

AIIMS

52nd ANNUAL REPORT

2007–2008



**All India Institute of Medical Sciences
New Delhi 110029**

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All India Institute of Medical Sciences

The All India Institute of Medical Sciences (AIIMS) was established by an Act of Parliament in 1956 as an institution of national importance. Its main objectives were 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.

AIIMS has comprehensive facilities for teaching, research and patient care. Medical and paramedical courses are taught at AIIMS. The institution awards its own undergraduate, postgraduate and doctorate degrees.

Teaching and research are conducted in 50 disciplines. AIIMS plays a leading role in the field of medical research, having more than 1400 research publications by its faculty and researchers in a year. AIIMS also has a College of Nursing, which awards BSc (Hons) Nursing and BSc Nursing (Post-certificate) degrees.

Twenty-five clinical departments, including six superspecialty centres, manage practically all types of disease conditions with support from pre-clinical and para-clinical departments. AIIMS also runs a 60-bedded hospital at 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

2007–2008

Year of establishment 1956

Teaching Departments and Centres	50	Medical graduates	2229
Faculty members (sanctioned 620)	453	Postgraduates	6759
Non-faculty staff (sanctioned 8572)	6785	Nursing graduates	1589
Undergraduate students	640	Publications/abstracts in journals	1424
Postgraduate students	1021	Books/monographs/chapters in books	194

Hospital Services

Facility	Outpatients	Admissions	Surgery	Beds	
				General	Private
Main Hospital	15,28,238	83,852	77,852	861	177
R.P. Centre for Ophthalmic Sciences	4,37,817	27,917	26,949	280	21
Dr B.R. Ambedkar Institute Rotary Cancer Hospital	80,244	21,535	3,927	167	15
Cardiothoracic Sciences Centre	1,33,799	11,147	3,393	166	14
Neurosciences Centre	93,245	6,950	3,000	166	14
National Drug Dependence Treatment Centre	36,513	1,134	–	50	–
Jai Prakash Narayan Apex Trauma Centre	6,683	3,362	3,321	30	–

Average bed occupancy	78.5%
Average period of hospital stay	5.4 days
Net death rate	2.7%
Infection rate (crude)	8.26%

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All India Institute of Medical Sciences

ORGANISATION STRUCTURE

Institute Body



Governing Body



1. Director's Review

I am glad to present the Fifty-second Annual Report and audited statement of accounts for the year 2007-2008.

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 an autonomous institution and awards its own degrees. The AIIMS continues to be a leader in the field of medical education, research and patient-care in keeping with the mandate from Parliament.

AIIMS is fully funded by the Government of India. However, for research activities, grants are also received from various sources including national and international 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.

AIIMS provides full time postgraduate and post-doctoral courses in 47 disciplines. The guiding principle in postgraduate training is to train them as teachers, researchers and competent doctors, who can investigate, manage and treat patients independently. During the 2007-2008 academic session (i.e. for the courses commencing in July 2007 and January 2008), 368 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, 1022 postgraduate and post-doctoral students were on the rolls in various courses and 242 students qualified for their degrees and 83 students qualified for various superspeciality degrees. As always, appropriate consideration was given to students from Scheduled Castes (SC) and Scheduled Tribes (ST). Twenty-five SC and 11 ST students were admitted to MD/MS courses, 3 SC and 1 ST students to MSc courses.

This year AIIMS admitted 50 students to its MB,BS course (including 7 SC and 4 ST students), 21 students to B. Sc Nursing (post-certificate) course (including 4 SC and 2 ST students), 52 students to B. Sc. (Hons) in Nursing Course (including 8 SC and 5 ST students), 13 students to B.Sc. (Hons.) in Ophthalmic Techniques (including 2 SC and 1 ST students) and 7 students to B.Sc. (Hons.) in Medical Technology in Radiography (including 1 SC student).

AIIMS also provides short/long term training to doctors from various organizations and State Governments, WHO-in-Country Fellowship and elective training to Foreign National students. Six hundred and twenty seven (627) candidates received short/long 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 international agencies. The Institute trained 21 WHO-sponsored/WHO-in-country fellowship candidates to fulfill its international obligations.

The MBBS course is spread over 5½ years, dividing the period to 1 year for pre-clinical, 1½ year for para-clinical and 2 years for clinical subjects 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 7th consecutive year by a national survey.

The institute organized a number of workshops, symposia, conferences and training programmes in collaboration with various national and international agencies during the year. Professionals from various institutions all over the country participated in these seminars and workshops and benefited with update knowledge. Guest and Public lectures were organized by visiting experts and faculty of AIIMS.

The All India Institute of Medical Sciences is a leader in the field of medical research, with major emphasis on areas of national needs. Over 381 research projects were ongoing during this period. Research grants totaling Rs 46 crores (approx.) were received from various international and national funding agencies during the year 2007-2008.

Despite increasing pressures the Institute has constantly tried to demonstrate its commitment to professionalism and service to the common people at affordable cost. Thousands of patients from all over the country come to AIIMS everyday to get optimal medical care. During the year 2007-2008, the AIIMS hospital catered not only to the patients from India but also from neighboring countries such as Nepal, Bangladesh, Sri Lanka, Bhutan and other Asian Countries. In 2007-08, there was an OPD attendance of over 15,28,238, there were 83,852 inpatient admissions and 77,631 surgical procedures were conducted. In addition 1,48,632 patients attended the Emergency Care Services at AIIMS. Due to expansion of facilities like OPD, emergency service, private wards and use of innovated methods, AIIMS 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 4.7 days; the average bed occupancy, 78.5% and the net death rate, 2.7%, which is at par with standards 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 level.

Dr. Rajendra Prasad Centre for Ophthalmic Sciences attended to 2,15,852 patients in the General OPD, 43,466 patients in the Emergency Service and 1,78,499 patients in Specialty clinics. The number of admitted patients was 27,917 and 26,949 surgical procedures were conducted during this period. The average bed occupancy during this year was 86% and the average in-hospital stay was 4.9 days.

At the Cardiothoracic and Neurosciences Centre (CN Centre), 2,27,044 patients attended the OPD (1,01,930 in Cardiology, 31,869 in Cardiothoracic and Vascular Surgery, 61,053 in Neurology and 32,192 in Neurosurgery), 18,097 patients were admitted as inpatients and 5,986 surgeries were performed.

The Dr. B.R. Ambedkar Institute Rotary Cancer Hospital now 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. Dr. BRAIRCH attended to 80,244 patients in the OPD and admitted 21,535 patients. About 3927 operations were also conducted.

The Jai Prakash Narain Trauma Centre, which became operational in the year 2006, 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 2007-2008, the Trauma Centre attended to 6,683 patients, of which 3,362 were admitted and 3,321 were operated. A total of 27,278 radiological investigations were conducted at the Centre.

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

The Department of Dental Surgery has set up a full-fledged dental college under the aegis of the AIIMS. The department is a nodal centre for the National Oral Health Policy of the Government of India. The Centre for Dental Education and Research (CDER) conducts an MDS (postgraduate course) in the speciality. In the year 2007-2008, the CDER attended to 9,271 patients, of which 6,020 were admitted and 2,437 were operated (major) and 3,583 were operated (minor).

The Centre for Behavioural Sciences (National Drug Dependence Treatment Centre), AIIMS, at Ghaziabad is a 50 bedded centre attended to 36513 patients in General OPD, of which 1,134 were admitted.

Community-based programmes have been an integral part of the Institute's clinical and research activities. The Rural Health Centre at Ballabgarh, being run under the supervision of the Centre of Community Medicine, is a unique experiment. Departments of Obstetrics and Gynecology, Rehabilitation and Physical Medicine, Pediatrics and Dr. Rajendra Prasad Centre for Ophthalmic Sciences also organize regular camps in the rural community. The outpatient facilities for patients with ophthalmic and dental problems are drawing a large number of patients.

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 villages covered, it also has a secondary level care hospital at Ballabgarh with 50 beds, which attracts patients from far and wide. The number of patients attended to in the hospital included 1,66,623 in the OPD, 18,406 in the emergency services, and 6,339 as inpatient admissions. The project has achieved significant successes in terms of improving health of mothers and children of the area. The zero Maternal Mortality Rate and Crude Death Rate of 7.0, recorded for the area, is much ahead of targets set by Government of India for 2010. The Urban Health Programme and Family Health Exercise programmes also cater to urban slums of Delhi having a population of about 84,678. A Mobile Health Clinic of CCM visits these slums 5 times a week and provides preventive, promotive and primary level curative services. Domiciliary services

in these slum areas are provided through para-medical workers. These services attended to 25,695 patients in 2007-08. CCM has now established a Disease Outbreak Response Cell (DORC) for ensuring a rapid response to infectious disease outbreaks that may occur from time to time in the region. The AIIMS also has an AIDS Education and Training Cell for prevention of HIV/AIDS. This cell operates an interactive telephone helpline called 'Shubhchintak' to answer queries of general public on HIV/AIDS. This helpline is quite popular and is supplemented by an internet based helpline called "e-shubhchintak. CCM also runs a Sex and Marriage Counselling Clinic (SMCC) at the AIIMS Hospital.

Medicines are supplied to all patients attending the Casualty free of cost. During the financial year 2007-08, about 2,500 poor and indigent patients were also provided financial assistance.

Prof. T. D. Dogra
Director

2. The Institute and its Committees

INSTITUTE BODY

1. **Hon'ble Dr Anbumani Ramadoss** President
Union Minister for Health & Family Welfare
Nirman Bhawan, New Delhi 110011
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
Delhi University
Delhi 110007
(Ex-Officio)
6. **Shri Naresh Dayal** Member
Secretary (Health)
Ministry of Health & Family Welfare
Nirman Bhawan, New Delhi 110011
(Ex-Officio)
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
Ansari Nagar, New Delhi 110029

9. **Dr S.S. Agarwal** Member
Central Drug Research Institute
Chattar Manzil Palace, Post Box No. 173
Lucknow 226001, Uttar Pradesh
D-13, Vivekanandpuri
Lucknow 226007, Uttar Pradesh
10. **Professor B.P. Chatterjee** Member
Department of Biological Chemistry
Indian Association for the Cultivation of Science
Jadavpur, Kolkata 700032, West Bengal
11. **Late Shri Sudeep Banerjee** Member (up to 21.5.2007)
Shri R.P. Agrawal Member (w.e.f. 22.5.2007)
Secretary, Department of Secondary Education and
Higher Education
Ministry of Human Resource Development (HRD)
Shastri Bhawan (Gate No.6), New Delhi 110001
12. **Professor K.K. Talwar** Member
Director
Postgraduate Institute of Medical Education
and Research, Chandigarh
13. **Professor Kartar Singh** Member
Department of Gastroenterology
Postgraduate Institute of Medical Education
and Research, Chandigarh
14. **Professor R. Surendran** Member
Professor and Head
Department of Surgical Gastroenterology
Government Stanley Hospital
Chennai, Tamilnadu
15. **Dr (Mrs) Nilima Arun Kshirsagar** Member
Dean, Professor and Head
Department of Clinical Pharmacology
Seth G.S. Medical College and KEM Hospital
Mumbai, Maharashtra
16. **Shri Raghbir Singh** Member
Additional Secretary and Financial Advisor
Ministry of Health and Family Welfare
Nirman Bhawan, New Delhi 110011

- | | |
|---|---|
| 17. Professor P. Venugopal
Director, AIIMS
Professor T.D. Dogra
Acting Director, AIIMS | Member-Secretary
(up to 19.12.2007)
(w.e.f. 20.12.2007) |
| 18. Smt Bhavani Thyagarajan
Joint Secretary
Shri Raama Murthy
Ministry of Health and Family Welfare
Nirman Bhawan, New Delhi 110011 | Special Invitee
(up to 19.12.2007)
(w.e.f. 20.12.2007) |
| 19. Dean (Academic), AIIMS | Special Invitee |
| 20. Professor T.D. Dogra
Dean (Exams), AIIMS, New Delhi | Special Invitee |

GOVERNING BODY

- | | |
|--|--|
| 1. Dr Anbumani Ramadoss | Chairman |
| 2. Shri R.K. Dhawan | Member |
| 3. Dr Karan Singh Yadav | Member |
| 4. Shri Naresh Dayal | Member |
| 5. Dr R.K. Srivastava | Member (Ex-Officio) |
| 6. Shri Raghbir Singh | Member |
| 7. Dr Shyam Prasad | Member |
| 8. Professor K.K. Talwar | Member |
| 9. Professor Kartar Singh | Member |
| 10. Professor R. Surendran | Member |
| 11. Professor P. Venugopal
Professor T.D. Dogra | Member-Secretary (up to 19.12.2007)
(w.e.f. 20.12.2007) |
| 12. Smt Bhavani Thyagarajan
Shri Raama Murthy | Special Invitee (up to 19.12.2007)
(w.e.f. 20.12.2007) |
| 13. Dean (Academic), AIIMS | Special Invitee |
| 14. Professor T.D. Dogra | Special Invitee |

STANDING FINANCE COMMITTEE

- | | |
|--|--|
| 1. Shri Naresh Dayal, Health Secretary | Chairman |
| 2. Professor Vijay Kumar Malhotra | Member |
| 3. Shri R.K. Dhawan | Member |
| 4. Dr R.K. Srivastava | Member |
| 5. Shri Raghbir Singh | Additional Secretary-Member |
| 6. Dr Shyam Prasad | Member |
| 7. Shri Sudeep Banerjee
Shri R.P. Agrawal | Member (up to 21.5.2007)
Member (w.e.f. 4.6.2007) |

- | | | |
|----|-------------------------|--------------------------------------|
| 8. | Dr S.S. Agarwal | Member |
| 9. | Professor P. Venugopal | Member-Secretary (up to 19.12.2007) |
| | Professor T.D. Dogra | Member-Secretary (w.e.f. 20.12.2007) |
| 10 | Dean, Academic | Special Invitee |
| 11 | Smt Bhavani Thyagarajan | Special Invitee (up to 19.12.2007) |
| | Shri Raama Murthy | Special Invitee (w.e.f. 20.12.2007) |

ESTATE COMMITTEE

- | | | |
|----|--------------------------------|--------------------------------------|
| 1. | Professor Vijay Kumar Malhotra | Chairman |
| 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 Pentel | Member |
| 7. | Shri Raghbir Singh | Member |
| 8. | Shri. Sudeep Banerjee | Member (up to 21.5.2007) |
| | Shri R.P. Agrawal | Member (w.e.f. 4.6.2007) |
| 9. | Professor P. Venugopal | Member-Secretary (up to 19.12.2007) |
| | Professor T.D. Dogra | Member-Secretary (w.e.f. 20.12.2007) |

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 Sudeep Banerjee | Member (up to 21.5.2007) |
| | Shri R.P. Agrawal | Member (w.e.f. 4.6.2007) |
| 9 | Professor P. Venugopal | Member-Secretary (up to 19.12.2007) |
| | Professor T.D. Dogra | Member-Secretary (w.e.f. 20.12.2007) |

HOSPITAL AFFAIRS COMMITTEE

- | | | |
|----|----------------------------|----------|
| 1. | Professor S.S. Agarwal | Chairman |
| 2 | Shri R.K. Dhawan | Member |
| 3. | Professor Karan SinghYadav | Member |
| 4. | Dr R.K. Srivastava | Member |
| 5 | Shri Naresh Dayal | Member |

6	Shri Raghbir Singh	Member
7.	Professor Nilima Arun Kshirsagar	Member
8.	Professor K.K. Talwar	Member
9.	Dr Shyam Prasad	Member
10.	Professor P. Venugopal	Member-Secretary (up to 19.12.2007)
	Professor T.D. Dogra	Member-Secretary (w.e.f. 20.12.2007)

SELECTION COMMITTEE

1	Professor R. Surendran	Chairman
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 Sudeep Banerjee	Member (up to 21.5.2007)
	Shri R.P Agrawal	Member (w.e.f. 4.6.2007)
7.	Professor Nilima Arun Kshirsagar	Member
8.	Dr Shyam Prasad	Member
9.	Professor P. Venugopal	Member-Secretary (up to 19.12.2007)
	Professor T.D. Dogra	Member-Secretary (w.e.f. 20.12.2007)

3. Academic Section

Dean

R.C. Deka

Sub-Dean

Sunil Chumber

Registrar

Sandeep Agarwala
(upto 4.2.2008)

Sunil Chumber
(5.2.2008 to 14.3.2008)

L.R. Murmu
(w.e.f. 15.3.2008)

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

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 MBBS, 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 (MBBS)

The pattern of education at the undergraduate level was reviewed and implemented from July, 2004 onwards. The duration of the MBBS course continues to be 5 ½ 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)

Every year 50 students are admitted to the MBBS course. 45 students (7 Scheduled Caste, 4 Scheduled Tribe and 34 General Category) are selected on the basis of their performance in an All-India entrance examination. 3% seats are reserved for orthopaedic physically handicapped candidates on horizontal basis. Government of India. During the year, there were 71 757 applicants, and 45 625 candidates appeared in the entrance examination for the 45 seats. 5 seats are reserved for foreign nationals and the screening and admissions for these 5 seats are done on the recommendation of the Ministry of External Affairs, The total number of undergraduate students as on 31 March 2008 was 255 including 48 interns.

