAMMA KNIFE PATIENT A/C

1 Patient Receipts 15976500 14326750
 2 Interest 8653920 3315690

NEURO SURGERY PATIENT A/C

1 Patient Receipts 34956844 32647738
 2 Fixed/CLTD Interest 763377 2753049
 3 Cancelled Cheques 615931 1059312

EXCESS OF EXPENDITURE OVER INCOME

1 CNC 7634347
 2 ANGIO PATIENT A/C 9462970
 3 NEURO SURGERY PT. A/C 6783197 3094407

1269686560 959352731

Dr. B.R.A. INSTITUTE ROTARY CANCER HOSPITAL (D)

1 Pay & Allowances 170822003 104360420
 2 Expenditure of TA/DA 1261243 1166238
 3 Material & Supply 87437843 61449398
 4 Maintenance of 7199258 5314238
 Building
 5 Outsourcing 11762560 8466708
 6 Contingency Expenditure 2878669 2489227
 7 Transfer to CNC 1478400

1 Grant-in-aid 267500000 170000000
 (Non-Plan)
 2 Hospital Receipts 13862049 23148182
 3 ICMR 375000 375000
 4 Interest Receipts 1980810 2566883

EXCESS OF INCOME OVER EXPENDITURE

I.R.C.H.	2356283	11365436
Sub-Total (D)	283717859	196090065

NATIONAL DRUG DEPENDENCE TREATMENT CENTRE & UNDCP PROJECT (E)

1 Pay & Allowances	34422765	21720499
2 Wages	2115256	2402242
3 i) Material & Supply 2008-09	25639008	16941057
4 Pilot Project		500000

NATIONAL DRUG DEPENDENCE TREATMENT CENTRE (N.D.D.T.C.) (UNDCP PROJECT)

1 TA	353282	164833
2 DA	108500	17300
3 Misc./Office Contingency	145221	475721
4 Transfer to NDDTC a/c		55130
5 Refund to WHO	113064	406318
6 Bank Charges	500	551
7 Pay & Allowances	105005	158227
8 Correspondences		196403
9 Refreshment	86381	
10 Transportation	41335	
11 Outstanding (Temporary Advance)	288234	

EXCESS OF INCOME OVER EXPENDITURE

1 N.D.D.T.C.	6691921	2524922
2 UNDCP Project		91681
Sub-Total (E)	70110472	45654884

EXCESS OF EXPENDITURE OVER INCOME

	283717859	196090065
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1 Grant-in-aid (Plan)	75000000		
Machinery & Equipment Motar	3324648		
Vehicle	1179461		
Furniture	396925		
Books & Publications	1869838	68229128	42865086
2 Grant (Pilot Project)			500000
3 Hospital Receipt		361822	478295
4 Miscellaenous Receipt		278000	217288
5 FDR's Interest			28051

NATIONAL DRUG DEPENDENCE TREATMENT CENTRE (N.D.D.T.C.) (UNDCP PROJECT)

1 Grant-in-aid (Plan)		992570	1543164
2 Miscellenous Receipt		80650	23000

EXCESS OF EXPENDITURE OVER INCOME

UNDCP		168302	
Sub-Total (E)	70110472	45654884	

J.P.N.APEX TRAUMA CENTRE (F)

1	Material & Supply	123488103	72201209	1	Plan	353799495	219423554
2	Manpower	17463449	43700000	2	Miscellaneous (Hospital Receipts)	7753981	3229015
3	Recurring & Outsourcing	56044264	75571710	3	Interest on TDR	3775037	822240
4	Pay & Allowances	156803679	27950635				

EXCESS OF INCOME OVER EXPENDITURE

J.P.N. APEX TRAUMA CENTRE	11529018	4051255
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EXCESS OF EXPENDITURE OVER INCOME

Sub-Total (F)	365328513	223474809	365328513	223474809
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CENTRE FOR DENTAL EDUCATION AND RESEARCH (G)

1	Pay & Allowances (Plan)	1981760	1851161	1	Grant in Aid (Plan)	44083442	4904516
2	Material & Supply (Plan)	32739280	1150716	2	Interest on STDR by Bank	575172	593506
3	Manpower & consumable(plan) For Engineering maintenance on contract	6343499	1902639	3	Miscellaneous Receipts	110800	9000
4	Office Expenses	3018903		4	Hospital Receipts	1062642	26990

EXCESS OF INCOME OVER EXPENDITURE

CENTRE FOR DENTAL EDUCATION & RESEARCH	1748614	629496
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EXCESS OF EXPENDITURE OVER INCOME

Sub-Total (G)	45832056	5534012	45832056	5534012
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Grand Total (A) to (G)	5880452024	4261164204	5880452024	4261164204
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(Smt. Basanti Dalal)
Financial Advisor (Offtng.)

(Sandeep Lall)
Senior Financial Advisor

(R.C. Deka)
DIRECTOR

ALL INDIA INSTITUTE OF MEDICAL SCIENCES
RECEIPTS & PAYMENT ACCOUNT
FOR THE YEAR 2008-2009
AIIMS(Main) (A)

RECEIPTS	2008-09	2007-08	PAYMENTS	2008-09	2007-08
1 <u>OPENING BALANCES</u>			1 <u>Grants transferred to the Centres/Schemes Cell</u>		
A <u>Cash at bank</u>			A <u>Dr. R.P. Centre</u>		
i) (a) AIIMS (MAIN) 586048113			i) PLAN 70000000	90000000	
(b) Unspent Balance of specific grants remained with AIIMS(M) 129483547	715531660	665704210	ii) Non-Plan 330000000	190000000	
ii) Scheme Cell 192600145	43642652		B <u>C.N. Centre</u>		
iii) Hostels			i) Plan 260000000	226800000	
a) Cash in hand 18221	23806		ii) Non-Plan 740000000	480000000	
b) Cash at bank 732202	318341		C <u>N.D.D.T.C.</u>		
c) FDR's 2223103	2171124		i) Plan 75000000	50000000	
B <u>CASH IN HAND (IMPREST)</u>			D <u>Scheme Cell</u>		
i) AIIMS (Main)			i) Grants against receipts 349613920	494570990	
(a) Balance as per cash book of the cashier 529450			ii) Non Plan grant for National Service Scheme	50000	
(b) Excess paid by the cashier 307426	222024	191224	E <u>Dr.B.R.A.I.R.C.H.</u>		
C <u>AMOUNT LYING UNDISBURSED</u>			a) Plan 85000000	97500000	
i) AIIMS (Main)			b) Non-Plan 267500000	170000000	
ii) Scheme Cell 47200	108000		<u>F.J.P.N.APEX TRAUMA CENTRE</u>		
D <u>POOR PATIENT A/C</u>			Plan 440000000	325636000	
i) AIIMS (Main)			G <u>CENTRE FOR DENTAL EDUCATION & RESEARCH</u>		
a) Cash/Bank 1132516	861808		Plan 100000000	13900000	
b) FDRs 400226	400226				

E PATIENTTREATMENTA/C

AIIMS	27786829	18900463
2 GRANTS FROM GOVT. OF INDIA		
a) PLAN	2180000000	1600000000
b) NON-PLAN	4354200000	3096800000
c) N.D.D.T.C.	750000000	500000000
3 Miscellaneous Receipts	112045786	60112090
4 Hospital Receipts	130350597	125724661
5 Interest	66689587	67297799
6 Licence Fee	17305909	20354267
7 Tution Fee /Examination Fee	4633276	4736602
8 Employees Health Scheme (EHS)	10425849	10241433
9 Pot Fund	306114	210914
10 Employees Insurance Scheme	6812741	6897219
11 GPF	245262226	194674446
12 Out side recoveries	179980162	128092636
13 Security Deposits/	35684731	21061035
14 Caution Money	54700	55400
15 Leave Salary & Pension contribution		156450
16 Recoverable Advances		
a)Car	1275864	888502
b)Scooter/Motor Cycle	674625	699799
c)Bicycle	1500	3227
d)H.B.A.	5165164	5806704

**2 ADMINISTRATIVE EXPENDITURE
AIIMS (MAIN)**

a) Pay and allowances	1929134498	1218187969
b) Travelling Allowances	15614269	12193800
c) Stipend	9687144	5666711
d) Leave salary & Pension contribution	560480	822792
e) Pensionary Benefits	285896228	210233184
3 Office Contingency	315022491	289723471
4 Material & Supply (Non-Plan)	697329812	611268173
5 Repair and maintenance of Machinery & Equipment	35067164	47969028
6 Furniture & Fixture	51126	23498
7 Books & Publications	12227020	10229477
8 Employees Insurance Scheme	6508285	5910941
9 GPF.	245262226	194674446
10 Maintenance of buildings	66290027	50961015
11 Recoverable Advances		
a) Car	1364200	985600
b) Scooter/Motor Cycle	516700	826500
c) Bicycle	6000	-
d) House Building Advance	550800	2001400
e) Computer	1170000	1470000
12 Expenditure out of grant received for specific purpose (Scheme Cell)		
i) Appendix-A	439967551	

<p>17 <u>NACO</u> HIV Sentinel Surveillance Project</p>	2943706		<p>ii) Add undisbursed for 2007-2008 paid now</p>	47200		
<p>18 Post Partum Programme (Incentive money)</p>	400000	550000	<p>iii) Less undisbursed for 2008-09</p>	44500	439970251	362787632
<p>19 Encashment of Short Term Deposit</p>	1800000000	3500000000	<p>13 Post Partum Programme (Incentive money)</p>		738000	328535
<p>20 Grants received for specific purpose Appendix-A (Scheme Cell)</p>	443593253	442064653	<p>14 College of Nursing</p>		68630	
<p>21 Schemes i) Grants against receipt ii) Grants transfer from A.I.I.M.S. Non-Plan Direct received</p>	349613920	496233262	<p>15 <u>PLAN</u> a)Machinery & Equipment b)Expenditure of Urology (Plan) against IRCH receipts c)Building Construction</p>	267520604	1600000 153988031	115931934 135140739
<p>22 Miscellenous Donations (Appendix-D)</p>	1118605	1350494	<p>16 Purchase of Vehicles (a) Transport Office (b) Hospital Store</p>		536416	iii) 958106 232219
<p>23 Revolving Funds</p>	60006547	55837195	<p>17 <u>Advance Payments</u> a) Material & Supply (NP) for foreign purchase b) Machinery & Equipment(Plan) for foreign purchase c) PAO for procurement of Stores d) P. & A.O. etc. for Building material e) Temporary/Contigent Advances f) Private firms for stores g) Secretary NDMC for AC Plant for Admn. Block h) Secretar NDMC for Security for Electric connection</p>	10944119	636644327 2400000 60608519	12795645 352743122 900000 4514413
<p>24 New Pension Scheme</p>	10494000	5420744	<p>i) Custom Duty for Machinery & Equipment j) For Books & Journals k) For cochelar Implant Pt. Treatment l) For Vehicle Purchase</p>	2797271 2450334	2951664 6294065 730000 - 670950 2079901	2951664 6294065 730000 - 670950 6272737
<p>25 Investment withdrawn & re-invested A (i) Dr.K.L. Wig (ii) Zenith Finance & Co. (iii) Kamani Charity trust</p>	14910 6000 5100	26010				
<p>B Donation (i) Dr. K.L. Wig (ii) Zenith Finance & Co. (iii) Kamani Charity trust</p>	22090 11000 9900	42990				