Merit scholarships of Rs 750 and Rs 500 per month were awarded to 4 students who secured first and second position in the first, second and final MBBS examination.

Summer fellowships were awarded to 6 students 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 55 students was admitted for BSc (Hons) Nursing in August 2007. 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)	44
BSc (Hons) Nursing	206
<i>Paramedical courses</i>	
BSc (Hons) Ophthalmic Techniques	34
BSc (Hons) Medical Technology in Radiography	21

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 368 students, including 12 state-sponsored and 13 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 2008 was 1021. The subject wise distribution of postgraduate students is given below.

A total of 242 postgraduate students MS/MS/MDS/DM/MCh/PhD/MSc/M Biotech passed out during the year 2007–2008.

PhD	General	Sponsored
Anatomy	14	–
Biochemistry	46	–
Biophysics	16	–
Biostatistics	2	1
Biotechnology	12	–
Cardiology	3	–
Cardiac Biochemistry	2	–
Forensic Medicine	1	–
Gastroenterology	8	–

Haematology	7	–
CTVS	3	–
Laboratory Medicine	12	–
Medical Oncology	5	–
Medical Physics	2	–
Medicine	9	–
Microbiology	36	–
Neurology	11	–
Nuclear Magnetic Resonance	2	1
Nuclear Medicine	2	1
Otorhinolaryngology (ENT)	1	–
Ophthalmology	2	–
Ocular Pharmacology	5	–
Ocular Microbiology	3	–
Community Ophthalmology	1	–
Ocular Pathology	1	–
Ocular Biochemistry	2	–
Paediatrics	6	–
Pathology	9	–
Centre for Community Medicine	2	–
Endocrinology	4	–
Paediatric Surgery	2	–
Neuro-Biochemistry	5	–
Pharmacology	11	–
Physiology	19	2
Psychiatry	5	–
Radiation Oncology	2	–
Reproductive Biology	4	–
Transplant Immunology and Immunogenetics	9	1
Total	292	6
DM	General	Sponsored
Cardiac Anaesthesiology	6	2
Cardiology	16	3
Clinical Haematology	5	3
Endocrinology	8	3
Gastroenterology	10	3
Haemato-Pathology	4	2
Medical Oncology	12	2
Neonatology	4	2
Nephrology	8	5
Neuro-Anaesthesiology	6	2
Neurology	13	3

Neuroradiology	3	–
Paediatric Neurology	6	1
Clinical Pharmacology	2	–
Total	103	31
MCh	General	Sponsored
Cardiothoracic & Vascular Surgery	16	–
Gastrointestinal Surgery	5	3
Neurosurgery	31	2
Paediatric Surgery	10	1
Urology	7	3
Total	69	9
MD	General	Sponsored
Anaesthesiology	24	–
Anatomy	11	–
Biochemistry	8	–
Biophysics	9	–
Community Medicine	14	–
Dermatology & Venereology	9	2
Forensic Medicine	6	–
Hospital Administration	4	6
Laboratory Medicine	6	–
Medicine	36	3
Microbiology	9	–
Nuclear Medicine	6	2
Obstetrics and Gynaecology	26	–
Ophthalmology	70	–
Pediatrics	18	3
Pathology	17	1
Pharmacology	9	–
Physical Medicine & Rehabilitation	6	–
Physiology	9	–
Psychiatry	16	1
Radiodiagnosis	16	3
Radiotherapy	6	1
MS		
Orthopaedics	12	3
Otorhinolaryngology	8	–
Surgery	29	2
MDS		
Conservative Dentistry & Endodontics	6	–
Orthodontics	6	–
Prosthodontics	6	–
Total	429	27

MSc	General	Sponsored
Anatomy	5	–
Biochemistry	6	1
Biophysics	2	–
Perfusion Technology	1	–
Biotechnology	21	1
Nuclear Medicine Technology	10	2
Pharmacology	7	–
Physiology	5	-
Urology Technology	–	–
MSc Nursing		
Oncological Nursing	4	–
Cardiological/CTVS Nursing	4	–
Nephrological Nursing	4	–
Neurosciences Nursing	4	–
Paediatric Nursing	4	–
Psychiatric Nursing	4	–
Critical Care Nursing	3	-
Total 88	84	4

Salaries: The present salary of residents, as recommended by the Sixth Pay Commission since January 2006 is:

Junior Residents	Rs 15 600–39 100 + (GP Rs 5400) plus allowances as per rules
Senior Residents	Rs 15 600–39 100 + (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 para-medical personnel. During the year, the Institute had 487 short and 2 long-term trainees. In addition, 13 WHO Fellows (FN) under WHO fellowship programme and 33 foreign trainees and 8 WHO Fellows (Indian national) for WHO-In-Country Fellowship training programme (2007-2008) were imparted training in various departments. The elective posting of foreign undergraduate medical students is also handled by the section. 75 foreign undergraduate medical students underwent elective training during the year.

COMMITTEE MEETINGS

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

Staff Council	=	Nil	
Dean Committee	=	1	04.03.2008
Faculty Meetings	=	10	03.04.2007 17.04.2007 07.08.2007

18.09.2007
 16.10.2007
 06.11.2007
 05.02.2008
 19.02.2008
 04.03.2008
 18.03.2008

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 Rs 50 000/ to Rs 100 000/ 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.

ORATIONS

The Academic Section organized the following Orations during 2007–2008

S.No.	Name of Oration	Name of Orator	Date of Oration, Time & Venue
1	Third Professor Kesho Ram Laumas Memorial Oration	Professor C.V. Rao, PhD Professor of Obstetrics Gynecology and Women's Health; Director of Division of Research, Department of Obstetrics Gynecology and Women's Health, University of Louisville, School of Medicine, 438 Medical Dental Research Building, 511 South Floyd Street, Louisville KY 40292, USA	8 February 2008 4.00 PM J.L.Auditorium, AIIMS
2	Eighteenth Sarveshwari Memorial Oration	Professor Brian P. Brophy Director, Neurosurgery, Royal Adelaide Hospital, Australia	29 February 2008 4.00 PM LT-II, AIIMS

CONVOCATION

The Annual Convocation of the Institute was held on 23 October 2007. Dr Montek Singh Ahluwalia, Hon'ble Deputy Chairman, Planning Commission, Government of India 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)

Statement of AIIMS Research Grant for the year 2007–2008

S No	Name of the investigator	Title of the project	Amount sanctioned	Duration
1	Dr Vandana Jain Asstt Prof Dept of Pediatrics	Vitamin D status of exclusively breastfed term healthy infants at a median age of 3 months during summer season and its correlation with maternal vitamin D status	Rs 100 000/-	1 year
2	Dr T. Velpandin Asstt Prof Dept of Ocular Pharmacology Dr R.P. Centre	Development and validation of N-in-one dosing technique to evaluate ocular kinetics of drugs using LC/MS/MS	Rs 55 000/-	2 years
3	Dr Atul Sharma Asstt Prof Dept of Medical Oncology Dr BRAIRCH	A pilot study comparing p16, p53, k-ras and c-erbB2 expression in non neoplastic and GBC epithelium	Rs 100 000/-	2 years
4	Dr D.S. Arya Assoc Prof Dept of Pharmacology	Pharmacological studies on Coleusital in experimentally induced myocardial infarction in rats	Rs 100 000/-	1 year
5	Dr Suman Jain Asstt Prof Dept of Physiology	Estimation of beta-endorphin and nociceptin in ventromedial nucleus of hypothalamus after prolonged sucrose ingestion by microdialysis	Rs 100 000/-	1 year
6	Dr Ratna Sharma Assoc Prof Dept of 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	Rs 100 000/-	2 years
7	Dr Kunzang Chosdol Asstt Prof Dept of Biochemistry	Distribution of cancer susceptibility modifying polymorphisms (MDM2 SNP3098 and p53 codon72) in Indian population groups	Rs 100 000/-	2 years

8	Dr Tulika Seth Asstt Prof Dept of Hematology	Molecular characterization of Fanconi anemia : A pilot study	Rs 100 000/-	1 year
9	Dr K.K. Roy Addl Prof Dept of Obst & Gynae	A prospective randomized trial comparing the clinical and endocrinological outcome with rosiglitazone versus laparoscopic ovarian drilling in patients with polycystic ovarian disease resistant to ovulation induction with clomiphene citrate (CC)	Rs 100 000/-	2 years
10	Dr Rachna Seth Asstt Prof Dept of Paediatrics	Evaluation of anthracycline induced cardiotoxicity in children with cancer: A comparative study with echocardiography and Multiple Gated Acquisition (MUGA)	Rs 40 000/-	3 years
11	Dr Ajay Garg Asstt Prof Dept of Neuroradiology Neurosciences Centre	Evaluation of spinal MR Angiography (MRA) in the diagnosis of spinal vascular malformations; and its role in subsequent spinal Digital Subtraction Angiography (DSA) planning	Rs 99 000/-	2 years
12	Dr Sandeep R. Mathur Asstt Prof Dept of Pathology	P16INK4a and E-cadherin expression profile in pre-cancerous lesions of cervix and cervical carcinomas	Rs 100 000/-	1 year
13	Dr Seema Kashyap Assoc Prof Dr R.P. Centre	P53 & mdm-2 expression in orbital rhabdomyosarcoma (RMS) of childhood – An immuno-histochemical study	Rs 90 000/-	1 year
14	Dr Sujata Mohanty Asstt Prof Stem Cell Facility	Expression status of HLA molecules on undifferentiated and differentiated Mesenchymal stem cell (MSC) – an <i>in vitro</i> study	Rs 100 000/-	1 year
15	Dr Seema Mishra Asstt Prof Unit of Anaesthesiology Dr BRA-IRCH	A comparative efficacy of amitriptyline gabapentin and pregabalin in neuropathic cancer pain: A prospective randomized double blind placebo controlled	Rs 100 000/-	1 year

16	Dr Immaculata Xess Assoc Prof & Incharge Immunocompromised Lab Mysology Division Dept of Microbiology	Serological and molecular methods for detection of cryptococcus neoformans from clinical samples	Rs 100 000/-	2 years
17	Dr Namrata Sharma Assoc Prof Dr R.P. Centre for Ophthalmic Sciences	To evaluate the potential role of bio-polymer to support the culture of corneal epithelial cells	Rs 100 000/-	1 year
18	Dr Anant Mohan Asstt Prof Dept of Medicine	Prognostic utility of various acute phase reactants in acute exacerbation of chronic obstructive pulmonary disease	Rs 100 000/-	2 years
19	Dr Kh Reeta Asstt Prof Dept of Pharmacology	Plasma level monitoring of mycophenolic acid and clinical outcome in renal transplant patients	Rs 100 000/-	3 years
20	Dr Sameer Bakhshi Assoc Prof Dept of Medical Oncology Dr BRA-IRCH	To study chromosomal abnormalities and FLT3 Internal Tandem Duplication (ITD) mutations in acute myeloid leukemia	Rs 1 00 000/-	3 years
21	Dr Somesh Gupta Asstt Prof Dept of Derm & Vene	Comparison of efficacy of transplantation of basal cell layer enriched epidermal suspension in patients with stable vitiligo vulgaris and segmental vitiligo	Rs 100 000/-	3 years
22	Dr Manish Singh Sharma Asstt Prof Dept of Neurosurgery	Screening of von-Hippel lindau gene for germline mutations in intracranial aneurysms-a prospective study	Rs 60 000/-	2 years
23	Dr Vivekanandhan S Assoc Prof Dept of Neurobiochemistry Neurosciences Centre	Analysis of TGF B pathway components expression and mutation in glioma patients	Rs 100 000/-	1 year
24	Dr Ashutosh Halder Assoc Prof Dept of Repro Biology	Rapid detection of Chromosome X Y 2Rs 1 18 & 13 aneuploidy by primed <i>in situ</i> labeling	Rs 100 000/-	3 years
25	Dr R. Goswami Assoc Prof Dept of Endo & Meta	Adrenal cortical reserves in patients with hyperthyroidism and their change in response following carbimizole therapy	Rs 100 000/-	1 year

26	Dr Sanjeev Bhoi Asstt Prof Dept of Emergency Medicine	To find out the sensitivity and specificity of parasite lactic dehydrogenase antigen detection of malaria when compared with microscopy in patients presenting to Emergency Department	Rs 50 000/-	2 years
27	Dr Pramod Kumar Garg Assoc Prof Dept of Gastroenterology	Association of Monocytic Chemotactic protein-1 2518 A/G polymorphism with the severity of acute pancreatitis	Rs 127 000/-	2 years
28	Dr Nibhriti Das Professor Dept of Biochemistry	Paraoxonase (PON 1) activity and its genetic determinants (PON 1 gene polymorphisms, in coding region at condon 55,192 and in promoter region at position-108) in relation to coronary artery disease (CAD)	Rs 50 000/-	3 years
29	Dr B R. Mirdha Addl Prof Dept of Microbiology	Prevalence of Intestinal Coccidiosis and other parasitosis in 'at risk' individuals	Rs 35 000/-	3 years
30	Dr Seema Sen Assoc Prof Dept of Ocular Pathology Dr R. P. Centre	Immunophenotypic characterization of small lymphocytic lymphomas of the eye	Rs 90 000/-	1 year
31	Dr Rakesh Lodha Asstt Prof Dept of Pediatrics	A randomized controlled trial to evaluate the effect of normal saline in 5% dextrose at standard maintenance rate, reduced volume (2/3) maintenance rate of N/5 saline in 5% dextrose and N/5 saline in 5% dextrose at standard maintenance rate on the incidence of hyponatremia in hospitalized children	Rs 100 000/-	2 years
32	Dr Y. K. Gupta Professor & Head Dept of Pharmacology	To study the effect of curcumin on Ferric chloride (FeCl ₃) induced seizures and cognitive parameters in rats	Rs 100 000/-	1 year
33	Dr Srinivas M. Assoc Prof Dept of Pediatric Surgery	Adverse effects of suture fixation of testis and evaluation of novel technique of fixation of testis by cyanoacrylate glue	Rs 150 000/-	1 year

34	Dr Rajiva Gupta Assoc Prof Dept of Medicine	To study the effect of stains in rheumatoid arthritis special reference to disease activity and lipid profile	Rs 95 100/-	2 years
35	Dr Purva Mathur Asstt Prof Dept of Lab Medicine	Evaluation of peripheral blood polymerase chain reaction for diagnosis and prognosis of visceral leishmaniasis	Rs 107 500/-	2 years
36	Dr Subodh Kumar Asstt Prof Dept of Surgical Disciplines	A randomized controlled trial of laparoscopic inguinal hernia repair-transabdominal preperitoneal versus totally extraperitoneal approach	Rs 162 500/-	2 years

ONGOING PROJECTS

S.No	Name of the investigator	Title of the project	Amount sanctioned	Duration
1	Dr N.C. Chandra Asstt Prof Dept of Biochemistry	To study the role of Insulin, Estradiol and Epidermal growth factor on the transcriptional regulation of LDL-receptor (LDLR)	Rs 100 000	3 years
2	Dr Rima Dada Assoc Prof Dept of Anatomy	Mutations in the oxidative phosphorylation (OXPHOS) pathway and spermatogenic arrest in infertile males	Rs 100 000	2 years
3	Dr Alpana Sharma Asstt Prof Dept of Biochemistry	Assessment of B-2 microglobulin, IL-6 and IL-2R as prognostic factors in Indian Patients with multiple myeloma	Rs 75 000/-	3 years
4	Dr Tanuj Dada Assoc Prof Dr R.P. Centre	Mutation spectrum of the CYP1B1 gene in North Indian Primary Congenital Glaucoma patients	Rs 100000/-	1 year
5	Dr V.K. Iyer Assoc Prof Dept of Pathology	Evaluation of chromosome 1p and 11p deletions in Hepatoblastoma and Hepatocellular Carcinoma	Rs 100000/-	3 years
6	Dr T.K. Das Assoc Prof Dept of Anatomy	Ultrastructural localization of proteins modified by fluoride-induced lipid peroxidation products and to study the preventive role of dietary antioxidants	Rs 100000/-	2 years
7	Dr Arundhati Sharma Assoc Prof Dept of Anatomy	Mutation analysis of the 5q31-linked autosomal dominant corneal dystrophies in the north Indian patients	Rs 40 000/-	2 years

8	Dr B.R. Mirdha Addl Prof Dept of Microbiology	Prevalence of intestinal Coccidiosis and other parasitosis in 'at risk' individuals	Rs 35 000/-	3 years
9	Dr Govind K Makharia Assoc Prof Dept of Gastro & Human Nutrition Unit	Screening of patients with functional bowel disease, short stature, metabolic bone disease, amenorrhea and infertility for celiac disease	Rs 47 000/-	2 years
10	Dr Kalpana Luthra Assoc Prof Dept of Biochemistry	HIV-1 resistance conferring polymorphisms in DC-SIGN in high risk individuals-a pilot study	Rs100 000/-	1 year
11	Dr Ritu Gupta Asstt Prof Dept of Lab Oncology Dr BRA-IRCH	Assessment of multi-drug resistance pattern in acute myeloid leukemia and response to therapy	Rs 100000/-	2 years
12	Dr Viveka P. Jyotsna Asstt Prof Dept of Endo & Meta	Bone health in patients of hyperthyroid Graves disease in relation to a) Duration of thyrotoxicosis b) Improvement after patient becomes euthyroid	Rs 100000/-	2 years
13	Dr Minati Choudhry Assoc Prof Dept of 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	Rs100 000/-	3 years
14	Dr Neeti Makhija Assoc Prof Dept of Cardiac Anaesthesia Cardiothoracic CentreCNC	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	Rs100 000/-	3 years
15	Dr Deepak Agrawal Asstt Prof Dept of Neurosurgery	Acute thalamic involvement in severe head injury-An autopsy study with histopathological correlation	Rs 80 000/-	3 years

16	Dr Nutan Agarwal Assoc Prof Dept of Obst & Gynae	Role of bile acids in diagnosis and therapeutic effect of Ursodeoxycholic acid in intrahepatic cholestasis of pregnancy	Rs 50 000/-	2 years
17	Dr D.N. Sharma Asstt Prof Dept of Radiation Oncology	A prospective randomized trial of amifostine (Radioprotector) given subcutaneously during radiation therapy in head and neck cancer patients	Rs 97 850/-	3 years
18	Dr Anushree Gupta Asstt Prof Dept of Biotechnology	Modulation of endothelin-1 in coronary artery bypass grafting patients imparted with pre-operative relaxation therapy	Rs 75 000/-	3 years

Funds available	Total	Rs 50 00 000/-
	Allocated	Rs 49 10 950/-
	Balance	Rs 00 89 050/-

4. Examination Section

Dean (Exams)

T.D. Dogra

Professor-in-Charge (Exams)

K.K. Deepak

Sub-Dean (Exams)

A.K. Dinda

Accounts Officer

R.K. Juneja

The posts of Assistant Controller of Exams and Administrative Officer were vacant

During the period under review (2007–2008), 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 April 2007 to 31 March 2008.

S.No.	Examination	Number of students			
		Appeared	Absent	Passed	Failed
	May 2007				
1	Final Postgraduate/Post-doctoral	124	–	117	7
2	MSc (Nursing) Phase I	14	–	12	2
3	MSc (Nursing) Phase II	15	–	15	–
4	Final MB,BS (Supplementary)	5	1	1	3
5	Second MB,BS (Supplementary)	7	–	5	2
6	BSc Nursing (Post-certificate) Phase I	19	–	17	2
7	Phase II	17	–	17	–
8	BSc (Hons) Nursing Phase I	51	2	44	5
9	Phase II	52	–	51	1
10	Phase III	49		48	1
11	Phase IV	48	–	48	–
	July 2007				
12	First Professional MB,BS	50	–	40	10
13	BSc (Hons) Ophthalmic Techniques Phase I	11	2	2	7
14	Phase II	9	–	5	4
15	Phase III	10	1	9	–

16	BSc(Hons) Medical Technology in Radiography	Phase I	7	–	5	2
17		Phase II	6	–	6	–
18		Phase III	5	–	5	–
	August 2007					
19	First MB,BS Professional (Supplementary)		10	–	7	3
	November 2007					
20	BSc(H) Ophthalmic Technology Phase I (Suppl.)		7	–	5	2
21	Phase II (Supplementary)		4	–	1	3
22	Phase III (Supplementary)		0	–	0	–
23	BSc (H) Medical Technology in Radiography Phase I (Supplementary)		2	–	2	–
	December 2007					
24	Final Postgraduate/Post-doctoral		86	–	80	6
25	MSc (Nursing) Phase I (Supplementary)		2	–	2	–
26	Final MB,BS		53	2	44	7
27	Second MB,BS		58	–	54	4
28	BSc Nursing (Post-certificate) Phase I (Suppl.)		2	–	1	1
29	BSc Nursing (Post-certificate) Phase II (Suppl.)		0	–	0	0
30	BSc (Hons) Nursing Phase I (Supplementary)		6	–	3	3
31	Phase II (Supplementary)		1	–	1	1
32	Phase III (Supplementary)		1	–	1	1
33	Phase IV (Supplementary)		3	–	3	3
	January 2008					
34	Final MB,BS (Compartmental Examination)		2	–	2	–
	Total		736	8	653	75

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 2007	6 May 2007	13008	9809
2	DM/MCh/MHA July Session 2007	20 May 2007	1569	1136
3	MB,BS (AIIMS) August Session 2007	1 June 2007	71757	45625
4	BSc (Hons) Nursing 2007	24 June 2007	1494	964
5	BSc Nursing (Post-certificate) 2007	13 June 2007	122	75

6	BSc (Hons) Paramedical Courses 2007	10 June 2007	782	349
7	MSc Courses 2007	7 July 2007	269	147
8	MSc Nursing 2007	30 July 2007	455	332
9	MBiotechnology Entrance Examination 2007	21 July 2007	797	399
10	PhD July Session 2007	14 July 2007	446	214
11	Senior Residents Entrance Examination July 2007 Session	20 June 2007	618	507
12	MD/MS/MCh (6 yrs)/MDS (AIIMS) 2008 January Session	4 November 2007	21600	19923
13	DM/MCh/MHA January Session 2008	16 December 2007	1626	1213
14	All India PG Entrance Exam: MD/MS/ Diploma/MDS	13 January 2008	52689	47390
15	PhD January Session 2008	20 January 2008	318	186
	Total		167550	128269

Examination for Recruitment

S No	Post	Date		Candidates	
		Written exam	Interview	Appeared	Applied
1	Receptionist	7 April 2007	9 May 2007	127	55
2	Masalchi Bearer	15 April 2007	3 May 2007	352	287
3	Office Superintendent	5 September 2007	–	22	13
4	Assistant Administrative Officer	12 September 2007	8 January 2008	21	20
5	Programmer	16 September 2007	28 Nov 2007	181	119
6	Lab. Attendant	9 March 2008	–	830	605
7	Assistant Security Officer	26 November 2007	–	30	28
8	Pharmacist	10 March 2008	–	42	24
	Total			1605	1151

Candidates passed in PhD *viva-voce* examination: 33 (Thirty three)
(1 April 2007 to 31 March 2008)

Entrance Examinations Conducted

1. All-India PG entrance examination for admission to MD/MS/Diploma/MDS courses against 50% open merit seats quota was held in 104 centres (19 local, 85 outstation) in 15 cities of India on 13 January 2008. The results were declared on 15 February 2008.

2. The AIIMS PG entrance examination for admission to MD/MS/MDS courses was conducted on 6 May 2007 for July 2007 session in Delhi at 30 centres and on 4 November 2007 for January 2008 session at 46 centres. The results were declared on 21 May 2007 and 20 November 2007, respectively.
3. Selections for various post-doctoral (superspecialty) courses viz. DM/MCh and Master in Hospital Administration for July 2007 and January 2008 sessions were made on the basis of a three-stage performance evaluation between 20–26 May 2007 and 16–22 December 2007, respectively.
4. The Institute also conducted a written test for the post of Senior Residents/Senior Demonstrators on 20 June 2007. 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 25 and 26 June 2007, respectively.
5. Selections of candidates for registration to PhD programme for July 2007 and January 2008 sessions were held between 14–21 July 2007 and 19–28 January 2008. The results were declared on 21 July 2007 and 28 January 2008, respectively.
6. The entrance examination for admission to MBBS course of AIIMS for August 2007 session was held in 161 (84 local and 77 outstation) centres in 10 cities of India on 1 June 2007.
7. BSc (Hons) Nursing entrance examination was held in Delhi and Thiruvananthapuram on 24 June 2007.
8. The entrance examination for admission to MSc/MBiotechnology courses for the August 2007 session was held in Delhi on 7 July 2007 and 21 July 2007, respectively.
9. The entrance examination for admission to MSc Nursing course was introduced from the year 2005. This examination was held on 30 June 2007 in Delhi only. The seats were allotted on the basis of merit through counselling held on 18 July 2007.
10. BSc Nursing (post-certificate) entrance examination was held in Delhi on 13 June 2007 followed by the personal assessment of candidates on 15 June 2007.
11. The entrance examination for admission to paramedical courses—BSc (Hons) Ophthalmic Techniques and BSc (Hons) Medical Technology in Radiography for August 2007 session was held in Delhi at one centre on 10 June 2007. The students were admitted to these two courses on the basis of merit through counselling held on 16 July 2007.

Participation in Other Events

1. The Examination Section actively participates in the counselling for admission to AIIMS Postgraduate, BSc (Hons) Paramedical, MSc (Nursing) courses and interview for BSc (Nursing) post-certificate course.
2. Professor-in-Charge (Exam) has been co-ordinating the evaluation of Postgraduate students' thesis from B.P. Koirala Institute of Health Sciences, Dharan, Nepal.

5. General Administration

Deputy Director (Administration)

T.D. Dogra
(upto 16.08.2007)

Shailesh Kumar Yadav, IAS
(w.e.f. 17.09.2007)

Chief Administrative Officer

Attar Singh

Senior Administrative Officers

Prem Ballabh
(upto 31.01.2008)

B.S. Sharma
(upto 15.12.2007)

K.C. Chhoker

Administrative Officers

E.L. Lakra

S.K. Vashisht
(upto 24.12.2007)

Sanjay Kumar
(upto 12.12.2007)

Kundan Kumar
R.K. Dabral
(upto 15.02.2008)

K.K. Vaid
S. Rangabashiam

Ajay Kumar
S.K. Mishra
(upto 02.04.2007)

Rajavelu Simon
(w.e.f 26.06.2007)

Ravi Chauhan
(w.e.f. 31.03.2008)

Administrative Officer (General) and Estate Manager

K.K. Vaid

Deputy Chief Security Officer

Rajiv Lochan

Store Officers

R.L. Prasad (under suspension)
K.D. Sharma

S.S. Bhaduria
Pradeep Kumar Gupta

ENGINEERING SERVICES DEPARTMENT

Superintending Engineer

B.S. Anand (officiating)

Executive Engineers

S. Bhasker (Civil I)

M. Rastogi (Civil II)
B.S. Anand (Air-Conditioning)

Sanjay Ram (Electrical)

The General Administration, including personnel and establishment, security, estate, matters related to Engineering Services Department, stores, vigilance and public relations activities of AIIMS are supervised by the Deputy Director (Administration). There are various branches looking after the above mentioned area. Each branch is headed by a senior officer with a 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 this section.

The total sanctioned staff of AIIMS is 9192, including the main hospital, all the centres and administration. These include the following:

S. No.	Category/group	Sanctioned strength	In position staff
1.	Faculty	620	453
2.	Group 'A'	304	191
3.	Group 'B'	760	600
4.	Group 'C'	5627	4475
5.	Group 'D'	1881	1519
	Total	9192	7238

ENGINEERING SERVICES DEPARTMENT

The following major works have been undertaken during the year:

Construction of Jai Prakash Narayan Apex Trauma Centre

The Centre, an ultramodern trauma centre with a capacity of 186 beds had been completed last year and had been put to partial use in November 2006 with 30 triage beds and 2 wards having 60 beds. In the current year, this facility has been made fully operational and functional.

Additional Tower for the C.N. Centre

The private wards in the tower had become functional last year itself and 4 new operation theatres have become functional in the current year.

Construction of Centre for Dental Education and Research

The 80 dental chaired Centre has been completed and the OPDs, laboratories and investigative facilities have been commissioned for patient care.

Covering of Nallah on the East of Ansari Nagar

The covering of 600 m of the total 1.218 km stretch of *nallah* is complete. This has created an additional access to the Ansari Nagar Campus leading to decongestion of the existing entry points.

Construction of Surgical Block

The detailed project report of the Centre has been prepared by the consultant. The proposal for the approval of EFC had been sent to the Ministry last year. The updated EFC proposal has been forwarded to the Ministry this year again. The drawings and plans for the proposed Centre have already been finalised and the work would be taken up further on receipt of the approval of the EFC and on getting the approval of the Master Plan.

Installation of 8 Additional Lifts in the OPD and Ward

CPWD has already started the construction work of the lift pits which is expected to be completed by December 2008

Renovation of Wards

AB6, D4, C7, D2 (balance remaining from last year) and half of AB4, AB5 wards and blood bank have been remodeled and renovated in the current year.

Underground Motorable Subway

To facilitate the movement of doctors and staff between the East and the West Ansari Nagar Campus, a proposal for a motorable subway has been mooted. The work has been entrusted to Delhi Metro Rail Corporation Ltd. (DMRC) and is expected to be completed by the end of 2009.

5.1 Office of Liaison Officer

	Liaison Officer J.S. Titiyal	
Principal Private Secretary Tej Bir Singh		Office Attendant Kitty Sharma
	SC/ST Cell (AIIMS)	
Assistant Administrative Officer Prakash Singh		Lower Division Clerk Vishal Pathak
	SC/ST Cell (Academic Section)	
Office Superintendent Som Dutt	Upper Division Clerk Narottam Anand	Upper Division Clerk Suresh Kumar

There is a separate SC/ST cell in administration to look after the welfare of employees and a SC/ST student cell (Academic Section) to look after grievances of reserved category Postgraduate, Undergraduate and Nursing students admitted at AIIMS for degree and diploma courses in various specialties. Both these cells are working under the overall control of Liaison Officer.