26	Cochelar Inplant Patient Treatement A/c	32887000	24089000	m)	M/s Shree Cement Ltd. for purchase of cement for construction		1503458
27	Deposit Work			n)	Central Public Works Department, SJHPD for Nallah		118000000
(a)	Starford India		2000000	o)	Central Public Works Department, SJHPD for Dr. Hostel		1181250
(b)	Rajgarhia Vishram Sadan	1500000	1413300	p)	Central Public Works Department, SJHPD for construction of sub-station		5000000
(c)	Surekha Vishram Sadan	34015		q)	M/s Metro Rail Corporation Ltd.	842700	60000000
28	Received from IRCH (Plan) for Urology	1600000		r)	Chief Controller of Accounts, (M/s Deepak Elect. Co.) for Electric works	190890	
29	Settelemnt of construction a/c of IRCH	1800000		s)	Chief Controller of Accounts, (M/s Sanico Ind.) for Electric works	98486	
				t)	Chief Controller of Accounts, (M/s Surya Roshni) for Electric works	266165	
				u)	M/s Blue Star Ltd.(for A/c works) for Maint.		1742488
				v)	M/s Indian Oil Corporation for lubricant Diesel Oil	1780106	
				w)	M/s Blue Star Ltd.(for A/c works) for Construction		222853
				x)	M/s Crompton Greave Ltd.(for Elect. Works)	180807	
				y)	M/s Universal comfort (for A/c work)	1262512	
				z)	M/s carrier Air Conditioning (for A/c work)	2415422	
				aa)	Central Public Works Department, Civil works)		1313000
				ab)	M/s Videocon Ind. Ltd.(A/c work)	1083247	
				ac)	M/s Voltas Ltd. for A/c work	859688	
				ae)	Chief Controller of Accounts for purchase of stores	3343957	
				af)	M/s Inderprastha for CNG Pipeline	10405000	

ag)	DGS&D M/s Rashmi Ind. for A/c work	2976242	
ah)	M/s LG Elect. Spilit A/c for A/c & Elect. Work	1192355	
ai)	Ex. Engg. SJH(CPWD) for sewage Treatment plant	11344542	
aj)	M/s Hitachi flames for A/c work)	1032950	
18	Security Deposit/ Earnest Money		
(i)	Payment made against the receipts upto the year 2007-08	18215216	18427854
(ii)	During 2008-09	1400000	830000
19	Outside recoveries	183962271	127927892
20	Investment of short term deposit	1800000000	3500000000
21	<u>NACO</u> HIV Sentinel Survillence Project	2943706	
22	Miscellenous Donations (Appendix-D)	522581	1725051
23	Investment		
(i)	Dr.K.L. Wig(SBI)	37000	-
(ii)	Zenith Finance & Co.(SBI)	17000	
(iii)	Kamani Charity Trust	15000	
24	Pot Fund		
25	Revolving Funds	39390883	37050175
26	New Pension Scheme	35801016	19341074
27	Excess paid by the Cashier		

				28	Cochelar Implant Patient A/c	17977000		10169000
				29	Deposit Work			
					a)Starford India			410902
					b)Rajgarhia Vishram Sadan	723391		713076
					c)Surekha Vishram Sadan	32030		
				30	Deposit Linked Insurance Scheme			180000
				31	Transfer to I.R.C.H. for Settelement of construction a/c of IRCH	1800000		
					<u>POOR PATIENT ACCOUNTS</u>			1
				1	AIIMS	909536		108024
					<u>PATIENT TREATMENT ACCOUNTS</u>			
				1	AIIMS	42276594		41380274
				2	Bank clearing charges	8090		
					<u>HOSTELS</u>			
				1	Security refunds	1155000		1034000
				2	Miscellenous Expenditure	60726		42190
					<u>CLOSING BALANCES</u>			
				A	<u>CASH AT BANK</u>			
				1	a) AIIMS(Main)	609833159		
					b) Unspent Balance of Specific Grants remained with AIIMS (Main)	223462880	833296039	715531660
				2	Schemes Cell	131137563		192600145
				B	<u>CASH IN HAND (IMPREST)</u>			
				1	AIIMS (Main)			
					a)Balance as per			
					<u>POOR PATIENT ACCOUNTS</u>			
					a) AIIMS	914153	378732	
					b) Interest	42886	-	
					c) FDRs	500000		
					<u>PATIENT TREATMENT ACCOUNTS</u>			
				1	(a) AIIMS	50523574	49488001	
					(b) Interest	1094586	778639	
					<u>HOSTELS</u>			
				1	Receipts during 2008-09			
					I) Security Deposits	1391500	1421500	
					ii) Miscellenous Receipts	63270	46915	
					iii) Interest earned	164188	68030	
					iv) Refund of Income Tax on FDRs wrongly deducted by Bank	586		

cash book of the cashier	553450		
b) Excess paid by the cashier	307426	246024	222024

CAMOUNTLYING UNDISBURSED

1	AIIMS (Main)		-
2	Scheme Cell	44500	47200
D <u>POOR PATIENT ACCOUNT</u>			
1	AIIMS (Main)		
	(a) Cash/Bank	1137133	1132516
	(b) FDR's	943112	400226
E <u>PATIENT TREATMENT A/C</u>			
	AIIMS	37120305	27786829
F <u>HOSTELS</u>			
1	Cash in hand	8991	18221
2	Cash at Bank	202429	732202
3	FDR's	3165924	2223103

Sub-Total(A)	11157077871	10723266479	11157077871	10723266479
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DR. RAJENDER PRASAD CENTRE FOR OPHTHALMIC SCIENCES(B)

1 <u>OPENING BALANCES</u>			1	(a) Pay & allowances	249173341	161873575
A <u>Cash at bank</u>	31108947	42205910		(b) Daily Wages	9498709	6712700
B <u>CASH IN HAND (IMPREST)</u>	10000	10000	2	Travelling Expenses	1626930	1489447
C <u>POOR PATIENT A/C</u>			3	Office Expenses	10103043	8851379
Cash/Bank	45258	25052	4	Capital Works	3974420	4985059
1 <u>GRANT-IN-AID</u>			5	Maintenance of Buildings	4121891	5283600
i) Plan	70000000		6	Material & Supply(NP)	167621040	100147351
ii) Non-Plan	330000000	400000000				

xxxi)	National Survey on Cataract (NPCB)	176000	150000	xxi)	Workshop	35500	178100
xxxii)	DST Evaluation of Tear fluid	600000	809000	xxii)	DST/DBT (Stem)	46817	1012001
xxxiii)	Collabotative surdy on dry eye Syndrom(DES)	250000	200000	xxiii)	ORP Vision 2020	-	-
xxxiv)	DME	1404538	926655	xxiv)	Multifocal IOL	211941	342146
xxxiii)	DST/Specific grant			xxv)	Evaluation of anit cataract Study- anti Cataract	-	101235
xxxiv)	CGD in primary angel Glaucoma			xxvi)	Indeye	-	880469
xxxv)	Clinical study of ketro conjectivities (Allergen India Pvt. Ltd.)			xxvii)	DST (Cyclo)	-	63913
xxxvi)	FTG			xxviii)	Reliance Clinical Research	144364	136083
xxxvii)	PDT Visdune pilot study	96489	48244	xxix)	NPCB-RIO(M&E)	-	1221760
xxxviii)	WHO SEIND/NCD 001001BB06 CDSTG		172150	xxx)	Clinical Evaluation on B&C(AMO)	68300	98420
xxxix)	INMAS Human Pharmacology		500000	xxxi)	Cataract Surery (NPCB)	253636	150000
xxxx)	INMAS deopergulogy chenetorzatin		500000	xxxii)	WHO Short Term training		40000
xxxxi)	Lux-PRA International	246154	43841	xxxiii)	Evaluation study of Glaucoma	40000	20000
xxxvii)	INDEGEN	1247417	3199437	xxxiv)	FTG	-	-
xxxviii)	Acute Bacterial Conjectivities	230717		xxxv)	CGD in primary angle closure of glaucoma	263999	179815
xxxviii)	DNB Examination	15000		xxxvi)	DME		
xxxv)	DBT-MA	797000			a)M& E		
xxxvvi)	ROP Workshop	57000			b)Pay & Conty.	1153419	906801
xxxvii)	PVD Study/VRT	820226		xxxvii)	Bausch & Lomb acro soft		
xxxviii)	Posudex Allergan International	217382			a)M& E		
xxxix)	ABN AMRO Natra Raksha	104000			b)Pay & Conty.	-	76730
xxxx)	Lux 201 Omnicare	526835		xxxviii)	FAME Study	-	
					a)M& E		
					b)Pay & Conty.	960992	737081
				xxxix)	Clinical study of ketro conjuncivities(Allergen India Pvt. Ltd.)	-	45000
					Lux-PRA international	274877	11304
				xxx)	Evaluation Polyherbal OZONE		
				xxxxi)	a)Machinery & Equipment		
					b)Pay & Contingency	106413	172472
				xxxvii)	Evaluation Polyherbal AOD	309692	99279
				xxxviii)	DST evaluation of Tear fluid constituent	419980	571943

xxxxxi)	AMD View Study	3370414		xxxxiv)	Bausch & Lomb Pink eye	59664	109137
xxxxxii)	FTG	15000		xxxxv)	PDT visdune pilot study	92894	46447
xxxxxiii)	Pediatric eye care	100000		xxxxvi)	Collaborative study on dry eye syndron DES	197548	107129
xxxxxiv)	High Precision Bil Analitial	25000		xxxxvii)	INMAS Biomedical	30000	15000
xxxxxv)	NCDRC	10000		xxxxviii)	INMAS Human Pharmacology	219451	15000
xxxxxvi)	Bactarial Keratro Pilot study	45000		xxxxix)	WHO-GS		
					a)M& E		
					b)Pay & Conty.	-	609044
				xxxxx)	DST/DBT Specific grant	-	14000000
				xxxxxi)	WHO-DSTG	67950	92150
				xxxxxii)	INDEGEN	3338749	
3	Hospital Receipts I/c Various kits	114124152	94364844	xxxxxiii)	Bacterial Conjectivities	26922	
4	Security Deposits	25000	50000	xxxxxiv)	DNB Examination	10000	
5	Interest on Recoverable Advance	213155	102345	xxxxxv)	ROP Workshop	51710	
				xxxxxvi)	PVD Study/VRT	312604	
6	Miscellenous Receipts	2915223	1253684	xxxxxvii)	Posudex Allergan International	41097	
7	AIIMS Recovery Received	54618503	46673328	xxxxxviii)	ABN AMRO Natra Raksha	11920	
8	Outside Recovery received	13004568	7642240	xxxxxix)	Lux 201 Omnicare	230205	
9	Interest on CLTD	1962009	3040085	xxxxxix)	AMD View Study	1057186	
10	<u>Recoverable Advance</u>			xxxxxx)	FTG	15000	
	a)HBA	334140		xxxxxi)	Pediatric eye care	100000	
	b)Computer	13500	347640	xxxxxii)	NCDRC	10000	
			403255	xxxxxiii)	Neema International	20000	
				xxxxxiv)	ORP vision 2020	10467	
				xxxxxv)	Allergan International	1843	
				12	Cash Withdrawl Tax		-
				13	AIIMS Recoveries remitted	54618623	46673328
				14	Outside recoveries remitted	13005203	7642240

POOR PATIENT ACCOUNTS

Receipts

a) Interest	2330	923
b) Donation	165389	80729

15	<u>Recoverable Advance</u> Scooter	50000	30000
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16	Cheque Book Charges		-
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POOR PATIENT ACCOUNTS

	Payment	96169	61446
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CLOSING BALANCES

A	<u>CASH AT BANK</u>	32586560	31108947
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B	<u>CASH IN HAND (IMPREST)</u>	20000	10000
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C	<u>POOR PATIENT ACCOUNT</u> Cash/Bank	116808	45258
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Sub-Total (B)	638197462	493462879	638197462	493462879
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CARDIO-THORACIC & NEUROSCIENCES CENTRE (C)

1 OPENING BALANCES

A	<u>Cash at bank</u>		
i)	C.N. Centre	158648226	151455520
ii)	CT Patient A/c		
	a) Bank	12970986	14403127
	b) FDR	230000000	220000000
iii)	Angiography A/c		
	a) Bank	2803934	12358587
	b) FDR	75000000	75000000
iv)	Gamma Knife patient A/c		
	a) Bank	3304760	66823583
	b) FDR	119138203	42500000
v)	Neuro Surgery patient A/c		
	a) Bank	10902678	4985397
	b) FDR	32000000	42000000

1 ADMINISTRATIVE EXPENDITURE

	a) Pay & Allowances (Non-Plan)	549614043	353265109
	b) Wages	24192176	16997408
	c) Travelling Allowance	1308353	1277253
2	<u>Stores (Non-Plan)</u>		
	a) Repair & Maintenance of Machinery & Equipment	18013112	12501251
	b) Material & Supply	166557398	130351256
	c) ORBO	-	16700
	d) Stem Cell		
3	<u>Stores (PLAN)</u>		
	a) C.N. Tower		
	b) Machinery & Equipment (Advance Payment)	185941729	204667810
	Machinery & Equipment(Ind.)	67648684	
	c) M&E against EFC		

13	New Pension Schemes	6798561	4699687	20	Outside Recovery	44241865	28934214
14	<u>Recoverable Advances</u>			21	Amount Sent to PAO	720	240
	a) Bicycle	1050		22	Pot Fund	30740	31206
	b) Scooter	334202	393236	23	Water charges	38880	36575
	c) Car	107492	208392	25	Amount sent to Main Institute(Computer Advance)	2000	600 200
	d) House Building	1334262	1290252	26	Amount sent to PAO (Computer Advance)	12000	
	e) Computer	36900	15450	27	NACO Fund(Expenditure)	102639	
15	Cardio Test	3530335	3635770	28	Amount sent to Main Inst. (Festival Advance)	600	200
16	Blood Test/Lab. Charges	5058760	5066000				
17	EHS	1528910	1513470				
18	Outside Recovery	44242645	28935533				
19	Institute Recovery (Computer Advances)	2200	600				
20	Water Charges	38892	36575				
21	Pot Fund	30740	31206				
22	Institute Recovery (Computer Advances)	12000					
23	NACO Fund Receipt	102506					
24	Institute Recovery (Festival Advance)	600					
	<u>C.T.PATIENT A/C</u>				<u>C.T.PATIENT A/C</u>		
1	a)Patient's Receipts during 2008-2009	243734341		1	Purchase of Stores	216701908	192396154
	b)CT A/c from Angio Patient A/c adjusted /correction carried out in compliance of audit para No.A.2.1	10000000		2	Machinery & Equipment		
	c)Patient's Refunds 2008-2009	49521335		3	Bank Charges	3463	490
				4	Fresh Cheque	1025049	2627796

	d)Add Poor Patient's treatment out of interest earned during 2008-09	3095464	207308470	196141082			
2	a)Interest during 2006-07 correction carried out in compliance special audit of report para 8.1	11618852					
	b)Interest during 08-09	20686238					
	c)Less Poor Patient's treatment expenditure 08-09	3095464	29209626	4776021			
3	Cancelled Cheques		5219802	1881696			
	<u>ANGIOGRAPHYPATIENTA/C</u>					<u>ANGIOGRAPHYPATIENTA/C</u>	
1	a)Patient's Receipts 2008-09	177148036			1	Purchase for stores	144078074
	b)Patients refunds	27121020			2	CT A/c from Angio Pt. A/c adjustment/correction carried out in compliance of audit para No.A.2.1	172040687
	c)Poor Patient's treatment out of interest earned during 2008-09	672400	150699416	157836863			10000000
2	a)Interest during 2008-09	6900688			3	Bank Charges	840
	b)Poor Patient's treatment expenditure 08-09	672400	6228288	3620313	4	Fresh Cheque	941433
3	Cancelled Cheques		3057824	1120871			890683
	<u>GAMMAKNIFE PATIENTA/C</u>					<u>GAMMAKNIFE PATIENTA/C</u>	
1	Patient Receipts 2008-09	17406500			1	Purchase for Stores	7002642
	Refund to Patients	1430000	15976500	14326750	2	MRI Charges	821000
2	Interest includes the figure of Rs.25.81lakh in compliance of Audit Para No. B.1.4		8653920	3315690	3	Bank Charges	1450

3 Cancelled Cheque - 69900

NEUROSURGERYPATIENTA/C

1	a)Patient Receipts			
	2008-09	43562011		
	b)Patient Refund	10751698		
	c)Transfer from NS	571725		
	Patient A/c to CNC A/c			
	d)Interest 2006-07	504215		
	e)Interest 2007-08	2753049		
	f)Add Poor Patient			
	Treatment out of			
	Interest earned			
	during 2006-07	2547476		
	g)during 2007-08	1424200		
	h)during 2008-09	2003844	34956844	32647738

2	Fixed/CLTD			
	a)Interest			
	(i) 06-07	504215		
	(ii) 07-08	2753049		
	(iii) 08-09	3481633		
	b)Poor Patients Treatment			
	Expenditure			
	(i) 06-07	2547476		
	(ii) 07-08	1424200		
	(iii) 08-09			
	includes Rs.17,94,802/-			
	appeared in Bank Statement on			
	3.4.08 in compliance			
	of audit para			
	no.B.1.5	2003844	763377	2753049

3 Cancelled Cheques 615931 1059312

POOR PATIENT ACCOUNTS

N.S. Centre		
Donation	25243	8952

NEUROSURGERYPATIENTA/C

1	Purchase for Stores	43118719	39554196
2	Bank charges	630	310
3	Fresh Cheques	287631	1032312

POOR PATIENT ACCOUNTS

N.S. Centre	11110	11329
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CLOSING BALANCES

A	<u>CASH AT BANK</u>		
i)	C.N. Centre	71281243	158648226
ii)	C.T. Patient A/c		
	(a) Bank	16978464	12970986
	(b) FDRs	250000000	230000000
iii)	Angiography A/c		
	a) Bank	32769115	2803934
	b) FDRs	50000000	75000000
iv)	Gamma Knife Patient A/c		
	a) Bank	21748291	3304760
	b) FDRs		
	(i) Upto 07-08	119138203	
	(ii) Adjustment during 08-09	1638203	119138203
v)	Neuro Surgery Patient A/c		
	a) Bank	3831850	10902678
	b) FDRs	32000000	32000000
B	<u>C.N. Centre</u>		
i)	Imprest	40000	40000
ii)	Cash in Hand with cashier	4400	
D	<u>POOR PATIENT ACCOUNT</u>		
i)	N.S. Centre		
	Cash at Bank	95562	81429
	Sub-total (C)	2318293279	1915807750
			2318293279
			1915807750

Dr. B.R.A. INSTITUTE ROTARY CANCER HOSPITAL (D)

1	<u>OPENING BALANCES</u>			1	Pay & Allowances	170822003	104360420A
	<u>Cash at bank</u>	34272417	46707703	2	Expenditure under TA/DA	1261243	1166238
B	<u>POOR PATIENT A/C</u>			3	Contingency Bills	2878669	2489227
	a) Cash/Bank	1821020	1393911	4	Medical Oncology	-	441378
C	<u>PATIENT TREATMENT A/C</u>			5	R.T. Revolving Funds	2340625	898811
	a) Cash/Bank	11991652	5194183	6	Maintenance of Building	7199258	5314238
	b) Short Term Investment	10000000	10000000	7	Material & Supply (Non-Plan)	87437843	61449398
	c) FDR's	6000000	6000000	8	Computer Advance		150000
				9	Scooter Advance		30000

1	<u>Grant in Aid</u>			10	Out Sourcing	11762560	8466708
(i)	Plan	90000000	97500000	11	Funds transfer to CNC		1478400
(ii)	Grant-in-Aid return to main	5000000		12	AIIMS Recoveries Remitted	19884665	22349336
(iii)	Funds transfer to Urology	1600000		13	Outside Recoveries Remitted	11957741	922754
(iv)	Machinery & Equipment(Plan) refunded by bank	18574917	101974917		<u>PLAN</u>		
b)	Transfer from CNC		732000	1	Advance Payment to foreign purchase for Machinery & Equipment	46048051	
	Transfer from JPNATC		690000	2	Machinery & Equipment	43834821	93429689
c)	Non-Plan	267500000	170000000	3	Custom Duty & PDA (Advance)	15800000	23267767
2	Miscellaneous Hospital Receipts	13862049	23148182	4	Capital Works	8570446	6753472
3	R.T. Revolving Funds	3415409	3172450	5	Vehicle		968275
4	Medical Oncology Receipts	601855	619230	6	Furniture and Fixtures	94978	642453
5	ICMR	375000	375000				
6	HSCC	1800000					
7	AIIMS Recoveries received	19884665	22349336				
8	Outside Recoveries received	11957741	922754				
9	Scooter Advance		26983				
10	Car/Scooter Advance	29116	18000				
11	Interest Receipts	1980810	2566883				
11	Computer Advance	31320	22460				
	<u>POOR PATIENT ACCOUNTS</u>				<u>POOR PATIENT ACCOUNTS</u>		
i)	(a) I.R.C.H.	290300	205825		During 2008-09	635245	265230
	(b) Interest on FDR's	562742	484514		Wrongly debited	2000	
	<u>PATIENT TREATMENT ACCOUNTS</u>				<u>PATIENT TREATMENT ACCOUNTS</u>		
	Receipt during 2008-09	45172567	45950380		During 2008-09	39945429	40424504

a) Cheque Cancelled	569924	1155266	Miscellaneous	92145
b) Dly Interest	15838	677		
c) Interest	1254900			
d) Wrong credited		115650		

CLOSING BALANCES

A	<u>CASHATBANK</u>	27792396	34272417
B	<u>POORPATIENTACCOUNT</u>		
	Cash/Bank	2036817	1821020
C	<u>PATIENTTREATMENTA/C</u>		
a)	Cash/Bank	28967307	11991652
b)	Short term investment		10000000
c)	FDRs	6000000	6000000

Sub-Total (D)	535364242	439353387	535364242	439353387
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NATIONALDRUGDEPENDENCE TREATMENT CENTRE & UNDCP PROJECT (E)

1 OPENING BALANCES

A	<u>Cash at bank</u>			1	Pay & Allowances	34422765	21720499
i)	a) N.D.D.T.C.	9897962	7499458	2	Material & Supply	25178030	16841057
	b) UNDCP	407834	316153	3	Wages	2115256	2402242
1	Grant-in-Aid (DAC)	75000000	50000000	4	Books & Publication	1869838	1958693
2	Hospital Receipt	361822	478295	5	Furniture	396925	88594
3	Interest on FDR			6	Pilot Project		500000
4	Security Deposit			7	Motar Vehicle	1179461	1122750
5	Grant (Pilot Project)		500000	8	Machinery & Equipment	3324648	3964877
6	Miscellaneous Receipt	278000	217288	9	Security Refund		
7	Temporary Advance Refund		200000	10	Temporary Advance		460978
8	FDR Interest		28051				
9	Car Advance Recovery	34560	34560		<u>Institute Recovery Remitted</u>		
10	Security Earnest Money	130000		1	GPF Subscription & Advance	4598515	3858450
				2	Conveyance	41786	60713
	<u>Institute Recovery</u>			3	HBA	236142	140712
1	GPF Subscription & Advance	4598515	3858450	4	Licence fee	54183	45763
2	Conveyance	41786	60713	5	Officer Association	2360	2320
3	HBA	236142	140712	6	EIS	44285	46900
4	Licence fee	54183	45763	7	EHS	94940	86410

5	Officer Association	2360	2320
6	EIS	44285	46900
7	EHS	94940	86410
8	Society		
9	Computer Advance	11204	9204
10	Faculty	800	800
11	New Pension Scheme	264514	143066
12	Miscellaneous Recovery Karamchari Union		
		1080	

Outside Recovery

1	Income Tax	1677595	1066866
2	GPF		
3	LIC	37956	33177
4	Court Rec.	54116	56086
5	Society	1738097	1216232
6	Bihar Relief Fund	33438	

**NATIONAL DRUG DEPENDENCE TREATMENT
CENTRE (N.D.D.T.C.)
(UNDCP PROJECT)**

1	Grant-in-Aid	992570	1543164
2	Miscellaneous Receipt	80650	23000

8	Society		
9	Computer recovery	11204	9204
10	Faculty	800	800
11	New Pension Scheme	264514	143066
12	Miscellaneous Recovery Karamchari Union		
		1080	

Outside Recovery

1	Income Tax	1677595	1066866
2	GPF		
3	LIC	37956	33177
4	Court Recovery	54116	56086
5	Society	1738097	1216232
6	Bihar Relief Fund	33438	