A National Convention on 'Ten Years of post based roster' from 14-16 February, 2008 was organized by the Institute of Public Administration at 'The Hotel Raj Bhavan Road, Bangalore. Mr. Tej Bir Singh, Principal Private Secretary to Liaison Officer was nominated to participate in the convention.

The Liaison Officer held meetings with higher authorities and emphasized urgent action should be taken to fill up all vacant reserved posts through Special Recruitment Drive for SC & ST candidates in group A, B, C & D category. The administration took positive steps and vacant reserved posts were advertised in leading Newspapers for recruitment.

During the year 2007-2008 various representations from SC/ST category employees and students were received in the office of Liaison Officer. Prof. Titiyal had frequent meetings with the Director, Dy. Director (Admn.) & Chief Admn. Officer and discussed the problems reported to him by employees and students.

A case of discrimination was reported by the SC/ST Assistant Nursing Staff in their postings and proper job assignment according to their status and seniority. It was also reported that SC/ST ANS

have been forced to work under junior sister grade-I & II at R.P. Centre. This issue was discussed in the office of Dy. Director (Admn.). The Medical Superintendent, Chief, Dr. R.P. Centre, Chief Admn. Officer, Chief Nursing Officer and other members present in the meeting. Prof. J.S. Titiyal appraised all members about the facts of the discrimination. The Dy. Director (Admn.) agreed and assured that immediate action shall be taken to solve this problem.

It was also decided in the meeting that a circular be issued for information to all undergraduate, post-graduate and nursing students about setting up a SC/ST grievance cell in the Academic Section. Any reserved category student can give complain to the above cell for any unacceptable remark based on caste harassment by anybody for being a reserved category candidate.

Mr. Dal Chand Verma, Office Superintendent submitted his representation to revoke his suspension from service. The CAO informed the Liaison Officer that a committee has been constituted to look into his case as his case is registered with CBI and Vigilance department.

Mr. Mukesh Kumar, Laboratory Assistant represented that his junior colleagues have been promoted to the post of Laboratory Technician in the DPC meeting and he has been denied promotion on the pretext of his average CR for one year. The Liaison Officer discussed the case in the administration and he was given promotion to the post of Laboratory Technician.

The Liaison Officer called a meeting of academic officials in his office and discussed (i) scheme for free coaching for SCs & OBCs students for specified recruitment entrance examination (ii) Establishment of SC/ST Fees Fund at the National Level. Dr. Aggarwala, the then Registrar academic assured that a meeting will be fixed shortly to discuss this issue and steps will be taken to implement the proposal.

Dr. Narender Meena, Junior Resident in the Department of Physical Medicine and Rehabilitation complaint against man handle, unacceptable remark on caste basis and harassment by his colleagues in the hostel. Dr. Meena also sent his complaint to the National Commission for Scheduled Tribes. This matter was discussed in the “Welfare and Grievance Committee for students and Residents”. Thereafter, a committee was constituted under the Chairmanship of Prof. T.P. Singh, Distinguished Biotechnologists, DBT to look into the matter.

6. Main Hospital

Medical Superintendent

D.K. Sharma

Additional Professor

Siddhartha Satpathy

Associate Professor

I.B. Singh

Sanjay Arya

GENERAL INFORMATION

Total number of beds (including Bassinets and CNC)	1423
Main hospital and private wards	1038
Bassinets	25
CNC	360

HOSPITAL PERFORMANCE INDICES

Item	2007-08	2006-07	Comments
Average length of stay (days)	4.7	4.8	Indicates effective utilization of beds
Average bed occupancy rate (%)	78.5	77.4	Indicates fair occupancy
Net death rate (%)	2.7	2.5	Indicates a low mortality rate despite the fact that quite a large number of critically ill patients are admitted
Combined crude infection rate (%)	8.26	7.63	

Please see Appendices I and II for details

Medical Records Services

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

N.K. Sharma

Education

A group of 15 Senior Medical Officers of Border Security Force, a group of students of Medical Record Degree and Diploma from St. Stephens Hospital, New Delhi and Medical Record Science Course at Christian Medical College, Vellore visited the Medical Record Section.

Meetings

Five Casualty Death Review Committee meetings were held in 2007-08.

Court attendance

A total of 1678 summons (average 5 summons per day) were received in the Medical Record Section from Courts of Delhi and outside Delhi.

Computerization of medical records

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

Inpatient Services

The hospital has maintained its tradition of services and quality of patient care, in spite of an ever increasing number of patients that come from all over the country as well as from abroad. A total of 83,852 patients were admitted during the year in various clinical units of the Main Hospital and CNC. The distribution of admissions as per departments, states and gender are given in Appendices II to IV. The number of surgical procedures performed during the year in different surgical fields is given in Appendix V.

The records of indoor patients are systematically classified and categorized for easy retrieval. These records are stored in compactors. The inpatient records of 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 enquiries regarding patients, departments, doctors and centres are provided from this office.

The office functions round the clock, i.e. 365 days \times 24 hours. Therefore, the staff working there is on shift duties. The office is manned by receptionists, medical record technicians and other ministerial and hospital staff.

Outpatient department and Specialty clinics

A total of 15,28,238 patients attended the general outpatient department and specialty clinics of the Main Hospital. The details of the outpatient load are given in Appendix VI.

APPENDIX I
Yearly statistical health bulletin (2007–08)

S. No.	Description	Main hospital	CNC	Total
1.	Total patients admitted	65,755	18,097	83,852
	a. Adults and children	63,584	–	–
	b. Newborn infants	2,171	–	–
2.	Total number of patients discharged	58,430	14,840	73,270
	a. Adults and children	56,774	–	–
	b. Newborn infants	1,591	–	–
3.	Total days of care	2,75,753	88,941	3,64,694
	a. Adults and children	2,65,141	–	–
	b. Newborn infants	10,647	–	–
4.	Average length of stay (ALS)	4.7	6.0	5.0
	a. Adults and children	4.7	–	–
	b. Newborn infants	6.7	–	–
5.	Total number of patient care days in hospital (as per daily census)	3,06,009	1,13,518	4,19,527
	a. Adults and children	2,99,983	–	–
	b. Newborn infants	6,026	–	–
6.	Daily average number of patients	838	311	1,149
	a. Adults and children	822	–	–
	b. Newborn infants	16	–	–
7.	Average bed occupancy (%)	78.5	86.4	–
	a. Adults and children	78.5	–	–
	b. Newborn infants	64.0	–	–
8.	Births in Hospital	2,171	–	–
	a. Male babies	1,162	–	–
	b. Female babies	1,006	–	–
	c. Intersex	3	–	–
9.	Total deaths (including newborns)	2,311	1,010	3,321
	a. Death under 48 hours	773	284	1,057
	b. Death over 48 hours	1,538	726	2,264
	c. Gross death rate (%)	4.0	6.8	4.5
	d. Net death rate (%)	2.7	5.0	3.1
10.	Attendance in casualty	1,48,632	–	1,48,632
	a. Deaths in casualty	1,148	–	1,148
	b. Brought dead to casualty	272	–	272

APPENDIX II
Department-wise statistics of inpatients (2007–08)

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	1,500	1,297	13,042	10.1	289	112	177	22.3	14.9
Medicine II	1,297	1,075	9,897	9.2	323	119	204	30.0	21.3
Medicine III	1,205	994	10,242	10.3	329	106	223	33.1	25.1
Surgery I	1,352	1,011	9,409	9.3	34	9	25	3.4	2.5
Surgery II	2,337	2,006	9,850	4.9	50	10	40	2.5	2.0
Surgery III	1,183	989	7,088	7.2	40	7	33	4.0	3.4
Surgery IV	1,707	1,382	7,843	5.7	23	6	17	1.7	1.2
Orthopaedics I	1,672	1,431	12,912	9.0	12	3	9	0.8	0.6
Orthopaedics II	2,102	1,892	10,636	5.6	12	1	11	0.6	0.6
Obstet/Gynaecol I	3,622	3,228	12,521	3.9	8	3	5	0.2	0.2
Obstet/Gynaecol II	3,089	2,734	12,856	4.7	5	–	5	0.2	0.2
Obstet/Gynaecol III	2,846	2,557	11,589	4.5	6	–	6	0.2	0.2
Nephrology	4,829	4,441	13,342	3.0	181	71	110	4.1	2.5
Endocrinology	402	321	4,950	15.4	17	3	14	5.3	4.4
Gastroenterology	2,416	1,962	13,095	6.7	372	126	246	19.0	13.4
Haematology	7,229	6,983	13,477	1.9	137	63	74	2.0	1.1
Psychiatry	402	256	5,395	21.1	1	–	1	0.4	0.4
Urology	4,877	4,568	16,546	3.6	29	6	23	0.6	0.5
ENT I	1,220	1,248	4,241	3.4	3	–	3	0.2	0.2
ENT II	1,488	1,393	4,219	3.0	5	–	5	0.4	0.4
ENT III	1,466	1,304	4,526	3.5	2	–	2	0.2	0.2
Dermatology	3,844	3,708	11,061	3.0	13	1	12	0.4	0.3
Newborn	2,171	1,591	10,647	6.7	57	22	35	3.6	2.2
Paediatrics I	2,792	2,534	8,259	3.3	74	20	54	2.9	2.1
Paediatrics II	1,363	1,140	5,763	5.1	66	15	51	5.8	4.5
Paediatrics III	2,492	2,246	7,056	3.1	78	21	57	3.5	2.6
Paediatric Surgery	2,559	2,146	12,465	5.8	48	6	42	2.2	2.0
Radiotherapy	35	28	138	4.9	11	8	3	39.3	15.0
Dental Surgery	154	128	1,076	8.4	1	–	1	0.8	0.8
Nuclear Medicine	569	519	1,119	2.2	–	–	–	–	–

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 %
GI Surgery	750	599	7,832	13.1	38	4	34	6.3	5.7
Physical Med Rehab	26	36	986	27.4	–	–	–	–	–
Dr BRA IRCH	221	158	1,150	7.3	47	31	16	29.7	12.6
Anaesthesiology	538	525	525	1.0	–	–	–	–	–
Total (Main)	65,755	58,430	2,75,753	4.7	2,311	773	1,538	4.0	2.7
Cardiology	7,856	7,187	22,159	3.1	267	114	153	3.7	2.2
CTVS	3,291	2,428	22,209	9.1	190	17	173	7.8	7.2
Neurology I	1,598	1,220	10,050	8.2	103	33	70	8.4	5.9
Neurology II	1,508	1,082	8,555	7.9	114	26	88	10.5	8.3
Neurosurgery I	1,914	1,450	14,065	9.7	149	42	107	10.3	7.6
Neurosurgery II	1,930	1,473	11,903	8.1	187	52	135	12.7	9.5
Total (CNC)	18,097	14,840	88,941	6.0	1,010	284	726	6.8	5.0
Grand Total (Main and CNC)	83,852	73,270	3,64,694	5.0	3,321	1,057	2264	4.5	3.1

APPENDIX III
Region-wise distribution of inpatients (2007–08)

Region	Main hospital	CNC	Total
Delhi	34,876	6,647	41,523
Uttar Pradesh	11,764	3,367	15,131
Haryana	7,333	2,046	9,379
Bihar	5,240	2,618	7,858
Rajasthan	1,184	619	1,803
Punjab	248	344	592
Other states	4,780	2,376	7,156
Other countries	330	80	410
Total	65,755	18,097	83,852

APPENDIX IV
Gender distribution of inpatients (2007–08)

Location	Male	Female	Male child	Female child	Total
Main hospital	26,075	24,733	10,174	4,773	65,755
CNC	9,800	4,265	2,836	1,196	18,097
Total	35,875	28,998	13,010	5,969	83,852

APPENDIX V
Surgical procedures (2007–08)

Department	Major	Minor	Total
Surgery I	688	2,709	3,397
Surgery II	980	2,723	3,703
Surgery III	589	1,795	2,384
Surgery IV	850	2,360	3,210
Gastrointestinal Surgery	427	3	430
Urology	1,361	9,116	10,477
Obstetrics	781	520	1,301
Gynaecology	1,466	1,207	2,673
Otorhinolaryngology	2,090	24,077	26,167
Orthopaedics I	1,115	476	1,591
Orthopaedics II	988	830	1,818
Paediatric Surgery	1,483	170	1,653
Dental Surgery	2,525	3,638	6,163
Casualty	3	6,268	6,271
Total (Main)	15,346	55,892	71,238
Cardiothoracic and Vascular Surgery	3,393	–	3,393
Neurosurgery I	1,180	216	1,396
Neurosurgery II	1,389	215	1,604
Total (CNC)	5,962	431	6,393
Grand Total (Main+CNC)	21,308	56,323	77,631

APPENDIX VI
Attendance in OPDs and Specialty Clinics (2007–08)

Medical disciplines		New cases	Old cases	Total
1.	Medicine			
	<i>General OPD</i>	69,763	63,386	1,33,149
	<i>Specialty Clinics</i>			
	Chest	1,803	3,509	5,312
	Rheumatology	442	7,730	8,172
	Geriatric	167	541	708
2.	Paediatrics			
	<i>General OPD</i>	29,513	37,698	67,211
	<i>Specialty Clinics</i>			
	Well baby	452	562	1,014
	Follow up TB	225	2,018	2,243
	Renal	633	2,714	3,347
	Neurology	1,374	3,335	4,709
	Chest	667	3,540	4,207
	High-risk neonatal	255	1,315	1,570
	Genetic and birth defects	1,329	1,000	2,329
3.	Endocrinology	6,500	15,087	21,587
4.	Haematology	5,147	19,106	24,253
5.	Gastroenterology	16,938	32,307	49,245
6.	Nephrology	6,773	20,115	26,888
	Renal Transplant Clinic	130	5,352	5,482
7.	Nuclear Medicine	2,031	8,672	10,703
8.	Dermatology			
	<i>General OPD</i>	31,816	29,868	61,684
	<i>Specialty Clinics</i>			
	Sexually transmitted diseases	704	1,057	1,761
	Allergy	444	1,042	1,486
	Leprosy	453	2,216	2,669
	Pigmentation	617	2,147	2,764
	Surgery	405	751	1,156
9.	Psychiatry			
	<i>General OPD</i>	3,166	–	3,166
	<i>Specialty Clinics</i>			
	Walk-in-clinic	10,918	21,823	32,741
	Child Guidance	433	371	804

Surgical disciplines		New cases	Old cases	Total
1.	General Surgery	35,209	27,481	62,690
2.	Urology	11,845	24,683	36,528
3.	GI Surgery	1,793	5,326	7,119
4.	Paediatric Surgery			
	<i>General OPD</i>	6,396	12,589	18,985
	<i>Specialty Clinic</i>			
	Hydrocephalus	29	209	238
	Intersex Clinic	21	200	221
	Urology	346	2,797	3,143
5.	Anaesthesia			
	Pain	1,082	2,514	3,596
	Pre-anaesthesia	8,405	1,620	10,025
6.	Orthopaedics			
	<i>General OPD</i>	68,629	1,31,759	2,00,388
	<i>Specialty Clinics</i>			
	Follow up	–	7,074	7,074
	Tuberculosis	13	–	13
	Polio	27	7	34
	Scoliosis	449	1,051	1,500
	Hand	631	897	1,528
	Club foot (CTEV)	878	716	1,594
7.	Otorhinolaryngology including RUAS			
	<i>General OPD</i>	42,494	39,576	82,070
	<i>Specialty Clinic</i>			
	Audiology	112	129	241
	Speech	1,238	1,274	2,512
	Hearing	852	1,091	1,943
	Voice	699	968	1,667
	Vertigo	112	100	212
	Rhinology	98	89	187
8.	Obstetrics and Gynaecology			
	<i>General OPD</i>	29,426	39,225	68,651
	<i>Specialty Clinics</i>			
	Postnatal	75	20	95
	Family welfare	5,592	2,357	7,949
	Antenatal	527	3,319	3,846
	Endocrine	58	163	221
	High-risk pregnancy	2,069	11,272	13,341
9.	Radiotherapy	1,956	72,290	74,246

Surgical disciplines		New cases	Old cases	Total
10.	Dental Surgery			
	<i>General OPD</i>	23,947	21,381	45,328
	<i>Specialty Clinic</i>			
	Orthodontics	2,591	4,165	6,756
	Combined cleft palate	180	182	362
	Trigeminal neuralgia	314	283	597
	Restorative-cum-endodontic	4,857	4,531	9,388
	Oral prophylaxis	3,355	4,399	7,754
	Prosthodontics-cum-maxillofacial prosthesis	2,274	2,681	4,955
Others				
1.	Casualty	1,48,632	–	1,48,632
2.	EHS	1,09,351	72,893	1,82,244
3.	Nutrition	2,011	798	2,809
4.	P.M.R.	12,103	10,182	22,285
5.	S.M.C.C.	2,315	2,596	4,911
Total		7,26,089	8,02,149	15,28,23

6.1 Division of Emergency Medicine

Professor-in-Charge

P.P. Kotwal
(till 21.02.2008)

Praveen Aggarwal
(w.e.f 22.02.2008)

Additional Professor

L. R. Murmu

Associate Professor

Prasoon Shamsherry

Sanjay Kumar Verma (ad hoc)

EDUCATION

The Faculty organized several life support courses (both basic and advanced) for undergraduates and postgraduates posted in the division. In addition, the department faculty was involved in didactic teaching of undergraduates and postgraduates through journal clubs and seminars.