**NATIONAL DRUG DEPENDENCE TREATMENT
CENTRE (N.D.D.T.C.)
(UNDCP PROJECT)**

1	a)TA	353282	164833
	b)DA	108500	17300
2	a)Miscellaneous/Office Contingency		
	b)Office contingency	72208	109900
	c)Honorarium	16150	62900
	d)Refreshment	86381	31064
	e)Hiring accom.	45200	
	f)Printing material Stationary	11663	244510
	g)Correspondence		196403
	h)Salary	105005	158227
	i)Transportation	41335	27347
3	Bank Charge	500	551
4	Refund to WHO	113064	406318
5	Transfer to NDDTC		55130
6	Outstanding(Temporary Advance)		288234

CLOSING BALANCES

			A	<u>CASHATBANK</u>		
			i)	N.D.D.T.C.	17215421	9897962
			ii)	UNDCP	239532	407834
Sub-Total (E)		96074409			96074409	67606668

J.P.N.APEX TRAUMACENTRE (F)

A	<u>Cash at bank</u>						
	J.P.N.A.T. Centre	21957766	32786727	2	Machinery & Equipment	34441322	
1	<u>GRANT-IN-AID</u>			3	Manpowers	17463499	
	Plan			4	Recurring & Outsourcing	1977077	
	a) EFC			5	HSCC	81703619	
	b) Non-EFC	44000000	325636000	6	a) Pay & Allowance	156803629	
	Other Receipts				b) Recurring & Outsourcers	54067187	
	a) Hospital	7753981	3229015	7	Material & Supply	123488103	147719935
	b) Security deposit	6380000	1475000	8	Furniture & Fixtures	744864	2206678
	c) Interest on TDR	3775037	822240	9	Capital Works		5572435
	d) Miscellenous Receipt	2986436		10	Machinery & Equipment		
					a) Letter of credit Advance	48891425	35646952
					b) PDA advance		68706597
				11	Refund Security	1865000	435000
				12	Deposit/PTA/C/ATLS	2364168	
					<u>CLOSING BALANCES</u>		
					<u>CASHATBANK</u>	445047	21957766
Sub-Total (F)		482853220	363948982			482853220	363948982

CENTRE FOR DENTAL EDUCATION AND RESEARCH (G)

1 OPENING BALANCES

A	<u>Cash at bank</u>		
	CDER	1864040	19511927
1	<u>Grant in aid</u>		
	Plan (EFC)	19300000	8900000
	Plan (Non-EFC)	80700000	5000000
2	Security Deposit	1839742	85000
3	Interest on STDR by bank	575172	593506
4	Miscellaneous Receipt	110800	9000
5	Hospital Receipt	1062642	26990

1	Pay & Allowances	1981760	1851161
	Office expenses	3018903	
2	Material & Supply	32739280	1150716
3(a)	Manpower & consumables for Engg. maintenances on contract	6343499	1902639
b)	Building Capital Works		410493
4	Machinery & Equipment		
(i)	Actual Payment	25680195	13824684
(ii)	Advance payments made to Foreign purchases	26188764	3685390
5	Advance paid to HSCC		7000000
6	Advance paid to NDMC	4040000	2404500
7	Advance paid to DGS&D	469471	
8	Advance paid to Voltas ltd.	184589	
9	Security Refund		32800

CLOSING BALANCES

A	<u>CASH AT BANK</u>	4800935	1864040
B	<u>CASH IN HAND (IMPREST)</u>	5000	

Sub-Total (G)	105452396	34126423	105452396	34126423
Grand Total (A) to (G)	15333312879	14037572568	15333312879	14037572568

(Smt. Basanti Dalal)
Financial Advisor (Offtg.)

(Sandeep Lall)
Senior Financial Advisor

(R.C. Deka)
DIRECTOR

ALL INDIA INSTITUTE OF MEDICAL SCIENCES**STATEMENT SHOWING THE EXPENDITURE OF THE GRANT RECEIVED
FOR THE SPECIFIC PURPOSE FOR THE YEAR 2008-09**

S.No.	Funding Agency	Opening Balance		Receipt	Total	Expenditure	Balance	
		Credit	Debit				Credit	Debit
1	ICMR	42997638	0	95871877	138869515	83823479	55046036	0
2	C.S.I.R.	13698688	0	31420785	45119473	28885522	16233951	0
3	DST	96949975	0	41064120	138014095	96081134	41932961	0
4	UNICEF	3397366	0	0	3397366	3100429	296937	0
5	D.B.T.	81454108	0	183778867	265232975	135671537	129561438	0
6	W.H.O.	11861313	0	11790117	23651430	8662071	14989359	0
7	U.G.C.	180077	0	6223419	6403496	5394523	1008973	0
8	Ministry of Health and Family welfare	4192960	0	13437382	17630342	11123544	6506798	0
9	Ministry of Environment & Forest	374404	0	1082587	1456991	834229	622762	0
10	Dabur Research Foundation	585520	0	0	585520	14400	571120	0
11	DEPTT. OF ELECTRONICS	113697	0	0	113697	31560	82137	0
12	Himalaya Drug Co.	92406	0	299998	392404	258900	133504	0
13	International Atomic Energy Agency	998706	0	2506218	3504924	1493705	2011219	0
14	Convatee Sayibb	2328	0	0	2328	0	2328	0
15	Rajiv Gandhi Foundation	237654	0	0	237654	238643	-989	0
16	Directorate of Education (NSS)	117564	0	0	117564	88467	29097	0
17	Torrent Pharma	49741	0	0	49741	0	49741	0
18	INDO-US	764123	0	0	764123	5090	759033	0
19	Ford Foundation	458594	0	0	458594	0	458594	0
20	Fulford India Ltd.	333592	0	0	333592	288257	45335	0
21	National Thalassemia Welfare Society	15545	0	60000	75545	45800	29745	0

22	INCLIN	940216	0	115070	1055286	1064672		-9386
23	Institute of Cancer Research UK co-ordination Committee	96441	0	0	96441	102066		-5625
24	Central Council for Research in Yoga & Naturopathy	22437	0	1299695	1322132	869962	452170	0
25	Ranbaxy /Elililly & company pvt Ltd	995808	0	3003903	3999711	975895	3023816	0
26	NATIONAL INSTITUTE OF HEALTH, USA	2813044	0	5103063	7916107	2488485	5427622	0
27	NIE	21860947	0	11723851	33584798	4955382	28629416	0
28	INSA	25331	0	0	25331	0	25331	0
29	SRB-Clinical Pharamacology	0	-3154100	0	-3154100	0		-3154100
30	Panacea biotech Ltd.	60712	0	437246	497958	370365	127593	0
31	Revolving Funds for Drugs. / SNMC	195710	0	0	195710	0	195710	0
32	Atomic Energy Regulatory Board	787833	0	0	787833	270852	516981	0
33	Pfizer Ltd.	1056496	0	1184723	2241219	1114979	1126240	0
34	NATCO Pharma India	352	0	0	352	0	352	0
35	University of Maryland	88875	0	85000	173875	67868	106007	0
36	Glaxo India Ltd.	217377	0	0	217377	0	217377	0
37	Ministry of Defence (D.R.D.O)	45274	0	427000	472274	91711	380563	0
38	Nova Nordisk India	446356	0	0	446356	307491	138865	0
39	Indian Institute of Technology	33950	0	0	33950	59387		-25437
40	Cystic Fibrosis/World Wide, USA	283830	0	0	283830	99180	184650	0
41	CONARD, USA	591	0	0	591	0	591	0
42	The Cancer Foundation	31015	0	375000	406015	393710	12305	0
43	Novartis India Ltd.	844656	0	1945166	2789822	487936	2301886	0
44	Maharishi Ayurveda	65512	0	0	65512	34210	31302	0
45	UN International Drug and crime Control Programme	766233	0	954456	1720689	687475	1033214	0
46	Russan Pharma Ltd Mumbai	163685	0	177000	340685	144180	196505	0
47	Central Council for Research in Ayurveda & Sidha	1034319	0	0	1034319	0	1034319	0
48	Ministry of Social Justice and Empowerment	77882	0	0	77882	0	77882	0
49	Quintiles Spectral India	3951678	0	3232754	7184432	3731269	3453163	0
50	Ministry of Communication and Information & Technology	397734	0	2619900	3017634	1041162	1976472	0
51	University of Bergan, Norway	1406211	0	1877996	3284207	2155765	1128442	0

52	Zydas Healthcare Ltd	0	-398	0	-398	0		-398
53	Oxford University, UK	3077936	0	696640	3774576	837156	2937420	0
54	Federation of Obstetric & Gynaecological	0	-276	0	-276	0		-276
55	Aimil Pharmaceutical India Ltd.	0	-331	0	-331	0		-331
56	Pharmacia India Pvt. Ltd	0	0	363375	363375	93781	269594	0
57	INCTR USA	662832	0	1542287	2205119	1200135	1004984	0
58	Emcure Pharmacetical Ltd.	0	-6380	100001	93621	95880		-2259
59	Neon Laboratories Ltd.	0	0	0	0	0	0	0
60	Delhi State Control Society/AIDS	1255	0	204600	205855	182800	23055	0
61	Bharat Biotech International Ltd	12241	0	0	12241	0	12241	0
62	L.G. Chemicals India Pvt Ltd.	0	-668	0	-668	0		-668
64	Wockhardt, Mumbai	21169	0	0	21169	0	21169	0
65	NSD (Security Deposit)	1512650	0	1298500	2811150	1112000	1699150	0
66	Sanofi Pasteur India Pvt Ltd	15834	0	0	15834	0	15834	0
67	Johnson & Johnson	632656	0	0	632656	334172	298484	0
68	Beijing Toshiba Pharmaceuticals Co. Ltd.	180235	0	0	180235	0	180235	0
69	C.P.W.W. Jersulam	6534	0	0	6534	0	6534	0
70	AVENTIS PHARMACEUTICALS, USA	14135	0	0	14135	0	14135	0
71	Dr. Reddy's Lab. Pvt. Ltd.	571332	0	60000	631332	504024	127308	0
72	Hindustan Latex Family Planning Promotion	0	0	0	0	7020		-7020
73	SIRO CLIN PHARMA PVT. LTD	124625	0	299239	423864	176252	247612	0
74	Charak Pharma (P)Ltd.	0	0	452997	452997	13590	439407	0
75	INCLIN & USAID	1113901	0	0	1113901	1241806		-127905
76	SAVING NEWBORN LIVES, USA	72067	0	0	72067	0	72067	0
77	DANIDA RESEARCH COUNCIL	19	0	0	19	0	19	0
78	THE MICRONUTRIENT INITIATIVE, ASIA	0	-4702	0	-4702	0		-4702
79	Ministry of Health And Family Welfare(N.A.C.O)	7713351	0	830411	8543762	5266582	3277180	0
80	The University of Albama, USA	85038	0	0	85038	18654	66384	0
81	Indian council of Philosophical Research	7920	0	81000	88920	84000	4920	0
82	Sterling Synergy System (P) Ltd.	103580	0	0	103580	40000	63580	0

83	Reliance Clinical Research Services (P) Ltd.	279340	0	814911	1094251	390208	704043	0
84	KLPF,USA	16473	0	0	16473	0	16473	0
85	Vulimini Ramalingaswami Foundation	0	-6508	0	-6508	0		-6508
86	Texas A&M Research Foundation (TAMRF) USA	16237	0	0	16237	0	16237	0
87	Biomerieux India (P)Ltd.	12011	0	0	12011	0	12011	0
88	Media Lab Asia	0	-11301	0	-11301	0		-11301
89	University of Warwick U.K	794528	0	212671	1007199	875492	131707	0
90	BHARAT SERUMS AND VACCINES LTD.	0	-10000	0	-10000	0		-10000
91	CD PHARMA INDIA PRIVATE LIMITED	273479	0	1977885	2251364	1639497	611867	0
92	CODMAN & SHURTLEFF, INC., USA	0	0	279500	279500	137362	142138	0
93	KHANDELWAL LABORATORIES LTD.	30805	0	0	30805	30000	805	0
94	Directorate General of Health Services	229227	0	430984	660211	365931	294280	0
95	Lajolla Pharmaceutical Company, California	60894	0	873234	934128	462115	472013	0
96	Institute De Recherches Internationales Servier (IRIS), France	56360	0	256425	312785	242216	70569	0
97	BONE & JOINT DECADE INDIA	130	0	0	130	0	130	0
98	Eli Lilly	0	0	121200	121200	10490	110710	0
99	ANTISENSE PHARMA GmbH, GERMANY	80789	0	89700	170489	111797	58692	0
100	I.S.H.T.M	72229	0	729612	801841	344214	457627	0
101	National Institute of Nutrition (NIN) Hyderabad	109	0	0	109	0	109	0
102	Peregrine Pharmaceuticals, USA	81154	0	677433	758587	372675	385912	0
103	Ozone pharmaceuticals ltd.	302034	0	0	302034	136000	166034	0
104	Ovation Pharmaceuticals, USA	312483	0	335196	647679	645810	1869	0
105	DELHI TAPEDIK UNMULAN SAMITI	194479	0	0	194479	181230	13249	0
106	John Hopkins Bloomberg School Of Public Health (JHBSPH)	404495	0	6903526	7308021	5169810	2138211	0
107	Clinigene International Pvt. Ltd	140449	0	293547	433996	73517	360479	0
108	D.R.D.O.	0	0	5418934	5418934	2703625	2715309	0
109	FREEDOM TRIAL	86253	0	0	86253	0	86253	0
110	DIGENE CORPORATION, USA	516136	0	0	516136	404834	111302	0