The division imparted short term training to 9 undergraduate students from Europe, Australia and USA.

Continuing Medical Education

Conferences/seminars/workshops organized

Division of Emergency Medicine, AIIMS was one of the collaborating partners for the 'Indo-US Emergency Medicine Summit-2007' held at Mumbai on 26-30 September 2007. The conference was hosted by Indian Railways. Other collaborating partner was University of South Florida, USA.

Dr Praveen Aggarwal

- 'Indo-US Academic Council for Emergency and Trauma-2007' (ACET-2007), 1-2 September 2007, AIIMS.
- 'Advanced Hazmat Life Support', 4-6 December 2007 in collaboration with Indian Council of Medical Research, India and Centers for Disease Control and Prevention, USA.
- 'ECG for Emergency Paramedical Personnel', 28 September 2007, Indo-US Emergency Summit 2007, Mumbai.
- 'Emergency Toxicological Life Support', 28 September 2007, Indo-US Emergency Summit 2007, Mumbai.

Dr L.R. Murmu

- Ultrasound Course for Emergency Physicians, 17-20 January 2008, AIIMS in collaboration with SUNY Downstate University and University of South Florida, USA.

Dr Prasoon Shamsherry

- AO Basic Course of Trauma, September 2007, Delhi.

Lectures delivered

Dr Praveen Aggarwal

- 'Poisoning in India—Problems and Solutions', University of South Florida, Tampa, USA, June 2007.

- ‘Fixed Drug Combinations and Patient Compliance: Perceptions and Evidence’, Brainstorming Workshop on Rationality Assessment and Guidelines for Fixed Dose Combinations, 26 June 2007, Delhi.
- ‘Emergency and Trauma Care in India’, Indo-US Joint Workshop on Road Map for Trauma System Development in India, Indian Council of Medical Research, and Centers for Disease Control, Atlanta, USA 27–28 February 2008, Agra.

Dr L.R. Murmu

- ‘Emergency Medicine Laws in India’, University of South Florida, Tampa, USA, June 2007.
- ‘Blunt and Penetrating Trauma Abdomen’, Indo-US Emergency Summit 2007, 29 September 2008, Mumbai.
- ‘Rape and Child abuse’, Indo-US Emergency Summit 2007, 29 September 2008, Mumbai.
- ‘Blast Injuries’, Indo-US Emergency Summit 2007, 30 September 2008, Mumbai.

Dr Sanjay Verma

- ‘Training of Trainers on Emergency Nursing Management Skills’, 9–15 July 2007, St. Stephen’s Hospital, Delhi.
- ‘Comprehensive Interventional Pain Management’, 28 February–2 March 2008, Mumbai.

PUBLICATIONS

Journals

1. Bhatt SP, Handa R, Gulati GS, Sharma S, Pandey RM, Aggarwal P, *et al.* Peripheral vascular disease in systemic lupus erythematosus. *Lupus* 2007;16:720–3.
2. Goel A, Aggarwal P. Camphor—a lesser-known killer. *Southern J Med* 2007;100:134–5.
3. Goel A, Aggarwal P, Bhoi S, Gupta V. High-dose pralidoxime for organophosphorus poisoning. *Lancet* 2007;369:1425.
4. Goel A, Aggarwal P. Pesticide poisoning. *Natl Med J India* 2007;20:182–91.
5. Gupta P, Verma S. Unique presentation of epiglottitis in corrosive poisoning: A case report. *Internet J Anesthesiol* 2007;12:number 2.
6. Gupta P, Verma S, Saxena R. Managing airway in Dohlmann’s procedure using carbon dioxide laser by an innovative method. *Internet J Anesthesiol* 2007;12:number 2.
7. Shamsbery P. Locking compression plate in long standing clavicular non-unions with poor bone stock. *J Trauma* 2008;64:439–41.
8. Verma S. Novel technique to modify the nonfunctional valve of LMA’s pilot. A case report. *Internet J Anesthesiol* 2007;14:number 1.

Book

1. Verma S. *Emergency room procedures*. Hyderabad:Paras Medical Publisher; 2007.

Chapters in Books

1. Aggarwal P, Choudhary S. Emergency management of substance overdose and withdrawal. In: Lal R, Gupta S (eds). *Substance use disorder: Manual for nursing personnel*. New Delhi:NDDTC, AIIMS; 2007:74–90.

PATIENT CARE

The patient load catered to by the Emergency Services in 2007–08 was:

Average number of patients	12,500/month	Total: 1,48,632
Emergency stat laboratory tests	1,500/month	Total: 18,000

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Dr Praveen Aggarwal and Dr L.R. Murmu were presented ‘Award of Special recognition for Contribution towards Development of Academic Emergency Medicine in India’ by His Excellency Honorable Governor of Maharashtra on 29 September 2007 at Mumbai; were invited by TEAMHealth (USA’s largest provider of hospital-based clinical outsourcing) to attend a Leadership Course at Fort Lauderdale, Florida, USA; also invited by Department of Emergency Medicine, University of South Florida, USA to review their emergency medicine residency program in May–June 2007; delivered guest lectures on emergency care in India at Florida.

To promote the specialty of Emergency Medicine in India, an Academic Council of Emergency and Trauma (ACET) has been formed. This Council includes a group of faculty from MCI recognized medical colleges in India and is trying to establish and promote the idea of emergency medicine in India. This Council is led by faculty from the Division of Emergency Medicine, AIIMS and Department of Emergency Medicine, University of South Florida, USA.

To provide educational exchange in emergency medicine, EM-TECH (Emergency Medicine and Trauma Education Center For Health) was launched in 2007. It will promote education and skills in emergency medicine via accredited workshops, symposia and training courses. The Advanced Hazmat Life Support (AHLS) and Ultrasound for Emergency Physicians Courses were organized as a part of the EM-TECH programme.

VISITING SCIENTISTS

1. Dr Vikas Kapil, Chief, Surveillance and Registries Branch, Agency for Toxic Substances and Disease Registry, Centers for Disease Control and Prevention, Atlanta, USA
2. Dr Arunabha Nandi, Emergency Medicine, Bronox, New York

6.2 Hospital Dietetics Services

Chief Dietician

Parmeet (Acting)

Dietician

Swapna Chaturvedi

Asstt. Dietician

Gurdeep Kaur

Richa Jaiswal

Vasundhara Singh

Anjali Bhola

Number of indoor patients served different diets

Total number of diets		6,24,697	
Normal	3,30,258	Enteral feeds	36,758
Semisolid diets	31,266	Private ward diet	84,881
Therapeutic diets	1,41,534		

Nutrition Clinic: Outpatients

Old patients	793
Males	525
Females	268
New patients	1,948
Males	1,117
Females	831

6.3 Medical Social Welfare Unit

Medical Social Welfare Services were organised in various OPDs., wards, clinics and Casualty by the present strength of 2 Chief Medical Social Service Officers, 1 Supervising Medical Social Service Officer; 2 Medical Social Service Officers Grade I; 5 Medical Social Service Officers Grade II and 16 part-time social guides.

This unit provides central services in the form of guidance to patients, financial assistance from the Poor Fund, exemption of levy charges to poor and indigent patients, counselling, accommodation in the *dharamshala* for outstation patients, adoption of orphans, coordination regarding these activities in different departments and centres, and helping patients obtain railway concession.

During peak hours, this unit provides guidance and counselling to patients and tries to resolve any small grievances on the spot. This assists in smooth running of the OPDs. The average number of patients requiring guidance, referral slips and counselling in all OPDs including emergency services is about 2,900 every day. To achieve this, part-time social guides are deployed at important places such as the main enquiry counter, X-ray counter, Emergency, Blood collection centre as well as the OPD counters on five floors.

Counselling

Over 39,700 cases were given counselling and information about their diagnosis, prognosis and treatment after discussion with concerned doctors.

Over 6,500 cases were given special counselling and case work services. Services were also offered to solve their social, emotional and psychosomatic problems which come in the way of achieving best results of treatment. Patients were also motivated and helped for regular follow up whenever required. Sixty-eight home visits were made and 410 cases were informed through phones and telegrams.

Rehabilitation services

Over 840 destitute/unknown/unattended/road accident patients were rehabilitated in different rehabilitation centres under Delhi Administration and other welfare institutions as well as their homes.

Thirty patients were rehabilitated by helping them in getting jobs or work avenues. Five wheelchairs, 2 tricycles, 12 sewing machines, 55 crutches and 10 weighing machines were given to poor and needy patients. Twenty unweaned mothers were rehabilitated in other agencies till their delivery as their parents were unable to keep them at home.

About 6000 senior citizens were provided special help in OPDs and laboratories.

Financial assistance

A total of Rs 69,804 was given to 228 poor patients from the 'Fund for Poor Patients' provided by the hospital authorities. A large number were helped from other sources such as donations from philanthropic organizations for very expensive drugs and appliances such as crutches, wheel chairs, hearing aids, etc. Help was also extended for food, travel and funeral to a large number of cases.

Over 250 patients were given blankets and clothes. A large number of patients were referred to Ali Yaver Jung Institute for the Hearing Handicapped. Over 20 patients were given colostomy bags.

A total of 593 patients were provided expensive chemotherapy drugs costing Rs 4,12,647 with the help of the Cancer Patients Aid Association and worth over Rs 2 lakhs from other associations. Besides this many other articles like books, radios, chocolates, sweets, fruits and tape recorders were distributed among poor patients with cancer by the Cancer Patients Aid Association.

Medicines worth over Rs 25,000 from a philanthropic organization (Sewa Prakalap Mahila Mandal Trust), for full course of antituberculosis medicine, were distributed to patients suffering from tuberculosis of any site other than chest. Over 125 urograffin vials costing nearly Rs 22,500 were given to poor patients from donations.

Over 200 patients were motivated and guided to obtain necessary financial help from the Prime Minister's and Health Minister's Discretionary Fund. A large number of patients got grants worth over Rs 30 lakhs. Food was provided to over 2,500 poor patients.

Railway concession facilities

Over 15,000 cases suffering from cancer, tuberculosis, leprosy etc. were helped in obtaining railway concession facilities for journeys to and from AIIMS. A similar facility was also provided to deaf and dumb patients.

Accommodation

Nearly 2,250 patients and their attendants who came from outside Delhi were helped in obtaining accommodation in different *dharamshalas* in the vicinity of the hospital at cheaper rates.

Exemption of levy charges

Over 2,500 indigent and poor patients were exempted from payment of different types of investigations and admission charges.

Referral

About 1,200 patients with pulmonary tuberculosis and other diseases were referred to different TB hospitals/clinics of respective areas for treatment and issuance of drugs. Also over 25,000 patients were referred from the Casualty to other hospitals.

Blood donation camps

Organized 3 blood donations camps in association with philanthropic organizations and collected over 170 units of blood.

Hepatitis B vaccine

In association with a philanthropic organizations, 3 doses of vaccine for prevention of hepatitis B were administered to over 325 children of a slum area.

Health education

Activities were conducted in children's surgical and gynaecological wards with the help of students of Social Work and National Service Scheme (NSS) workers on maintenance of personal hygiene, balanced nutrition, health and family welfare, and preoperative and postoperative care.

Festivals such as Diwali, Rose Day and Christmas were celebrated in the wards and Puppet shows were organised for children admitted to the hospital. Toys were distributed in the children's surgical ward on Good Friday.

Special help

Over 500 poor indoor patients were provided life saving drugs/medicines worth a few lakhs from the medical stores/local purchase after proper scrutiny by Medical Social Service Officers.

Training and teaching

Mrs P.K. Kukreja, Chief MSSO attended 2nd National Congress on Prevention of Kidney Disease in India, 16 February 2008.

Mr B.R. Shekhar, Supervising MSSO attended workshop and seminar organized by KCDAT on Dual Diagnosis in UK, 24–31 July 2007.

Ms Gurmit Kaur, MSSO Grade I attended workshop on Rehabilitation of Unknown Babies, AIIMS, 14 February 2008.

Orientations were given to the visitors from various organizations. Besides this about 35 NSS volunteers from various schools and colleges were also given orientation in dealing with patients and hospital-related problems.

Two postgraduate students of MSW from the Department of Social Work, Delhi; 2 undergraduate students from Aditi College; 3 undergraduate students from Ambedkar College, Delhi University; 2 postgraduate students from Bishop Vayalil Memorial Holy Cross College, Kerala; and 3 postgraduate students from St. Joseph College, Devagiri, Kerala were given on-the-job/field work training in Medical Social Services under close supervision during this period. A team of 80 students from various institutions were given on job training/orientation ranging from 1–15 days.

6.4 Hospital Billing Section

The amount received as donation and payments made to patients during 2007–08 are as follows:

Total sum available from donations, poor fund boxes and bank interest	Rs 3,28,372
Payments made to (69+159) patients	Rs 69,804

(The amount disbursed to poor patients is from donations received 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 services to all departments in the main hospital, Dr R.P. Centre for Ophthalmic Sciences, Dr B.R. Ambedkar Institute Rotary Cancer Hospital, and the Cardiothoracic and Neurosciences Centre.

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

Workload during 2007–08

1. Total pieces processed	52,77,497
2. Total weight (kg)	16,23,639
3. Total cost of washing material (Rs)	14,68,227
4. Cost of washing material per piece (Rs)	0.2782
5. Cost of washing material per kg of linen (Rs)	0.9042

6.6 Blood Bank (Main Hospital)

ACTIVITIES

Blood collection in donor room

1. Total relative donors	23,417
2. Total voluntary donors	6,663
From Donation camps	6,099
From AIIMS blood bank	564
From Mobile donation	Nil
3. Collected from CNC	1,219
4. Indian Red Cross Society	166
5. Others	479
Total	31,944

Camps organized

83

Routine laboratory

1. Total patients	42,459
2. Total ABO grouping	1,06,347
3. Total Rh	74,403
4. Total OPD grouping and Rh	3,903
5. Total cross-match (emergency and routine)	58,774
6. Total donor grouping	63,888
7. Total ICT	914
ICT positive	195
8. Total titre	183
9. Total A/B	38,556
10. Total DCT	411
DCT positive	21
11. Total blood issued (units)	32,334
12. Total received back (units)	533
13. Total small units	352
14. Total blood discarded (units)	367
15. Blood issued but not transfused (units)	0

16. Total blood issued to private ward (units)	2,473
17. Total component issued to private ward (units)	2,444
18. Total blood issued to outside hospitals (units)	1,397
19. Total components issued to outside hospitals (units)	213
20. Total cross-match but not transfused (units)	9,041
21. Blood issued to IRCH (units)	3,334
Indian Red Cross Society	151
CNC	91
Total	4,41,104

Special procedure laboratory

1. Minor grouping	343
2. Platelet antibody.	80
3. Reagent cell thawing	720
4. Cell freezing	Nil
5. DAT	17
6. Cross-matching discrepancy	95
7. Group discrepancy	5
8. AB screening	53
9. Blood thawing	Nil
Total	1,313
10. Infection marker QC	212
11. Antisera QC	76
12. EQAS	4
13. Component QC	326
Total	618

Component laboratory

1. Platelet rich concentrate	23,688
2. Fresh frozen plasma	17,881
3. Liquid plasma	11,803
4. Cryoprecipitate	600
5. Red blood cells	28,984
6. Single donor platelet pheresis (SDP)	31
7. Plasmapheresis	5
Total components prepared	82,292
8. Platelet pheresis (IRCH)	1,243
9. Stem cell (IRCH)	166

Infection laboratory

1. HIV test	44,441
2. HBV test	39,503
3. Anti-HBc test	39,209
4. HCV test	39,828
5. VDRL	37,885
Total	2,00,866

Welfare Unit

Welfare Officer
Preeti Ahluwalia

Patients Welfare/Care: Rs. 79,40,000/- (approx.) raised as donation

Purpose	Donation (Rs)	Donor
For treatment and surgery of poor and needy patients undergoing treatment in the Main Hospital & Centres	8,49,700	Shri Sai Bhakta Samaj (Regd.)
	4,18,000	Indo Global Social Service Society
	4,77,250	Handicapped Children's Rehabilitation Association
	1,67,000	Jawahar Bhawan Trust
	1,13,000	Sahu Jain Trust
	1,07,000	Times of India Relief Fund
	1, 00,000	Shakti Sewa Samiti
	90,000	Rajendra Bhawan Trust
	76,000	Sewa Prakalp Mahila Mandal Trust
	64,000	Lal Devi Charitable Trust
	85,000	Other Charitable Trusts
	64,500	Individual Donors
	24,000	Vijaya Gujral Foundation
AIIMS Poor Fund Account	1,00,000	Sahu Jain Trust
	11,000	Shri Anshuman Bhalla
	10,000	Smt. Surjeet Kaur
	5,000	Shri V.B.M. Mathur
	2,000	Smt. Bimla Devi
	2,100	Smt. Vimmi Bhutani
Anti-Cancer drugs provided free to cancer patients	36,76,223	Gopal Foundation
Portable Whole Body Colour Doppler System received as donation for the Casualty	15,00,000	Smt. Swarn Kapur
Folding Wheelchairs	21	USTA

In addition, patients living below the poverty line were assisted to avail of financial assistance for their treatment from Rashtriya Arogya Nidhi, P.M. National Relief Fund, Health Minister's Discretionary Grant and other governmental and non-governmental agencies. Assistance to poor patients from Hospital Poor Patient Fund is also extended and they are also helped 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 16,000 patients and their attendants who were undergoing treatment at the Institute and its Centres. In special cases, food was arranged for the needy poor patients/attendants who were staying in the Vishram Sadan through individual donors namely Smt. Amrit Sharma & Shri K.K. Sureka.

Sapna, (NGO) is also distributing dry ration on a weekly basis to approx. 50 patients who are below the poverty line. In addition, half a litre milk was also distributed every day to approx 80-90 patients of the Sadans. Holi was celebrated with the inmates of the Sadans by Cancer Patients Aid Association.

Employees' Welfare

Appointment on compassionate grounds

Cases for appointment 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 have suffered and thereby enable them to shoulder the responsibilities befallen upon them. As need be, assistance for funeral expenses was also provided to the relatives of the deceased employees.

Counselling Services

Counseling 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 for redressal of grievances to staff and patients are being provided.

Free Hearse Van Facility

This facility is organized through Shri Sai Bhakta Samaj (Regd.) to enable 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.

Diwali Celebration

Mrs. Vimmi Bhutani celebrated Diwali with the children of our employees studying in the Nursery & Primary School being run by Medical Institute Residents Welfare Association (MIRWA). Cardigans and Sweets were distributed on this occasion.

7. College of Nursing

Principal

Manju Vatsa

Lecturers

Meena Agarwal

Ashia Qureshi

Sandhya Gupta

Deepika C. Khakha

Rachel Andrews

Kamlesh Sharma

Senior Nursing Tutor

Geeta Razdan

Nursing Tutors

M. Sharma
(Retired in January 2008)

Shashi Mawar

Kiran Singh Simak

Poonam Joshi

Babita Sahoo

Gayatri Batra

Sucheta

EDUCATION

Undergraduate

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

Postgraduate

MSc Nursing: 14 students graduated from the two-year MSc Nursing course. Twelve students have joined the programme this year in the following specialties:

1. Pediatric 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/symposia/workshops (CNE programmes).
 - A ten-day workshop on 'Effective learning and teaching strategies in nursing education', 7–16 January 2008 for nurse educators from northern region, sponsored by Ministry of Health and Family Welfare. A total of 28 participants registered for the workshop. Coordinator: M. Aggrawal.
 - A two-day workshop on 'Substance use disorder nursing', October 2007 for 19 nursing personnel from NDDTC, AIIMS. Coordinator: Sandhya Gupta.
 - 'Cardiology Nursing Update', October 2007; 28 nurses from AIIMS attended the update. Coordinator: Rachel Andrews.
 - 'Neurological Nursing Update', October 2007; 20 nurses from AIIMS attended the update. Coordinator: Meena Agarwal.

- ‘Oncology Nursing Update’, November 2007; 21 nurses from AIIMS attended the update. Coordinator: K. Sharma.
 - ‘Nephrology Nursing Update’, November 2007; 43 nurses from AIIMS attended the update. Coordinator: D.C. Khakha.
 - ‘Neonatal Nursing Update’, November 2007; 28 nurses from AIIMS attended the update. Coordinator: P. Joshi.
 - ‘Mental Health Nursing Update’, March 2008; 32 nurses from AIIMS attended the update. Coordinator: Sandhya Gupta.
 - Symposium on ‘Integrated approach to healthy living’ held on Annual day of the College. Nurse participants from AIIMS attended the programme. Coordinator: Sandhya Gupta.
 - Three months ‘Clinical Training Programme’ was organized for 3 nursing personnel from Myanmar on WHO fellowship.
2. The College of Nursing also conducted orientation/briefing sessions for:
 - One group of visitors from abroad and 10 groups of visitors from various educational institutions from India.
 - WHO fellows from National Institute of Health and Family Welfare (Nursing services administration).
 3. Faculty members of the college attended 21 workshops/conferences and delivered 65 lectures for 35 continuing nursing/medical education programmes and workshops during the year.

CLINICAL AND COMMUNITY SERVICES

(Participation by Faculty and Students)

1. Participated in outdoor and indoor patient care activities of all clinical departments of the Institute.
2. Participated in six rounds of Pulse Polio programmes at 45 centres of South Delhi, organized by Government of NCT of Delhi. Kiran Singh coordinated and supervised the programme.
3. One hundred health education sessions each in rural areas and urban slums and OPDs of AIIMS on various health issues such as hygiene, HIV/AIDS, prevention and treatment of upper respiratory infection, diarrhoeal diseases, tuberculosis, family welfare, female infanticide, prevention of household accidents in children, prevention of obesity, etc.
4. Street plays (10) and exhibitions on various health-related topics for urban slums.
5. New-born week was celebrated in November 2007. On-the-spot poster competition (inter-college), quiz competition (inter-class) and neonatal nursing CME were organized on the occasion. Dr Manju Vatsa, and Ms Poonam Joshi, coordinated the activities. Well baby show was organized in NGO ‘Mobile Creche’ in collaboration with Centre for Community Medicine.
6. National Mental Health Week was organized from 4–10 October 2007. In addition, symposia, exhibitions, street plays, counselling and screening/referral was done at AIIMS OPD for general public. Health education and awareness programme was taken up at the National Drug Dependence Treatment Centre at Trilokpuri. Ms Sandhya Gupta was the coordinator.
7. Two community mental health educational programmes were organized by Ms Sandhya Gupta and nursing students in the Trilokpuri area.

PUBLICATIONS

Journals

1. Rohrberg DS, Khakha DC, Tahir B, Basu S, Sharma SK. Poor follow-up rates at a self-pay north Indian tertiary AIDS Clinic. *Int J Equity Health* 2007;6:14.
2. Wig N, Sakhuja A, Agarwal S, Khakha DC, Mehta S, Vajpayee M. Multidimensional health status of HIV infected outpatients at a tertiary care center in north India. *Indian J Med Sci* 2008;2:87–97.

Abstracts

3. Arora S, Vatsa M, Dadhwal V. A study to compare cabbage vs hot and cold compresses in treatment of breast engorgement. In: Abstracts of 6th International Conference of Neonatal Nursing, 15–18 September 2007. New Delhi:NNF, UNICEF India; 2007.
4. Gupta S. Attitude of parents of malformed child, In: Abstracts of 6th International Conference of Neonatal Nursing, 15–18 September 2007. New Delhi:NNF, UNICEF India; 2007.
5. Mawar S, Mahajan S, Tiwari SC, Agarwal S, Gupta S, Bhowmick D. Clinical audit of CAPD procedure and clinical outcome. In: Souvenir of 9th Annual Conference of Peritoneal Dialysis Society of India, 2007:13
6. Sharma K, Arora S, Subhashini L. A study to assess the knowledge, attitude and practice of parents and staff nurses regarding K.M.C. In: Abstracts of 6th International Conference of Neonatal Nursing, 15–18 September 2007. New Delhi:NNF, UNICEF India; 2007.
7. Vatsa M. Study of effectiveness of an innovative instructional program using selected teaching strategies in Neonatal Nursing for BSc Nursing students. In: Abstracts of 6th International Conference of Neonatal Nursing, 15–18 September 2007. New Delhi:NNF, UNICEF India; 2007:5
8. Vatsa M. Neonatal nursing in India In: Souvenir TNAI Centenary Celebration. New Delhi:TNAI; 2008:57–9.

Chapters in Books

1. Gupta S. Care in general medical/surgical units and pain management. In: Lal R, Gupta S (eds). Substance use disorder nursing: L A Manual for Nursing Personnel. New Delhi:NDDTC, AIIMS; 2007.
2. Gupta S. Camp approach in treatment of substance use disorder. In: Lal R, Gupta S (eds). Substance use disorder nursing: L A Manual for Nursing Personnel. New Delhi:NDDTC, AIIMS; 2007.
3. Vatsa M. Legal aspects of drug abuse in India. In: Lal R, Gupta S (eds). Substance use disorder nursing: L A Manual for Nursing Personnel. New Delhi:NDDTC, AIIMS; 2007.

Books

1. Lal R, Gupta S (eds). Substance use disorder nursing: L A Manual for Nursing Personnel. New Delhi:NDDTC, AIIMS; 2007.

AWARDS AND HONOURS

Dr Manju Vatsa was awarded the WHO Fellowship for ‘Ageing’ to Khon Kaen University, Thailand for 1 month; nominated Member, Faculty of Nursing, Baba Farid University of Health Sciences, Faridkot, Punjab; nominated Founder President of ‘Indian Association of Neonatal Nurses’.

Ms Deepika Khakha was awarded Fellowship in ‘Advanced AIDS International Training Research Programme’, University of California Los Angeles (ULCA), USA for three months; awarded AIIMSONIANS of AMERICA Award for Best Research at 35th Convocation, October 2007.

Ms Shashi Mawar was awarded AIIMSONIANS of AMERICA Award for Best Research at 35th Convocation, October 2007.

CONSULTANCY AND PARTICIPATION AS EXPERT

1. Dr Manju Vatsa participated as core group member of PhD Consortium in India coordinated by the Indian Nursing Council and (i) took teaching sessions for PhD scholars through video-conferencing and (ii) continued as guide for 6 PhD scholars for consortium for PhD in nursing, Indian Nursing Council and Rajiv Gandhi University for Health Sciences; Member of the Indian Nursing Council and its executive and education committees as (i) Expert for revision of MSc Nursing curriculum and (ii) Development of curriculum of Nurse Practitioner’s course.
2. Dr Manju Vatsa participated in the first meeting of ‘SEARO-WHO Nursing and Midwifery Educational Institutions Network’, Chandigarh; Training in ‘Recent Advances in Nursing and Midwifery and National Health Programmes’ in Bangkok, Thailand sponsored by WHO; Pilot testing of Essential Newborn Care package for nurses training tool. WHO collaborating Centre for Newborn Care, AIIMS; as National Advisory Board member for ‘Prism’s Nursing Practice’ *Journal of Clinical Nursing*, Education, Training and Career; Organizing Secretary, International Neonatal Nursing Conference, New Delhi, September 2007; National Coordinator for Workshop on ‘Evidence Based Practice’ and ‘International Neonatal Nursing Conference’, New Delhi, September 2007.
3. Dr Manju Vatsa was an expert member for National Task Force on Strategies for Development of Nursing Sector during X and XI Plan, Ministry of Health and family Welfare Government of India; 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, Government of India, Ministry of Health and Family Welfare, Maternal Health Division; Revision of MTP Act, Ministry of Health, Government of Indian; Review of three month’s Speciality Programme of Ministry of Health, Government of India; Strengthening of Pre-service education of ANM, GNM as Skilled Birth Attendant. Indian Nursing Council.
4. Dr Manju Vatsa, Ms Sandhya Gupta and Ms Deepika Khakha participated as experts for (i) Development of ‘Training Manual for Nurses for Trainers and Nursing Personnel in HIV/AIDS’ organized by the Indian Nursing Council, NACO and Clinton Foundation; (ii) Two-day training programme for trainers for HIV modules organized by the Indian Nursing Council; and (iii) from SEARO, India at the launch of Mental Health Atlas by WHO, Geneva, 15 September 2007.
5. Dr Manju Vatsa and Ms Sandhya Gupta continue to be on the review panel of *Indian Journal of Nursing and Midwifery* and were members of organizing committee, National Conference on Emerging Trends in Medical Education, organized by CMET in collaboration with FAIMER in 2007.
6. Ms Sandhya Gupta was nominated as Chairperson for the scientific sessions for Seventh National Conference of Indian Society of Psychiatric Nurses held in Cochin, Kerala in February 2008; nominated Chief Editor, Indian Society of Psychiatric Nurses (2007 onwards); nominated Organising Secretary, Second International Conference of Indian Society of Psychiatric Nurses to be held in 2009.