111	KOBE, JAPAN	10221	0	0	10221	0	10221	0
112	AYUSH, Ministry of Health and Family Welfare	2096	0	937450	939546	659060	280486	0
113	Troikaa Pharmaceutical Ltd	362	0	44850	45212	19798	25414	0
114	International Paedtrics Nephrology Association	12567	0	246000	258567	25484	233083	0
115	National Perinatal Epidemiology Unit, University of Oxford, UK	733028	0	1657206	2390234	1674943	715291	0
116	Center Oxford Research Committee	0	0	0	0	0	0	0
117	ABBOTT VASCULAR, USA	0	-3393	1095289	1091896	537240	554656	0
118	European Commission	1314551	0	1596620	2911171	2223197	687974	0
119	Synergy Network India Pvt Ltd,	551	0	0	551	0	551	0
120	Solvey Pharma Ltd.	13465	0	0	13465	0	13465	0
121	Relisys Medical Devices Ltd.	0	-3433	0	-3433	0	-3433	0
122	PPD Pharmaceutical Development India Pvt. Ltd.	167111	0	518416	685527	529812	155715	0
123	Auxilium Technical & Management Services Pvt. Ltd.	400	0	0	400	0	400	0
124	M/S ASPREVA PHARMACEUTICAL CORPORATION, CANADA	175745	0	0	175745	233809		-58064
125	University of South Carolina, USA	0	0	0	0	0	0	0
126	CLINIRx RESEARCH PVT. LTD. GURGAON, HARYANA	1813106	0	1179056	2992162	1735874	1256288	0
127	SANOFI-AVENTIS, USA	0	0	0	0	0	0	0
128	Central Council for Research in Unani Medicine	415952	0	2489276	2905228	1624251	1280977	0
129	CLINCYTE, USA	12938	0	0	12938	12273	665	0
130	M/S Markansas Research Division	158472	0	0	158472	163217		-4745
131	THRESHOLD PHARMACEUTICALS, USA	0	-3136	0	-3136	0		-3136
132	DTUS	0	0	0	0	0	0	0
133	London School of Hygiene & Tropical Medicine, UK	0	-2811	532635	529824	171983	357841	0
134	GlaxoSmith Kline Asia Private Ltd	1394124	0	1243682	2637806	940058	1697748	0

135	AJINOMOTA CO. JAPAN	162256	0	0	162256	118401	43855	0
136	The International Society for Paediatric Neurosurgery (ISPNE)	3369	0	67200	70569	49806	20763	0
137	MSD (India) Pvt. Ltd.	850106	0	0	850106	610240	239866	0
138	Fogarty International Centre,NIH, USA	0	0	0	0	0	0	0
139	Solumiks Herbaceuticals Limited	13	0	0	13	0	13	0
140	Cadila Health care ltd.	106752	0	684899	791651	485257	306394	0
141	South Asian Pneumococcal Aliance (SAPNA)	51547	0	0	51547	51547	0	0
142	Shire Human Genetic Therapies, Inc., USA	0	0	1876673	1876673	558558	1318115	0
143	Centocor Research & Development, USA	0	0	284798	284798	107900	176898	0
144	Neeman Medical International Asia Ltd.	129015	0	132340	261355	23970	237385	0
145	Apothecaries Ltd	42648	0	253500	296148	295713	435	0
146	PAREXEL INTERNATIONAL LTD., U.K.	109026	0	1726390	1835416	666303	1169113	0
147	OXIGENE, USA	0	0	414165	414165	236271	177894	0
148	Hindustan Latex Limited	77600	0	315000	392600	340143	52457	0
149	Ovrseas associates	0	0	65000	65000	64810	190	0
150	Biogen Idec Limited, UK	0	0	1272338	1272338	542795	729543	0
151	Global Cancer Concern India	58200	0	0	58200	54553	3647	0
152	N.C.Pvt. Ltd	0	0	200000	200000	153375	46625	0
153	N.C.T.	0	0	166646	166646	99173	67473	0
154	NAIP	0	0	377000	377000	230541	146459	0
155	UNIVERSITY OF CALGARY, CANADA	0	0	58956	58956	1769	57187	0
156	Archimedes Development Ltd, UK	0	0	0	0	0	0	0
157	CORVENTIS, USA	0	0	527879	527879	289949	237930	0
158	BRITISH COUNCIL, UK	0	0	1242216	1242216	37266	1204950	0
159	The Service de Dermatologie, France	0	0	138960	138960	147405		-8445
160	University of Western Australia	0	0	146990	146990	116810	30180	0
161	Centre For Chronic Disease Control	0	0	55969	55969	50679	5290	0
162	Lupin Limited	0	0	88000	88000	79614	8386	0
163	Coloplast	0	0	125094	125094	95239	29855	0

164	Piramal Life Sciences	0	0	80233	80233	27300	52933	0
165	Criterion	0	0	78739	78739	2363	76376	0
166	M/s ARCHIMEDES DEVELOPMENT LTD., UK	0	0	833884	833884	473779	360105	0
167	University of Nottingham, UK	0	0	15473	15473	15464	9	0
168	BRISTOL MEYER SQUIBB INDIA PRIVATE LIMITED	0	0	298444	298444	120122	178322	0
169	Brains Gate Ltd. ISRAEL	0	0	163208	163208	106937	56271	0
170	JIV DAYA FOUNDATION	0	0	200000	200000	44148	155852	0
171	QED PHARMACEUTICAL SERVICES PVT. LTD	0	0	100000	100000	3000	97000	0
172	Amgen Technologoy Private Limited	0	0	44335	44335	1330	43005	0
173	ACE PHARMACEUTICALS BV, NETHERLAND	0	0	782188	782188	23466	758722	0
174	Actelion Pharmaceuticals Ltd. Switzerland	0	0	227439	227439	16823	210616	0
175	Central Scientific Instruments Organisation	0	0	458865	458865	13766	445099	0
		325291129	-3207437	472484302	794567994	439967551	358040749	-3440306

(Smt. Basanti Dalal)
Financial Advisor(Offtg.)

APPENDIX - A1

ALL INDIA INSTITUTE OF MEDICAL SCIENCES RESEARCH SECTION

Statement of Expenditure Made for Purchasing Equipment during the Financial Year 2008-2009

S.No.	Code No.	Project Investigators	Month	Amount
1	N659	DR. A.K. MAHAPATRA	JUN.08	59,749
2	D243	DR.ALKA KRIPLANI	FEB.09	36,000
3	I508	DR.B.K. MOHANTI	DEC.08	45,656
4	N935	DR. BALRAMBHARGAVA	JUN.08	397,641
5	N935	DR. BALRAMBHARGAVA	AUG.08	14,500
6	N935	DR. BALRAMBHARGAVA	OCT.08	70,700
7	N935	DR. BALRAMBHARGAVA	NOV.08	90,760
8	N935	DR. BALRAMBHARGAVA	JAN.09	373,867
9	N935	DR. BALRAMBHARGAVA	FEB.09	3,995
10	N935	DR. BALRAMBHARGAVA	MAR.09	2,963,417
11	N935	DR. BALRAMBHARGAVA	JUL.08	79,405
12	N017	DR. BIR SINGH	OCT.08	54,340
13	N1077	DR. C.S. BAL	MAR.09	104,500
14	D231	DR. D.K. MITRA	OCT.08	465,271
15	N1073	DR.D.N. RAO	DEC.08	89,948
16	N1073	DR.D.N. RAO	FEB.09	11,250
17	I573	DR. D.S. ARYA	MAR.09	260,000
18	I570	DR. S.B. RAY	MAR.09	568,636
19	N1050	DR. GITA SATPATHY	MAR.09	994,065
20	D234	DR. H.K. PRASAD	OCT.08	420,873
21	N835	DR. H.N. MALLICK	JAN.09	26,100
22	I547	DR. K. ANAND	JUL.08	40,417
23	I543	DR. KALPANA LUTHRA	JUN.08	29,925
24	N966	DR. KAMESHWAR PRASAD	SEP.08	111,400
25	N966	DR. KAMESHWAR PRASAD	FEB.09	480,472
26	N968	DR. KAMESHWAR PRASAD	AUG.08	13,534
27	N968	DR. KAMESHWAR PRASAD	SEP.08	949,181
28	N968	DR. KAMESHWAR PRASAD	NOV.08	22,194
29	N968	DR. KAMESHWAR PRASAD	MAR.09	48,608
30	I560	DR. M.L. KHURANA	MAR.09	59,456

31	I516	DR. MADHULIKA KABRA	MAR.09	8,000
32	N1008	DR. MADHULIKA KABRA	JUN.08	16,600
33	N962	DR. MADHULIKA KABRA	MAY.08	156,000
34	N962	DR. MADHULIKA KABRA	JUL.08	265,442
35	N962	DR. MADHULIKA KABRA	AUG.08	624,328
36	N962	DR. MADHULIKA KABRA	SEP.08	895,921
37	N962	DR. MADHULIKA KABRA	OCT.08	446,575
38	N962	DR. MADHULIKA KABRA	NOV.08	98,875
39	N962	DR. MADHULIKA KABRA	JAN.09	411,614
40	N962	DR. MADHULIKA KABRA	FEB.09	55,125
41	N962	DR. MADHULIKA KABRA	MAR.09	2,989,886
42	N899	DR. MADHURI BEHARI	JAN.09	254,250
43	N936	DR. MADHURI BEHARI	MAR.09	103,990
44	N992	DR. N.C. CHANDRA	MAY.08	39,870
45	N992	DR. N.C. CHANDRA	NOV.08	50,625
46	I510	DR. N.K. MEHRA	OCT.08	988,865
47	I510	DR. N.K. MEHRA	FEB.09	83,890
48	N781	DR. N.K. MEHRA	MAY.08	20,250
49	N934	DR. N.K. MEHRA	JUN.08	112,000
50	N972	DR. N.K. MEHRA	AUG.08	453,212
51	N972	DR. N.K. MEHRA	FEB.09	588,971
52	N972	DR. N.K. MEHRA	MAR.09	336,085
53	N982	DR. N.K. MEHRA	FEB.09	22,100
54	D233	DR. N.R. JAGANNATHAN	NOV.08	74,227,853
55	I479	DR. NIKHIL TANDON	DEC.08	64,125
56	N570	DR. NIKHIL TANDON	JUL.08	55,107
57	N612	DR. NAVEET WIG	OCT.08	9,450
58	N903	DR. NEERJA BHATLA	MAY.08	6,250
59	N1071	DR. NEETA SINGH	MAR.09	327,660
60	N1040	DR. GOVIND MAKHARIA	SEP.08	94,629
61	I474	DR. O.P. KHARBANDA	JUN.08	40,417
62	I474	DR. O.P. KHARBANDA	DEC.08	28,000
63	N698	DR. PEUSH SAHNI	JAN.09	67,219
64	N1081	DR. PRAMOD GARG	DEC.08	92,880
65	N1081	DR. PRAMOD GARG	MAR.09	263,125
66	N1002	DR. PRATIMA RAY	MAR.09	3,609,814
67	D239	DR. PUNIT KAUR	MAR.09	599,690
68	D227	DR. R.LAKSHMY	OCT.08	324,390
69	I522	DR. R.M. PANDEY	MAR.09	71,768

70	N848	DR. RAKESH KUMAR	DEC.08	89,120
71	D232	DR. RANDEEP GULERIA	OCT.08	624,993
72	N671	DR. RANDEEP GULERIA	OCT.08	322,400
73	N954	DR. RANDEEP GULERIA	JUL.08	28,100
74	N687	DR. S.K. ACHARYA	NOV.08	25,000
75	N967	DR. S.K. PANDA	OCT.08	1,343,013
76	N984	DR. S.K. PANDA	OCT.08	4,195,992
77	N719	DR. S.K. SHARMA	OCT.08	14,930
78	N755	DR. S.K. SHARMA	MAR.09	93,720
79	N911	DR. S.K. SHARMA	SEP.08	1,482,563
80	N911	DR. S.K. SHARMA	JAN.09	1,142,438
81	N1004	DR. S.S. CHAUHAN	SEP.08	507,070
82	N1004	DR. S.S. CHAUHAN	OCT.08	495,343
83	N1004	DR. S.S. CHAUHAN	DEC.08	261,077
84	N1004	DR. S.S. CHAUHAN	FEB.09	178,921
85	N1004	DR. S.S. CHAUHAN	MAR.09	327,660
86	D223	DR. SARMAN SINGH	MAR.09	51,636
87	N906	DR. SARMAN SINGH	SEP.08	631,580
88	D241	DR. SAVITA YADAV	NOV.08	281,455
89	N1106	DR. SAVITA YADAV	MAR.09	487,453
90	D022A	DR. SHASHI WADHWA	JUL.08	38,289
91	N1085	DR. SHASHI WADHWA	MAR.09	4,023,004
92	N1088	DR. SHINJINI BHATNAGAR	MAR.09	98,415
93	N737	DR. SHINJINI BHATNAGAR	AUG.08	19,543
94	N917	DR. SHINJINI BHATNAGAR	MAY.08	355,011
95	I435	DR. SHOBHA BROOR	MAY.08	4,100
96	I435	DR. SHOBHA BROOR	SEP.08	161,200
97	I435	DR. SHOBHA BROOR	OCT.08	16,000
98	I435	DR. SHOBHA BROOR	NOV.08	195,400
99	I435	DR. SHOBHA BROOR	JAN.09	20,442
100	I435	DR. SHOBHA BROOR	FEB.09	24,700
101	I435	DR. SHOBHA BROOR	MAR.09	1,734,444
102	N1051	DR. SHOBHA BROOR	NOV.08	225,621
103	N1051	DR. SHOBHA BROOR	JAN.09	413,817
104	N945	DR. SNEHANAND	OCT.08	185,237
105	N945	DR. SNEHANAND	OCT.08	83,200
106	D192	DR. SUBRATA SINHA	MAR.09	2,010,178
107	N893	DR. SUBRATA SINHA	MAY.08	260,000
108	N893	DR. SUBRATA SINHA	JUL.08	102,577

109	N893	DR. SUBRATA SINHA	SEP.08	1,118,241
110	D214	DR. SUJATA SHARMA	MAY.08	39,847
111	D214	DR. SUJATA SHARMA	JUL.08	89,550
112	D240	DR. SUJATA SHARMA	JAN.09	99,400
113	D240	DR. SUJATA SHARMA	MAR.09	822,250
114	I1013	DR. SUNEETA MITTAL	DEC.08	67,680
115	I492	DR. SURYABHAN	MAR.09	1,524,280
116	N878	DR. T.P. SINGH	FEB.09	26,000
117	N970	DR. T. VELPANIDAN	FEB.09	603,058
118	N052	DR. Y.D. SHARMA	FEB.09	272,250
119	N672	DR. CHETAN D. PATEL	JUL.08	32,948
120	N1033	DR. SUSHMA BHATNAGAR	MAR.09	190,785
121	C618	DR. B.R. MIRDHA	JAN.09	99,000
122	C618	DR. B.R. MIRDHA	MAR.09	97,594
123	N815	DR. ARVIND BAGGA	AUG.08	36,465
124	I513	DR. RIMA DADA	NOV.08	301,209
125	I558	DR. RIMA DADA	AUG.08	411,750
126	I558	DR. RIMA DADA	SEP.08	258,539
127	N959	DR. SATYA N DAS	MAY.08	276,208
128	N932	DR. SEEMA SOOD	MAY.08	20,292
129	D194	DR. SHARMISTHA DEY	OCT.08	22,875
130	C615	DR. SUMAN JAIN	JUN.08	118,687
131	N872	DR. SANJEEV SINHA	AUG.08	56,137
132	N975	DR. SANJEEV SINHA	AUG.08	323,960
133	N975	DR. SANJEEV SINHA	JAN.09	34,000
134	I551	DR. SEEMA SEN	JUN.08	218,209
135	I551	DR. SEEMA SEN	DEC.08	61,762
136	I551	DR. SEEMA SEN	JAN.09	6,021
137	I501	DR. V. SREENIVAS	JAN.09	4,669
138	N1007	DR. RITU DUGGAL	OCT.08	78,500
139	N1007	DR. RITU DUGGAL	JAN.09	40,820
140	N1007	DR. RITU DUGGAL	MAR.09	202,446
141	I545	DR. ANUSHREE GUPTA	MAY.08	19,931
142	I545	DR. ANUSHREE GUPTA	JUN.08	26,090
143	I545	DR. ANUSHREE GUPTA	JAN.09	233,986
144	I545	DR. ANUSHREE GUPTA	FEB.09	37,091
145	N1021	DR. BALRAM AIRAN	OCT.08	3,990,233
146	N1021	DR. BALRAM AIRAN	FEB.09	499,325
147	N1021	DR. BALRAM AIRAN	MAR.09	15,712,786

148	I500	DR. AMLESH SETH	FEB.09	99,784
149	I546	DR. S. VEVEKANANDHAN	MAR.09	211,150
150	N947	DR. S. VEVEKANANDHAN	MAR.09	211,150
151	C617	DR. RAJ KUMAR YADAV	MAY.08	186,923
152	C617	DR. RAJ KUMAR YADAV	JUN.08	38,289
153	C617	DR. RAJ KUMAR YADAV	AUG.08	89,243
154	N976	DR. RAJ KUMAR YADAV	JAN.09	65,250
155	N976	DR. RAJ KUMAR YADAV	FEB.09	123,987
156	N976	DR. RAJ KUMAR YADAV	MAR.09	64,500
157	D202	DR. VEENA KALRA	MAY.08	2,154,336
158	N938	DR. S.C. MAHAPATRA	FEB.09	34,250
159	I540	DR. A.K. MUKHOPADHYAY	MAY.08	439,573
160	I574	DR. A.K. MUKHOPADHYAY	MAR.09	416,000
161	N1053	DR. RITU GUPTA	JAN.09	551,959
162	N1053	DR. RITU GUPTA	FEB.09	60,989
163	N944	DR. RITU GUPTA	SEP.08	74,880
164	N944	DR. RITU GUPTA	NOV.08	56,812
165	I550	DR. SUJATA MOHANTY	SEP.08	308,854
166	N875	DR.SANJEEV SHARMA	AUG.08	8,800
167	D221	DR. B.S. SHARMA	MAR.09	1,561,587
168	N912	DR. J.B. SHARMA	JUL.08	9,850
169	N912	DR. J.B. SHARMA	JAN.09	9,450
170	N919	DR. PRATAP SHARAN	JUL.08	4,900
171	N997	DR.P. SARAT CHANDRA	JUN.08	24,269
172	N1056	DR. ALPANA SHARMA	MAR.09	327,660
173	N1023	DR.GURPREET GULATI	NOV.08	111,647
174	N1023	DR.GURPREET GULATI	FEB.09	80,000
175	N1006	DR.ANITA DHAR	SEP.08	3,340,533
176	N1016	DR.SHYAM PRAKASH	SEP.08	26,640
177	N1009	DR. SOMESH GUPTA	JUL.08	42,591
178	N1038	DR. SANDEEP SETH	MAR.09	71,500
179	N950	DR. UMA KUMAR	JAN.09	86,387
180	N950	DR. UMA KUMAR	MAR.09	93,620
		GRANDTOTAL		159,408,590

(Smt. Basanti Dalal)
Financial Advisor(Offtg.)

Appendix B

ALL INDIA INSTITUTE OF MEDICAL SCIENCES LIST OF SUNDRY DEBTORS (SCHEME CELL)

S.No.	Funding Agency	Debit
1	INCLEN	9386
2	Institute of Cancer Research UK co-ordination Committee	5625
3	SRB-Clinical Pharmacology	3154100
4	Indian Institute of Technology	25437
5	Zydas Healthcare Ltd.	398
6	Federation of Obsteric & Gynaecological	276
7	Aiimil Pharmaceutical India Ltd.	331
8	Emcure Pharmaceutical Ltd.	2259
9	L.G. Chemicals India Pvt. Ltd.	668
10	Hindustan Latex Family Planning Promotion	7020
11	INCLEN & USAID	127905
12	THE MICRONUTRIENT INITIATIVE, ASIA	4702
13	Vulimini Ramalingaswami Foundation	6508
14	Media Lab Asia	11301
15	BHARAT SERUMS AND VACCINES LTD.	10000
16	M/S ASPREVA PHARMACEUTICAL COPRORATION, CANADA	58064
17	M/S Markansas Research Division	4745
18	THRESHOLD PHARMACEUTICALS, USA	3136
19	The Service de Dermatologie, France	8445
	TOTAL	3440306

(Smt. Basanti Dalal)
Financial Advisor(Offtg.)

Appendix-C

ALL INDIA INSTITUTE OF MEDICAL SCIENCES STATEMENT SHOWING THE DONATIONS & INVESTMENT AS ON 31-03-09

<u>S.NO.</u>	<u>PARTICUALRS & MODE OF INVESTMENT</u>	<u>AMOUNT OF DONATION</u>	<u>AMOUNT OF INVESTMENT</u>
1	AIIMS ROTARY CANCER HOSPITAL	700000	700000
2	MISC. DONATION - HEAMOTOLOGY UNDER Dr. A.K. SARAYA	8000	8000
3	R.S. NANDA (UNIT TRUST)	78274	78274
4	ANNONYMOUS DONORS	70000	70000
5	DR. B.B. DIXIT LIB.	10000	13700
6	CHACHAMA DONORS	150000	199600
7	MJ. GENERAL S.L. BHATIA	10000	9800
8	MJ. GENERAL AMIR CHAND	150000	149660
		100000	100000
9	SARUP CHAND HANS RAJ	20000	19500
10	RAJ KUMARI AMRIT KAUR	25000	25000
11	KATHERINE SORAL FREYMAN	5000	5000
12	DR. S.L. KALRA	6000	5800
13	R.L. RAJGARHIA	850000	850000
14	SMT. PRAKASH WATI DONATION	13800	13800
15	SMT. KRIPAL KAUR (UNIT TRUST)	6000	5908
16	SMT. KAUSHALYA THAPAR (UNTI TRUST)	12000	12017
17	SH. G.D JHANGINI	25500	25602
18	LALA KHUSHI RAM	247753	247753

19	SMT. BRIJ RANI SAWHENY (UNIT TRUST)	22501	22472
20	S.P. VIRMANI (FIXED DEPOSIT)	1500	1500
21	EAST INDIA COMMERCIAL PVT. LTD CALCUTTA (FIXED DEPOSIT) SRB	3200000	2800000
22	DR. KANTI KAPILA (UNIT TRUST)	10079	10002
23	DR. V. RAMALINGASWAMI (UNIT TRUST)	8000	7996
24	SR. S. SABHARWAL (UNIT TRUST)	10000	9951
25	DR. N.H. KASWANI (UNIT TRUST)	10000	9990
26	DR. B.K. ANAND (UNIT TRUST)	5000	4995
27	DR. V. HINGORANI	15000	15000
28	KUMUDINI KRISHNA MOORTHY	15000	15000
29	G.D. RADHAKRISHNA (SARWESHWARI MEMORIAL ORATION, UNIT TRUST)	20000	19987
30	P.L. TANDON (FIXED DEPOSIT)	15000	15000
31	XV INTERNATIONAL CONGRESS OF PEADIATRICS (UNIT TRUST)	40000	40000
32	RAM LOBHAYA DONATION (FIXED DEPOSIT)	15000	15000
33	SUBHASH MEMORIAL FOUNDATION (V.L. TELEKAR DONATION)	10101	10101
34	SMT. INDIRA SATYANAND	10000	10000
35	SH. K.V. SUBA RAO	10000	10000
36	NEWZELAND HIGH COMMISSION	10000	10000
37	AKHILESH MITTAL (SUMITH MOHAN SADAN DAYAL TRUST)	20000	20000