7. Ms Kamlesh Sharma and Ms Rachel Andrews acted as resource persons for training of health personnel in workshop on 'Breast Self-examination' for CGHS doctors from Delhi, 8–15 March 2008, organized by Department of Surgery, AIIMS, New Delhi.
8. Ms Kamlesh Sharma was National Coordinator for workshop on 'Kangaroo Mother Care and Lactation Management' at the 6th International Conference of Neonatal Nursing, National Neonatology Forum, September 2007; technical expert for orientation of assessors for ANM training schools in Kolkata, Bhopal and Bhubaneshwar in 2007 organized by Indian Nursing Council.
9. Ms Kiran Singh is continuing as Programme Officer of NSS Unit, AIIMS
10. Faculty members were resource persons/committee members for the following organizations:
 - Indian Nursing Council: General body, executive committee and education committee.
 - Faculty of Nursing, Baba Farid University of Health Sciences
 - Ministry of Health and Family Welfare, Government of India
 - Rajkumari Amrit Kaur College of Nursing
 - Adjunct faculty, CMET, AIIMS
 - National Medical Library, Book Selection Committee
 - 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
 - GGS Indraprastha University: Institutional Assessment Committee
 - Indian Academy of Hospital Administration
 - University of Delhi: Inspection for Grant of Affiliation to LHMC College of Nursing
 - Kumaon University: Board of Studies
 - IP University: Inspections, College of Nursing of Batra Hospital and St Stephen Hospital
 - Public Service Commission: UP, Allahabad
 - SGPGIMS, Lucknow: Selection Committee
 - BR Ambedkar University, Agra
11. Faculty members of the College participated in conduct of inspections and examinations in various colleges of nursing and universities in India.

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. These were funded by national and international agencies and the total funding amounted to nearly Rs 46 crores.

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

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 (Admn)	Member
6. Dr G.K. Rath, Professor and Head of Radiotherapy and 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 Met.	Member
20. A Representative of the ICMR, to be nominated by DG, ICMR	Member
21. Financial Adviser	Member
22. Sh. S.P. Mahla, Finance and Chief Accounts Officer (Res)	Member
23. Sh. K.C. Chhoker, Sr. Administrative Officer (Res)	Member-Secretary
24. A Representative of SYS	Member

Ongoing research projects funded by Indian agencies

Investigator	Project	Funding agency	Funds (Rs)
Anatomy			
Rani Kumar	Role of cell cycle regulatory genes in breast cancer patients on hormonal therapy	DBT	3,03,963
Rima Dada	Analysis of mitochondrial DNA mutations in pathogenesis of spermatogenic arrest	ICMR	4,33,617
Rima Dada	Genomic diversity in five ethnic groups of Rajasthani population	DBT	31
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	2,12,035
Biochemistry			
D.N. Rao	Developing new generation peptide based vaccine using F1 and V antigens of <i>Yersinia pestis</i> (Plague)	DST	3,04,064
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	6,16,173
D.N. Rao	Immunocapture based diagnostic assay for the detection of <i>Plasmodium falciparum</i> HRP-2 and LDH antigen	ICMR	6,88,200
D.N. Rao	Development of defensin(s) as a mucosal adjuvant/ microbicide with peptide antigens of HIV	ICMR	1,22,928
D.N. Rao	T reg cells and other negative regulatory elements of IL-2 in leprosy patients	ICMR	6,55,949
D.N. Rao	Development defensin(s) as a mucosal adjuvant/ microbicide with peptide antigens of HIV	DBT	7,22,860
D.N. Rao	Programme for productization of diagnostics and development of prophylactics for neglected infectious diseases with filariasis as a model	DBT	6,49,000
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	2,68,564
Kalpana Luthra	Genetic polymorphism of cholesterol ester transfer protein in hyperlipidaemic patients: A case-control study.	ICMR	3,38,314
M.R. Rajeswari	Proteomic analysis of outer membrane of <i>Acinetobacter baumannii</i> and its resistant strains	DBT	2,07,700
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.	DST	4,57,034
N.C. Chandra	An <i>in vitro</i> study of hyperlipoproteinemia on the degree of LDL receptor expression in placental trophoblast cells: Correlation with oral steroid contraceptive-induced hyperlipoproteinemia	ICMR	2,61,146

N.C. Chandra	Studies on the possible development of hyperlipomia by oral contraceptives: An <i>in vitro</i> model	MOHFW	101
Neeta Singh	A study of molecular and biological factors in pathogenesis of ovarian cancer	ICMR	7,99,099
Neeta Singh	Mitochondria in apoptosis and human cancer	ICMR	3,56,160
Neeta Singh	Development of HPV vaccine prototype	DBT	12,00,261
Neeta Singh	Development of human papilloma virus vaccine proto-types- Molecular epidemiology of HPV types prevalent in India and identification of HPV-16 L1 and E6 variants	DBT	11,68,566
Nibhriti Das	Expression and modulation of complement receptors: Significance in the pathophysiology and prognosis of autoimmune disorders	CSIR	4,17,418
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	5,53,924
P. Chattopadhyay	Effect of tumour-specific HSP 90 inhibitor, Geldanamycin, on CpG island methylation and survival of hypoxic glial tumour cell lines	CSIR	2,00,000
P. 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	6,61,972
Ranju Ralhan	Functional analysis and clinical significance of novel molecular targets in cytoskeleton reorganization and locoregional spread of oral cancer using proteomics	DBT	8,05,910
S.S. Chauhan	Characterization of the positive regulatory region of the first exon of human Cathepsin L gene	DST	7,15,870
Subrata Sinha	Interaction of DNA repair genes and p53 in determining the cellular response to genotoxic agents in glial tumor cell lines	DST	5,14,449
Subrata Sinha	Funds for improvement of S&T infrastructure (FIST)	DST	16,134
Subrata Sinha	Generation and characterization of phage displayed recombinant antibodies to biochemically and immunologically relevant epitopes of the onco-developmental antigen heat stable alkaline phosphatase	ICMR	4,79,980
Subrata Sinha	Ligand based selection from combinatorial libraries for generating recombinant antibodies to the placental (oncofoetal) isozyme of alkaline phosphatase: Characterization and validation in clinical cancers	DBT	8,01,911
Subrata Sinha	Therapy of infectious and chronic diseases. Targeted gene delivery and long-term specific modulation of gene expression.	DBT	60,24,347
Biomedical Engineering Unit			
J.C. Bhardwaj	Reversibility of injectable intravascular contraceptive for the male: Technology development and multicentric non-human primates study	MOHFW	3,31,915

J.C. Bhardwaj	Study of fallopian tube function with luminal implant	Markansas Research Division	2,46,341
Biophysics			
A. Srinivasan	Infrastructural support for clinical proteomics	DBT	9,00,399
A.Srinivasan	Proteomics of human body fluids: Structural characterization of proteins and target identifications for diagnosis and drug discovery	DBT	7,15,666
Krishna Dalal	Improvement of S & T infrastructure in universities and higher education institutions (FIST)	DST	1,08,925
Krishna Dalal	A randomized clinical trial on the effect of reflexology in the management of patients suffering from diabetic neuropathy: Case studies	ICMR	5,35,545
Krishna Dalal	Randomized clinical trial (RCT) of reflexology therapy and usual drug treatment in the management of intractable epilepsy	CCRYN	6,02,013
Nagendra Singh/ T.P.Singh	Structure based rational drug design for inflammation, arthritis and rheumatism using phospholipase A-2 (PLA-2), cyclooxygenase-2 (COX2) and lipooxygenase as target macromolecules	DST	64,638
Punit Kaur	Three dimensional structure determination of disintegrin from venom of Indian saw scaled viper by X-ray diffraction method and structure and function relationship with its complex with integrin	CSIR	1,12,500
Punit Kaur	Setting up bioinformatics centre at AIIMS, New Delhi	ICMR	14,06,550
Savita Yadav	Purification, crystallization and structure determination of disintegrin and integrin–disintegrin complex	DST	3,02,710
Sharmistha Dey	Structure based rational drug design: Development of specific anti-inflammatory agents using phospholipase A2 and cyclooxygenase-2 as target enzymes	CSIR	3,31,267
Sharmistha Dey	Design, synthesis and evaluation of inhibitors of lipooxygenase as anti-inflammatory agents	DST	9,54,102
Sujata Sharma	Search of a magic drug: Isolation, purification, crystallization and three-dimensional structure determination of the functional c-lobe and antimicrobial peptides of lactoferrin and their applications in antimicrobial drug discovery	DST	5,590
Sujata Sharma	Structural studies of signalling proteins expressed during involution/breast cancer and ligand design	DST	11,12,588
Sujata Sharma	Determination of amino acid sequence and three-dimensional structure of phospholipase A2 from Indian red scorpion	DST	1,07,331
Sujata Sharma	Isolation and three-dimensional structure determination of the novel signaling protein SPX-40 from mammary gland secretion during involution	DST	5,32,398
Sujata Sharma	Clinical proteomics: Structural and functional studies of proteins present in pleural fluid	DST	3,63,578
T.P. Singh	Distinguished Biotechnologist Award	DBT	7,70,500

Biostatistics			
R.M. Pandey	Development of appropriate prevention and intervention strategies for non-communicable nutrition related disorders among women in post-reproductive period	DST	7,41,103
R.M. Pandey	New born screening for congenital hypothyroidism and congenital adrenal hyperplasia: A multicentric study	ICMR	1,33,417
S.N. Dwivedi	Multilevel epidemiological analysis to assess the role of community level effects on public health/family welfare	ICMR	47,922
V. Sreenivas	A multicentric randomized controlled clinical trial of lamivudine, lamivudine and adefovir, glycyrrhizin and adefovir in HBV-related decompensated cirrhosis	ICMR	3,30,011
Biotechnology			
H.K. Prasad	Study of transmission of livestock derived pathogenic mycobacteria and its prevalence among humans (Zoonotic tuberculosis)	DBT	3,91,607
J.S. Tyagi	Isolation identification and characterization of peptides that interact with two component system proteins devR and RC 2027c of <i>Mycobacterium tuberculosis</i>	CSIR	10,718
J.S. Tyagi	Evaluation of devR mutant of <i>Mycobacterium tuberculosis</i> in animal model of tuberculosis and in cultured bacilli: Virulence and gene expression analysis.	DBT	12,76,820
J.S. Tyagi	High throughput PCR assays for diagnosing tuberculosis caused by <i>Mycobacterium tuberculosis</i> and <i>Mycobacterium bovis</i> using molecular beacons	DBT	9,74,984
Y.D. Sharma	Malaria vaccine related field studies in Jabalpur India	ICMR	7,19,409
Cardiac Anaesthesiology			
Poonam Malhotra Kapoor	Myocardial preconditioning against infarction in patients undergoing coronary artery bypass surgery: A comparison of isoflurane and sevoflurane	ICMR	4,08,198
Cardiac Biochemistry			
R. Lakshmy	Recovery and stability of routine chemistry analytes and enzymes from serum/whole blood spotted on filter paper	ICMR	42,117
R. Lakshmy	LDL particle heterogeneity and its association with other established risk factors for CHD in an industrial population: Role of CETP gene	ICMR	1,29,938
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	11,22,081
R. Lakshmy	Serum fatty acid levels and their correlation with other CVD risk factors in industrial populations from Delhi and Trivandrum	ICMR	5,04,109
Cardiac Radiology			
Sanjeev Sharma	Induction of therapeutic angiogenesis in critical limb ischaemia by intra-arterial delivery of autologous bone marrow derived stem cells	DBT	19,48,730

Cardiology			
Balram Bhargava	Clinical trial with paclitaxel eluting carbon coated cobalt chromium stent	Relisys Medical Devices	75,000
G. Karthikeyan	Role of homocysteine in coronary artery disease: Genetic and epigenetic studies	DBT	1,20,552
G. Karthikeyan	Non-invasive detection of sub-clinical disease activity in patients with established rheumatic valvular heart disease	DBT	10,28,154
R. Juneja	Intravascular ultrasound for severe pulmonary artery hypertension in congenital heart diseases	DST	7,76,000
Cardiothoracic and Vascular Surgery			
Balram Airan	Surgical treatment for ischaemic heart (stitch) failure trial	Clini Rx Research	22,13,915
P. Venugopal	Use of autologous bone marrow stem cells for myocardium regeneration	DBT	74,01,693
Centre for Behavioural Sciences (Psychiatry)			
Manju Mehta	Risk factors of substance use and abuse in offspring of substance abuse patients	ICMR	1,64,746
Manju Mehta	Road rage: A study of aggressive behaviour and intervention strategies	MOHFW	4,57,233
Manju Mehta	National mental health programme	MOHFW	1,45,500
Rajesh Sagar	Phase III randomized placebo-controlled, double-blind trial evaluating the safety and efficacy of sublingual asenapine vs. olanzapine and placebo in inpatients with an acute manic episode (A7501005)	Pfizer	5,74,790
Centre for Community Medicine			
Puneet Mishra	Development of appropriate prevention and intervention strategies for non-communicable nutrition related disorders among women in post-reproductive period	DST	5,04,268
Dental Surgery			
Ajoy Roychoudhry	A randomized double blind placebo controlled study of efficacy of lactobacillus CD2 lozenge in patients with chronic periodontitis	CD Pharma India	4,73,914
O.P. Kharbanda	Development of visual analog scale for smile characteristics following orthodontic treatment and its correlation with the treatment outcome	ICMR	4,43,510
Ritu Duggal	Detection of apoptosis in human periodontal ligament during orthodontic tooth movement	ICMR	2,91,325
Dermatology and Venereology			
Kaushal K. Verma	Randomized clinical trial of azathioprine weekly pulse versus daily azathioprine for the treatment of Parthenium dermatitis	ICMR	4,03,590
Neena Khanna	Evaluation of ovarian function in female patients with multibacillary leprosy	ICMR	1,71,882

Neena Khanna	Role of parthenium hysterophorus in pathogeneis and exacerbation of atopic dermatitis	DBT	63,116
V.K. Sharma	Evaluation of cyclophosphamide pulse therapy as adjuvant in the management of pemphigus	ICMR	66,899
Dr B.R. Ambedkar Institute–Rotary Cancer Hospital			
Ritu Gupta	Immunophenotypic characterization of plasma cells by flow cytometry in health and disease with particular reference to plasma cell myeloma	DST	2,01,491
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	4,29,116
B.K. Mohanti	Patterns of care and survival studies in cancer registry programme	ICMR	3,58,540
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	1,55,001
Lalit Kumar	Expansion of adult human bone marrow and cord blood stem cells for reprogramming into hepatocytes	ICMR	8,02,364
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	1,98,729
Lalit Kumar	<i>In vitro</i> expansion and establishment of human foetal liver haematopoietic stem cell line	DBT	26,43,234
Lalit Kumar	Grastim (G-CSF) mobilized peripheral blood progenitor cell (PBPC) transplantation (allogenic or autologous): A multicentric study	Dr Reddy's Lab	7,05,403
N.K. Shukla	Characterization and functional analysis of differentially expressed genes in esophageal cancer	DST	6,08,347
P.K. Julka	A phase III trial of ALIMTA vs. docetaxel in patients with locally advanced or metastatic non-small cell lung cancer	Ranbaxy/ EliLilly	4,86,885
P.K. Julka	A randomized, double blind, placebo controlled, phase II study of oral recombinant human lactoferrin (RHLF) in combination with carboplatin and paclitaxel (C/P) in patients with locally advanced and/or metasatic non-small-cell lung cancer (NSCLC)	Reliance Clinical Research Services	47,421
P.K. Julka	A randomized, double-blind, parallel-group, multicentre, phase III study comparing the efficacy and tolerability of fulvestrant (FASLODEX) 500 mg with fulvestrant (FASLODEX) 250mg in postmenopausal women with oestrogen receptor positive advanced breast cancer progressing or relapsing after previous endocrine therapy	Quintiles Spectral India	3,69,499
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	1,52,967
Rajive Kumar	Characterization of testis specific sperm associated antigen 9 (SPAG9) gene expression and humoral immune response in various human cancers	DBT	75,750