38	PREMALATA KAPOOR	10000	10000
39	DWARKA PRASAD TRUST	50000	50000
40	LATE. SH. D.R. BAHRI	15000	15000
41	SEWARAM	15000	15000
42	FACULTY BENEVELENT FUND	60065	60065
43	V.RANGA MEMORIAL TRUST	50000	50000
44	SH. DORABJI TRUST	10000	10000
45	CORPUS FUND	30000	30000
46	AIIMSONIANS	10000	10000
47	SARLA ATAM PRAKASH	15000	15000
48	K.L. WIG RESEARCH FOUNDATION	100000	100000
49	KAMLA B.K. ANAND	100000	100000
50	V.K. MITTAL	130000	130000
51	SNEH LATA SONI	15000	15000
52	AIIMSONIAN OF AMERICA	129850	129850
		151630	151630
		126471	126471
53	SMT. LEELA WATI SALWAN	15000	15000
54	DR. D.K. GUPTA	100000	100000
55	J.R. CHAWLA	15000	15000
56	URMIL SHARMA IN R/O SHYAM SHARMA	15000	15000
57	SMT. SUSHILA WATI MALHOTRA	500000	500000
58	BASANTI KUMARI	100000	100000
59	ORTHO PAEDICS FUND	250000	250000
60	DR. S.B. ROY	125000	125000
61	MR. R.V. KANDHARI	100000	100000

62	DR. B.K. KAPOOR	125000	125000
63	SMT.SAVITRI UGGARSEAN	100000	100000
64	VIMAL LAUMAS	200000	200000
65	MRS. PRAMADA BAJAJ	200000	200000
66	DR. V. RAMALINGASWAMI	100000	100000
67	DR. N.C. NAYAK	100000	100000
68	DR. H.D. TANDON	100000	100000
69	PROF. N. GOPINATH (CTVS)	1200000	1200000
70	PROF. L.K. BHUTANI ORATION	500000	500000
71	BINEY ROHTAGI & SMT. SHAKUNTALA	36000	-
72	Dr. K.L. WIG (SBI)	36990	37000
73	ZENITH FINANCE & CO. (SBI)	17000	17000
74	KAMANI CHARITY TRUST (SBI)	15000	15000
75	G.P.F. INVESTMENT	17831	93465
76	N.P.S. INVESTMENT	7720	0000
	TOTAL	<u>10902514</u>	<u>1870911889</u>

(Smt. Basanti Dalal)
Financial Advisor(Offtg.)

Appendix-D

ALL INDIA INSTITUTE OF MEDICAL SCINECES

Details of Misc. Donations as on 31.3.2009

<u>S.NO.</u>	<u>DEPARTMENT</u>	<u>OP. BAL. AS ON</u> <u>1/4/2008</u>	<u>GRANT</u>	<u>TOTAL</u>	<u>EXPD.</u>	<u>CL. BAL AS ON</u> <u>31-03-2009</u>
1	R & AL	19475		19475		19475
2	PSYCHIATRY	28495		28495		28495
3	HEAMATOLOGY	12380		12380		12380
4	ORTHO	65586		65586		65586
5	IMMUNOLOGY	824		824		824
6	PAED SURGERY	32041		32041		32041
7	INSTT. MISC.	137338		137338		137338
8	DERMATOLOGY	15974		15974		15974
9	IRCH DR. V. KOCHUPILLAI	10460		10460		10460
10	LEPROSY PATIENT	115785		115785		115785
11	IRCH DR. A.K. BASU	17651		17651		17651
12	CN CENTRE	20418		20418		20418
13	BB DIXIT LIB	3324		3324		3324
14	EMP. WELFARE FUND	125139		125139		125139
15	PMR POOR FUND	44199		44199	10000	34199
16	SURGERY	501		501		501
17	K.L. WIG CEMET	12021		12021		12021
18	N/MEDICINE	19571		19571		19571
19	CEU	30000		30000		30000
20	DR. NK MEHRA	25235	572000	597235		597235

21	I.C.G.E.B. DR. T.P SINGH	444630		444630		444630
22	DR. VEENA KALRA	84778		84778	10096	74682
23	LEVER CLINIC - GASTRO	2865		2865		2865
24	DR. N.P. GUPTA -UROLOGY	4982		4982		4982
25	DR. N. KOCHUPILLAI-POOR PT.	120000		120000		120000
26	PEAD. GENETICS	355640	546605	902245	502485	399760
27	MRS. USHA SHARMA	176600		176600		176600
		<u>1925912</u>	<u>1118605</u>	<u>3044517</u>	<u>522581</u>	<u>2521936</u>

(Smt. Basanti Dalal)
Financial Advisor(Offtg.)

Appendix-E

ALL INDIA INSTITUTE OF MEDICAL SCIENCES
Details of Misc. Deposits as on 31.3.2009
2008-2009

S.NO.	NAME OF THE DEPARTMENT	AMOUNT
1	Controller of Printing & Stationary	16076
2	C.P.W.D. Shimla	70432
3	C.P.W.D.	7096
4	Delhi Municipal Corporation	33750
5	Indian Institute of Technology	4250
6	N.D.M.C.	173242
7	P. & T. Circle Division	12796
8	Indian Telephone Industries	13344
TOTAL		330986

(Smt. Basanti Dalal)
Financial Advisor(Offtg.)

Appendix - F

ALL INDIA INSTITUTE OF MEDICAL SCIENCES
Details of GPF Investment
2008-2009

Opening Balance of Investment as on 1.4.2008	1729693465
Investment during 2008-09	495500000
Closing balance as on 31.3.2009	17231023
	<hr/> 2242424488
Investment matured during 2008-09	442000000
	<hr/> 1800424488

Details of NPS Investment 2008-2009

Opening Balance of Investment as on 1.4.2008	25000000
Investment during 2008-09	62200000
Add Closing Balance of C.B. as on 31.3.2009	23713651
after correction as per audit para A.2.2	110913651
Investment matured during 2008-09	10000000
	<hr/> 100913651

(Smt. Basanti Dalal)
Financial Advisor(Offtg.)

12.2 Audit Report

Separate Audit Report of the Comptroller & Auditor General of India on the Accounts of All India Institute of Medical Sciences (AIIMS) for the year ended 31 March 2009

We have audited the attached Balance Sheet of All India Institute of Medical Sciences (AIIMS) as on 31 March 2009 and the Income & Expenditure Account/Receipts & Payment Account for the year ended on that date under Section 19(2) of the Comptroller and Auditor General's (Duties, Powers & Conditions of Service) Act, 1971 read with section 18(2) of the All India Institute of Medical Sciences Act, 1956. These financial statements are the responsibility of the AIIMS's management. Our responsibility is to express an opinion on these financial statements based on our audit.

2. This separate Audit Report contains the comments of the Comptroller and Auditor General of India on the accounting treatment only with regard to classification, conformity with the best accounting practices, accounting standards and disclosure norms, etc. Audit observations on financial transactions with regard to compliance with the Law, Rules & Regulations (Propriety and Regularity) and efficiency-cum-performance aspects, etc., if any are reported through Inspection Reports/Comptroller and Auditor Generals' Audit Reports separately.
3. We have conducted our audit in accordance with auditing standards generally accepted in India. These standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatements. An audit includes examining, on a test basis, evidences supporting the amounts and disclosure in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management as well as evaluating the overall presentation of financial statements. We believe that our audit provides a reasonable basis for our opinion.
4. Based on our audit, we report that:
 - i We have obtained all the information and explanations which to the best of our knowledge and belief were necessary for the purpose of our audit;
 - ii The Balance Sheet and Income & Expenditure Account/Receipt & Payment Account dealt with by this report have not been drawn up in the format approved by the Ministry of Finance, Department of Expenditure, Controller General of Accounts.
 - iii In our opinion, proper books of accounts and other relevant records have been maintained by the AIIMS in so far as it appears from our examination of such books.
- iv We further report that :

A Balance Sheet

A.1 Assets

A.1.1 Understatement of assets by Rs. 19.71 lakh (AIIMS Main)

Institute had shown vehicles condemned worth Rs. 19,70,729 and reduced the same amount from the head “Vehicles” on the asset side of balance sheet and from capital fund on the liabilities side though the condemned vehicles were not auctioned as on 31.03.2009. This resulted in understatement of Assets and Capital funds by Rs. 19,70,729.

A.1.2 Understatement of assets by Rs. 15.51 crore (AIIMS Main)

The closing balance of GPF bank account was Rs. 17,23,10,203 while the Institute had shown it as Rs. 1,72,31,023 resulting in understatement of assets and liabilities by Rs. 15,50,79,180.

A.1.3 Understatement of assets by Rs. 1,85,75,917 and overstatement of capital fund by Rs. 1,77,76,216 Dr. BRA Institute Rotary Cancer Hospital (D)

The Institute had received LC (letter of credit) of Rs. 1,85,74,917 from the bank pertaining to the year 2006-07 including interest of Rs. 7,98,701 as Machinery and Equipment (Plan) refund and taken it as Grant-in-aid (Plan) on receipt side of Receipt and Payment Account of IRCH. However, the Institute deducted the same amount from the head “Machinery and Equipment” on the asset side of Balance Sheet instead of deducting it from the head “Advance payment to foreign purchase for Machinery and Equipment” in which the amount of Rs. 1,77,76,216 in respect of LC was placed for adjustment. This resulted in overstatement of head “Advance payment to foreign purchase for Machinery and Equipment” by Rs. 1,77,76,216 and understatement of head “Machinery and Equipment” by Rs. 1,85,74,917 in the Balance Sheet. Moreover, as the same amount of Rs. 1,77,76,216 was capitalized during 2006-07, and when refund was received, this amount was supposed to be reduced from capital fund also. As this was not reduced, this resulted in overstatement of capital fund by Rs. 1,77,76,216.

A.1.4 Understatement of assets by Rs. 1.75 crore Dr. BRA Institute Rotary Cancer Hospital (D)

Machinery of Rs. 1.75 crore which was received during the year 2007-08 (Payment made on 12.12.2007 for LC no. 7/316) had not been included under the head “Machinery and Equipment” on the asset side of the Balance Sheet but still lying under the head “Advance payment to foreign purchase for Machinery and Equipment”. This resulted in overstatement of advance and under statement of “Machinery and Equipment” by Rs. 1.75 crore.

A.1.5 Understatement of capital fund by 3.09 crore Dr. BRA Institute Rotary Cancer Hospital (D)

Institute had shown assets of Rs. 11,43,48,296, created during the year, on assets side of balance sheet while the Institute capitalised only Rs. 8,34,00,000 on the Liabilities side. This resulted in understatement of Capital Fund by Rs. 3,09,48,296.

A.1.6 Overstatement of assets by Rs. 3.96 lakh (Patient Treatment Account - Institute Rotary Cancer Hospital)

The closing balance of Rs. 2,89,67,307 in respect of Patient Treatment Account (IRCH) had been shown as per bank statement instead of cash book balance which was Rs. 2,85,71,796 resulting in overstatement of closing balance by Rs. 3,95,511 in the Balance Sheet.

A.1.7 Fixed assets

No depreciation was provided on fixed assets resulting in overstatement of assets and under statement of expenditure.

The schedule of fixed assets showing the opening balance, additions, deletion, depreciation and closing balance have not been attached.

A.1.8 Investments-Non adherence to the approved pattern of investment for G. P. Fund accumulations.

The investment of accumulated funds of General Provident fund balance of Rs. 178.32 crore was not made as per the pattern prescribed by the Ministry of Finance vide notification no. F.5 (53)/2002-ECB & PR dated 24.1.2005.

A.2 Liabilities

A.2.1 Understatement of liabilities – Capital Fund by Rs. 3.82 crore (J.P.N. Apex Trauma Centre)

The Institute had shown assets of Rs. 12,43,79,510 created during the year while it capitalised only Rs. 8,62,00,505 on the Liabilities side. This resulted in understatement of Capital Fund by Rs. 3,81,79,005.

B Income and Expenditure Account

B.1 Income

B.1.1 Understatement of income Dr. BRA Institute Rotary Cancer Hospital (D)

An amount of Rs. 1.86 crore refunded by bank (L.C. amount) under the head “Machinery & Equipment (Plan)” also includes interest of Rs. 7.99 lakh but the Institute had not taken it as income resulting in understatement of income by Rs. 7.99 lakh.

B.1.2 Understatement of income by Rs. 13.74 lakh (Neuro Surgery Patient Accounts)

Interest of Rs. 13.74 lakh earned on the FDRs had not been taken as income resulting in understatement of income by Rs. 13.74 lakh.

B 1.3 Understatement of income by Rs. 45.10 lakh (Gamma Knife Patient Accounts)

Interest of Rs. 45.10 lakh earned on FDRs was not been taken as income resulting in understatement of income by Rs. 45.10 lakh.

B 1.4 Overstatement of income by Rs. 115.29 lakh (J.P.N. Apex Trauma Centre)

The Institute had shown income of Rs. 1,15,29,018 as hospital receipts (Rs. 77,53,981) and Interest on TDRs (Rs. 37,75,037) on the Income side which was incorrect as the Institute had already created assets of this income and taken in the balance sheet during the year. This resulted in overstatement of Income by Rs. 1,15,29,018.

C. Receipts & Payment Accounts

C.1.1 Understatement of Receipts and Payment by Rs. 5.72 lakh (Neuro Surgery Patient Accounts)

The payment of Rs. 5.72 lakh was made to CN Centre and was deducted from the receipt side instead of showing it on the payment side. This not only resulted in understatement of receipts by Rs. 5.72 lakh but also payments side by the same amount.

C.1.2 Understatement of Receipts by Rs. 6.42 lakh (Patient Treatment Account - Institute Rotary Cancer Hospital)

The centre had deducted “Cheques deposited but not credited by the bank” amounting to Rs. 6,41,800 from the total receipt resulting in understatement of receipts by Rs. 6,41,800

C.1.3 Understatement of payment by Rs. 10.37 lakh (Patient Treatment Account of Institute Rotary Cancer Hospital)

The centre had deducted “Cheques issued but not debited by the bank” amounting to Rs. 10,37,311 from the total expenditure resulting in understatement of payment by Rs. 10,37,311.

D. General

D.1.1 Difference between the closing balances shown in the Balance sheet and of broadsheet

There was a difference between the closing balances shown in the Balance sheet and in the broadsheet of various advances for the year 2008-09, the details of which are given below :-

Name of advances	Closing balance		Difference(Rs.)
	As per balance sheet (Rs.)	As per broad sheet (Rs.)	
Car Advance	2535716	2929801	394085
Motor Cycle advance	970183	1239726	269543
Bicycle advance	129028	143349	14321
Computer Advance	3594493	3606358	11865
HBA	18772400	19405021	632621

The above differences need to be reconciled.

E Grants in aid

The institute is mainly financed from the grants of Government of India. During the year 2008-09 the institute received grants of Rs. 660.92 crore {Plan Rs. 218.00 crore and Non-Plan Rs. 435.42 crore and Rs. 7.50 crore (Plan) for NDDTC.} It also had its own income of Rs. 101.09 crore from hospital receipts, tuition fee, examination fee, license fee and interest income etc. The total plan expenditure was Rs. 118.62 crore and Rs. 111.95 crore was utilised for giving advances for various purposes. The total non plan expenditure was Rs. 489.20 crore and Rs. 2.09 crore was given to suppliers etc. as advances. The institute received grants for various schemes for Rs. 47.25 crore and incurred an expenditure of Rs. 44.00 crore.

F Management letter: Deficiencies which have not been included in the Audit Report have been brought to the notice of the Director, AIIMS, through a management letter issued separately for remedial /corrective action.

- v. Subject to our observations in the preceding paragraphs, we report that the Balance sheet and Income and Expenditure Account /Receipts and Payments Account dealt with by this report are in agreement with the books of accounts.
- vi. In our opinion and to the best of our information and according to the explanations given to us, the said financial statements read together with the Accounting Policies and Notes on Accounts, and subject to the significant matters stated above and other matters mentioned in Annexure to this Audit Report give a true and fair view in conformity with accounting principles generally accepted in India;
 - a. In so far as it relates to the Balance Sheet, of the state of affairs of the All India Institute of Medical Sciences as at 31 March 2009; and
 - b. In so far as it relates to Income and Expenditure Account of the surplus for the year ended on that date

Place: New Delhi	Director General of Audit
Date: 04-11-2009	Central Expenditure

Annexure to Audit Report

1. Adequacy of internal audit system

- The Institute did not have any internal audit manual.
- As per the audit plan, 70 units were to be audited during 2008-09 but due to non-availability of staff no unit was audited during the year.

2. System of physical verification of fixed assets

- The physical verification of fixed assets had not been conducted during 2008-09.

3. Regularity in payment of statutory dues

- As per the accounts, no statutory dues over six months were outstanding.

**Replies/comments to the Separate Audit Report of the Comptroller &
Auditor General of India on the Accounts of All India Institute of Medical
Sciences (AIIMS) for the year ended 31 March 2009**

A.1.1 Understatement of assets by Rs. 19.71 lakh (AIIMS Main)

The amount of Rs.19,70,729/- has been reduced from Capital fund and Assets side of Balance Sheet due to fact that the vehicles have been actually condemned during the year 2008-09. However, the point has been noted for future compliance and sale proceeds will be credited as revenue receipt as and when condemned item are auctioned.

A.1.2 Understatement of assets by Rs. 15.51 crore (AIIMS Main)

In this connection it is stated that figure Rs.1,72,31,023/- shown in the balance sheet is due to typographical error. The facts stated in the memo are correct. However, discrepancy as pointed out will be rectified while preparing next years Annual Accounts.

A.1.3 Understatement of assets by Rs. 1,85,75,917 and overstatement of capital fund by Rs. 1,77,76,216 (Institute Rotary Cancer Hospital)

The discrepancies pointed out by Audit has been noted and would be made good/rectified in the Annual Account for the year 2009-10.

A.1.4 Understatement of assets by Rs. 1.75 crore (Institute Rotary Cancer Hospital)

The discrepancies pointed out by Audit has been noted and would be made good/rectified in the Annual Account for the year 2009-10.

A.1.5 Understatement of capital fund by 3.09 crore (Institute Rotary Cancer Hospital)

The discrepancies pointed out by Audit has been noted and would be made good/rectified in the Annual Account for the year 2009-10.

A.1.6 Overstatement of assets by Rs. 3.96 lakh (Patient Treatment Account - Institute Rotary Cancer Hospital)

The discrepancies pointed out by Audit has been noted and would be made good/rectified in the Annual Account for the year 2009-10.

A.1.7 Fixed assets

The Institute prepares its accounts on actual receipt & expenditure basis. Further, no depreciation on machinery & equipment, vehicles etc. has been provided as the AIIMS is fully funded by the Government of India. A foot-note in this regard has already been given in the balance sheet to justify the action taken.

A.1.8 Investments-Non adherence to the approved pattern of investment for G. P. Fund accumulations.

All investments have been made keeping in view the safety of the funds of the employees. Hence, to earn interest on the funds while maintaining the safety investments have been made mainly with public sector banks in terms of Ministry of Finance, Deptt. Of Expenditure's O.M. No. F.No.7(2)/E Coord/2007 dated 15th January, 2008 (copy enclosed) Para 3 of the ibid O.M provides as under:-

“It has also been brought to the notice of the Government that in recent times there is an emerging practice of inviting competitive bids for placing bulk deposits with banks. As consequence, there is undesirable competition amongst banks leading to arbitrary hikes in deposit rate (even for short periods) which have consequences for the economy. “It is therefore, advised that the practice of inviting competitive bids for bulk deposits should be discontinued forthwith. Any department/Ministry or any of the agencies/entities/bodies referred to in para 2 above should place their bulk deposits with the banks (s) with whom they have regular course of business, including public sector banks”

Further, Prior to the issue of this O.M dated 15th January 2008 the Institute has been following the investment pattern to the maximum extent as prescribed by the Ministry of Finance vide notification No.F.5(53)/2002-ECB& PR dated 24th January, 2005.

In view of above facts audit observation may be treated as settled.

A.2.1 Understatement of liabilities – Capital Fund by Rs. 3.82 crore (J.P.N. Apex Trauma Centre)

The discrepancies as pointed out by Audit has been noted and will be rectified by giving the effect in the next year Annual Accounts accordingly.

B.1.1 Understatement of income (Institute of Rotary Cancer Hospital)

The discrepancies pointed out by Audit has been noted and would be made good/rectified in the Annual Account for the year 2009-10.

B.1.2 Understatement of income by Rs. 13.74 lakh (Neuro Surgery Patient Accounts)

In this regards it is stated that due to oversight the FDs in question could not be renewed in March, 2009. However, FDs were renewed in the next financial year with retrospective effect i.e from the due dates i.e from 14.3.09, 22.3.09 and 30.3.09 respectively. As such there is no loss of interest on FDs in question. The interest has already appeared in Bank statement and will be taken into account for the year 2009-10.

In view of above facts, the observation may be treated as settled.

B 1.3 Understatement of income by Rs. 45.10 lakh (Gamma Knife Patient Accounts)

In this regards it is stated that due to oversight the FDs in question could not be renewed in 2008-09. However, FDs were renewed in the next financial year with retrospective effect i.e from the due dates i.e from 20.02.09 and 30.3.09 respectively. As such there is no loss of interest on FDs in question. The interest has already appeared in Bank statement and will be taken into account for the year 2009-10.

In view of above facts, the observation may be treated as settled.

B 1.4 Overstatement of income by Rs. 115.29 lakh (J.P.N. Apex Trauma Centre)

The receipt amount shown as income of Rs.1,15,29,018 as Hospital Receipts and interest on TDRs is correct. However, the audit observations i.e the revenue receipts amounting to

Rs.1,15,29,018/- had been incurred only for creating assets is not acceptable as the total allocation of the funds under the head Plan including revenue receipts was utilized for construction of building, machinery & equipment, furniture & fixtures, material & supply, pay and allowances and office expenses etc. Hence, it is not given to understand how the audit viewed that the above said revenue receipt had specifically been incurred for creating assets.

It is further, elaborated that JPNATC is a newly created centre during the current plan period. From the next Plan period the expenditure of JPNATC shall be divided into Plan and Non-Plan expenditure and will also be possible to categorise under the head Plan and Non-Plan.

In view of above facts the observation may be treated as settled.

C.1.1 Understatement of Receipts and Payment by Rs. 5.72 lakh (Neuro Surgery Patient Accounts)

It is stated that the amount of Rs.5.72 lac was transferred from NS Patient A/c to CNC Account since it was the receipt of CNC account from NS package charges received from patients. In view of this it was deducted from NS Patient Account receipt and was taken to CNC Account receipt. However, the point has been noted for future compliance.

Hence, observation may be treated as settled.

C.1.2 Understatement of Receipts by Rs. 6.42 lakh (Patient Treatment Account - Institute Rotary Cancer Hospital)

The discrepancies pointed out by Audit has been noted and would be made good/rectified in the Annual Account for the year 2009-10.

C.1.3 Understatement of payment by Rs. 10.37 lakh (Patient Treatment Account of Institute Rotary Cancer Hospital)

The discrepancies pointed out by Audit has been noted and would be made good/rectified in the Annual Account for the year 2009-10.

D.1.1 Difference between the closing balances shown in the Balance sheet and of broadsheet

There is no difference during the year 2008-09. The difference pertains to previous years for which efforts are being taken to reconcile the same.

E. Grant-in-aid

Facts – No comments.