V. Raina	Antioxidants as adjunct to chemotherapy of lung cancer: <i>In vitro</i> study	Dr Reddy's Lab	2,06,502
V. Raina	An <i>in vitro</i> study of antiproliferative and apoptotic effects of Gefitinib on lung cancer cell lines	NATCO Pharma India	89,248
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	3,62,705
V. Raina	An ascending dose, sequential group, placebo-controlled, multicentre, phase I study of RWJ 800088 in subjects with cancer receiving platinum-based chemotherapy regimens protocol 800088-NAP-1002: Phase I	Johnson & Johnson	10,30,383
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 protocols but may derive benefit from treatment with SU011248	Pfizer	6,33,337
Dr R.P. Centre for Ophthalmic Sciences			
Gita Satpathy	Novel molecular diagnostics for eye diseases and low vision enhancement devices	CSIR	2,08,585
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 particularly stromal keratitis and atypical epithelial keratitis vis antigen detection and genomic DNA detection by PCR assay in corneal scrapings	ICMR	4,61,362
Niranjan Nayak	Standardization of antifungal susceptibility testing for filamentous fungi and characterization of drug sensitive and drug resistant fungal isolates in mycotic keratitis	ICMR	1,07,012
Radhika Tandon	Ocular surface reconstruction with alternative autografts of non-ocular origin	DST	7,81,459
Rohit Saxena	Study on the prevalence, therapeutic options and outcome measures of amblyopia	DST	11,27,888
T. Velpandian	Evaluation of the biodisposition of Xanthophylls in Indian donor eyes and detection of their content in commonly available fruits and vegetables	DST	1,36,489
T. Velpandian	Evaluation and characterization of colours and documentation of their ocular toxicity in the northern states of India during the festival of colours (Holi)	DST	1,94,000
T. Velpandian	Development of topical ocular formulation of calcium dobesilate and evaluation of its formulation characteristics	Ozone Pharmaceuticals	4,88,260
T. Velpandian	Development and validation of sensitive HPLC method and evaluation of taxanes in various taxus species especially found in Himalayan regions to support tribal welfare	Auxilium Technical Management Services	400
Tanuj Dada	Mutation analysis in congenital and developmental glaucoma in north Indian population	DBT	11,69,000

Endocrinology and Metabolism			
A.C. Ammini	Comparison of efficacy of metformin and spironolactone in the management of polycystic ovarian syndrome	ICMR	4,72,362
A.C. Ammini	Demographic and clinical profile of young diabetics in a tertiary care hospital in north India	ICMR	5,58,136
A.C. Ammini	Postmenopausal evaluation and risk-reduction with lasofoxifene (Pearl)	Pfizer	8,77,780
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	12,42,517
M.L. Khurana	A pilot study to assess micronutrient profile among preschool children (6–71 months) of Assam and Rajasthan: A multicentre study	ICMR	8,12,473
M.L. Khurana	Nutritional profile of Assam, Manipur and Meghalaya: An ICMR task-force multicentre study	ICMR	47,41,245
Nikhil Tandon	Registry of people with diabetes in India with young age at onset	ICMR	10,91,509
Nikhil Tandon	Development of web-based data capture module for diabetes	ICMR	44,000
Nikhil Tandon	Hyperglycaemia and its effect after acute myocardial infraction on cardiovascular outcomes in patients with type 2 diabetes (HEART2D)	Ranbaxy/ EliLilly	4,30,855
Nikhil Tandon	A multicentre, double-blinded, randomized, placebo-controlled study of MK-0431 in patients with type 2 diabetes mellitus who have inadequate glycaemic control	MSD (India)	8,56,833
Nikhil Tandon	A phase 3 open label parallel group study to evaluate the efficacy and safety of human insulin inhalation power (HILP) compared to preprandial injectable insulin in insulin-naive patients with type 2 diabetes mellitus	Ranbaxy/ EliLilly	6,272
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	7,74,254
R. Goswami	Vitamin D status of subjects residing in rural North India.	Vulimini Ramalinga-swami Foundation	737
R. Goswami	Encapsulation of potentially immunotherapeutic/ immunoprophylactic peptides in novel biocompatible nanosized carriers for targeted delivery in IDDM	DBT	1,87,782
R. Goswami	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	DRDO, MoD	3,31,349
Rajesh Khadgawat	A randomized, double blind placebo-controlled multicentric clinical study to evaluate the safety and efficacy of Rimonabant tablet in obese subjects	Torrent Pharma	51,279
R. 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	28,69,200

ENT (Otorhinolaryngology)			
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	2,20,000
R.C. Deka	Efficacy of intratympanic dexamethasone in the management of tinnitus and its effect on improving quality of life: A clinical study	ICMR	3,34,357
Sudhir Bahadur	Phase II/III randomized placebo controlled clinical trial of curcumin in squamous head and neck cancers	DBT	11,64,319
Gastroenterology and Human Nutrition			
Anoop Saraya	Role of enteral nutrition in preventing complications in severe acute pancreatitis. A randomized control trial	ICMR	3,71,140
Anoop Saraya	Genetic basis of alcohol induced pancreatic disorders	ICMR	1,91,417
Govind K. Makharia	Double blind randomized placebo-controlled study of a probiotic preparation VSL #3 for the treatment of mild to moderate active ulcerative colitis	CD Pharma India	4,81,862
Pramod Garg	Is chronic pancreatitis a premalignant disease?	ICMR	4,45,119
Rakesh Aggarwal	A mathematical decision-analysis model to study the efficacy and cost-effectiveness of prophylactic cholecystectomy in preventing complications especially gallbladder cancer in patients with symptomatic gallstones	ICMR	1,06,853
Rakesh Aggarwal	Potential of <i>Mycobacterium W</i> to boost immune response to hepatitis B vaccine in poor responder groups	DBT	6,91,000
S.K. Acharya	FIST infrastructure in universities and higher educational institutes	DST	4,85,215
S.K. Acharya	Multicentric study of interferon-glycyrrhizin combination therapy and interferon-ribavirin combination therapy in the management of chronic hepatitis C (Study centre)	ICMR	59,114
S.K. Acharya	Advanced centre for liver diseases	ICMR	31,08,693
S.K. Acharya	A multicentric randomized controlled clinical trial of lamivudine and adefovir, glycyrrhizin and adefovir in HBV related decompensated cirrhosis	ICMR	6,06,721
S.K. Acharya	Randomised controlled trial of pegylated interferon (PEG-IFN) monotherapy and combination of PEG-INF with lamivudine among patients with chronic hepatitis B	Fulford India	5,11,729
Umesh Kapil	Prevalence of obesity and associated diseases amongst well to do adolescent children in the national capital territory of Delhi	ICMR	1,74,953
Umesh Kapil	Epidemiology of gallbladder cancer with special reference to nutritional risk factors	ICMR	5,07,453
Umesh Kapil	Resolution of Bitot spots after administration of megadose of vitamin A in a cohort of children 1-5 years of age with Bitot spot.	ICMR	5,81,117
Umesh Kapil	Assessment of zinc deficiency amongst children 6 months of age in different regions of India	DBT	1,87,508
Vineet Ahuja	A phase III, randomized, multi-centre, double blind, parallel group, active comparator study to compare the efficacy and safety of SPD476 (measalazine) 2.4 g/day once daily (od) with Asacol 1.6 g/day twice daily (bid) in the maintenance of remission in patients with ulcerative colitis	PPD Pharmaceutical Development India	4,84,562

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	CDPharma India	3,87,057
Vineet Ahuja	Curcumin for the treatment of ulcerative colitis	Himalaya Drug Co.	88,785
Y.K. Joshi	Effect of glutamine on intestinal structure and function in patients with inflammatory bowel diseases	ICMR	5,60,946
Y.K. Joshi	Assessment of intestinal permeability in chronic liver disease and its consequences	ICMR	16,55,469
Gastrointestinal Surgery			
Peush Sahni	Design and development of syringe pump and online peristaltic pump for drug delivery	Ministry of Communication and Information Technology	5,00,261
T.K. Chattopadhyay	Identification of novel oesophageal squamous cell carcinoma genes by using a combination of array-based CGH and gene expression microarrays	DBT	9,26,000
Haematology			
Renu Saxena	A study to characterize Von Willebrand disease and its correlation with molecular defects	DST	2,23,310
Renu Saxena	Funds for improvement of S&T infrastructure in university and higher educational Institutions (FIST)	DST	-3,44,012
Renu Saxena	Organization of proficiency testing programme for testing haemogram	DST	1,07,112
Renu Saxena	Haemostatic and molecular defects predisposing to acute non-embolic stroke in children and young Indians	ICMR	2,10,727
Renu Saxena	Elucidation of molecular genetics of acute leukaemia in India	ICMR	6,74,108
Renu Saxena	Thalassaemia awareness and screening programme for detection of thalassaemia trial	National Thalassaemia Welfare Society	67,144
Renu Saxena	Characterization of mutations underlying haemophilia A and B	DBT	1,78,875
Renu Saxena	Diagnosis and counselling of genetic disorders using cytogenetics and molecular methods	DBT	3,17,066
Renu Saxena	Organization of Indian Society of Haematology and Transfusion Medicine (ISHTM)-AIIMS external quality assurance programme	ISHTM	3,23,713
Tulika Seth	Evaluation of the thermal camera pre-cancer lesions or cancers in early stages and to study the effect of <i>Pranayam</i> and <i>Sudershan kriya</i> (Breathing process) in reversing pre-cancer lesion	DST	11,263
Tulika Seth	Assessment of the effect of planned intervention on awareness, perception and attitude regarding common cancers in Delhi: A community based longitudinal study	The Cancer Foundation	3,54,110

Laboratory Medicine			
M. Irshad	Development of rapid diagnostic test for detection of auto antibodies in myasthenia gravis by plate and dot-blot ELISA	ICMR	1,11,907
M. Irshad	Prevalence and significance of transfusion transmitted virus (TTV) in various forms of liver diseases	ICMR	7,98,317
M. Irshad	Optimization of carbohydrate–protein conjugates as vaccine for prevention of enteric fevers	DBT	5,29,361
Sarman Singh	Evaluation of toxicity and anti-leishmanial efficacy of liposomal amphotericin B (KALSOMETM) in mouse model	DST	94,575
Sarman Singh	Transmission of drug resistant hepatitis B virus in close family contacts of HBV-related chronic liver disease patients	DST	8,37,948
Sarman Singh	Rapid and accurate diagnosis of tuberculosis using a novel set of primers directly from clinical samples	ICMR	3,63,440
Sarman Singh	Identification of <i>Leishmania donovani</i> reservoirs in various animal species of endemic areas using species specific antibodies	ICMR	80,000
Sarman Singh	Proteomic analysis of <i>M. tuberculosis</i> during the stage of acquisition of resistance to isoniazid and rifampicin	DBT	8,28,541
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	19,33,000
Medicine			
A.B. Dey	Determinants of the functional status of the older Indian	ICMR	1,70,107
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	3,81,029
Ashok Kumar	Methotrexate in rheumatoid arthritis: Pharmacogenetics and clinico-immunological correlates	DBT	6,26,986
G.C. Khilnani	Effect of outdoor and indoor air pollution in children's health in Delhi: A controlled study	Ministry of Environment and Forest	9,18,402
Naval K.Vikram	To investigate the relationship between growth hormone, insulin like growth factor and hypothalmo-pituitary-adrenal axis in body composition and insulin sensitivity	DST	1,00,452
Naval K.Vikram	Double blind randomized placebo controlled trial of our herbal compound MA-471 for diabetes mellitus	Maharishi Ayurveda	99,889
Naval K.Vikram	Evaluation of efficacy and safety of SD 002 tablets in newly diagnosed patients with type 2 diabetes	Solumiks Herbaceuticals	1,14,911
Naval K.Vikram	Investigation of genetic basis and gene-lifestyle interactions in generalized and regional obesity, insulin resistance and diabetes in Asians	DBT	18,87,416
R. Handa	Prevalence of rheumatic disorders in Ballabhgarh Tehsil, District Faridabad, NCR Delhi	Bone&Joint Decade India	60,880

Randeep Guleria	Design and development of personal use respiratory device for patients with respiratory failure	Ministry of Communication and Information Technology	5,86,806
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	15,45,280
Randeep Guleria	Serum leptin, nutritional status and inflammatory markers in chronic obstructive pulmonary disease. Relationship with dyspnoea and severity of disease	ICMR	7,66,569
Randeep Guleria	Double blind randomized placebo controlled trial of herbal compound MA- 364 in patients with mild to moderate bronchial asthma	Maharishi Ayurveda	1,07,194
Rohini Handa	Herbal based preparations for degenerative disorders: Osteoarthritis (OA) and rheumatoid arthritis (RA)	CSIR	1,81,545
S.K. Sharma	Impact of HIV infection on latent TB among patients with HIV-TB co-infection	ICMR	2,42,160
S.K. Sharma	Genomic and molecular studies on the immunopathogenesis of bronchial asthma	DBT	3,64,068
S.K. Sharma	Efficacy and safety of immunomodulator <i>Mycobacterium w, mw</i> as an adjunct therapy in pulmonary tuberculosis	DBT	26,57,980
S.K. Sharma	Antiretroviral treatment	MOHFW	9,94,646
S.K. Sharma	Treatment outcome and drug resistance among category II pulmonary tuberculosis under RNTCP	Delhi Tapedik Unmulan Samiti	4,69,695
S.K. Sharma	Efficacy of thrice weekly intermittent short course antituberculosis chemotherapy in tuberculosis patients with and without HIV infection	NACO, MOHFW	18,49,435
S.K. Sharma	Programme support for immuno-proteomics based diagnostics of infectious diseases	DBT	18,923
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	3,78,440
S.K. Sharma	A population-based study of prevalence and risk factors in sleep disorders breathing in south Delhi	Pfizer	2,59,492
S.K. Sharma	Evaluation of the efficacy of thrice weekly DOTS regimen in TB pleural effusion at 6 months	DGHS	26,97,192
S.K. Sharma	Efficacy of oral zinc administration as an adjunct therapy in category I pulmonary tuberculosis along with assessment of immunological parameters	DBT	5,30,511
S.K. Sharma	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	8,11,890

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	17,15,330
S.K. Sharma	Impact of HIV infection on latent TB among patients with HIV-TB co-infection	DBT	56,25,000
Sanjeev Sinha	Study of early versus delayed initiation of antiretroviral therapy for HIV infected patients with tuberculosis on antituberculosis chemotherapy in Indian subjects	NACO, MOHFW	15,41,909
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, MOHFW	38,94,425
Microbiology			
Arti Kapil	Study of carbapenemase production amongst nosocomial isolates of Gram-negative bacteria in a tertiary care hospital	ICMR	2,87,767
Arti Kapil	Cinico-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	90,000
Arti Kapil	Optimization of laboratory diagnosis of pertussis	DBT	1,10,599
B.K. Das	Study of <i>Haemophilis influenzae</i> isolates from invasive and non-invasive disease	DST	3,292
B.K. Das	Pneumolysin DNA construct as a vaccine candidate against <i>Streptococcus pneumoniae</i> : An immune response study	DST	9,70,000
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	6,33,464
B.R. Mirdha	DNA amplification study by polymerase chain reaction (PCR) to detect sub-clinical <i>Pneumocystis carini</i> infection and colonization in at risk patients with or without respiratory symptoms	DST	5,00,423
B.R. Mirdha	Detection, identification and molecular characterization of intestinal coccidia and microsporidia in patients with chronic diarrhoea and malabsorption syndromes	ICMR	2,40,340
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	1,26,898
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	2,40,150
Benu Dhawan	Phenotypic and genotypic characterization of methicillin and mupirocin resistant staphylococci	DBT	6,57,869
Lalit Dar	Congenital CMV infection in offspring of immune mothers	ICMR	1,57,265
Lalit Dar	External quality assessment programme	NACO, MOHFW	11,80,950
Lalit Dar	Voluntary counselling and testing facility (VCTC)	NACO, MOHFW	2,19,700
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 faecal samples of diarrhoeic patients and in food samples using Multiplex PCR, PCR REFO and PRGE	ICMR	5,40,245

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	9,53,311
Rama Chaudhary	Cloning and expression of <i>Mycoplasma pneumoniae</i> P1 gene and its fragments to study their role in cytoadherence	ICMR	4,41,582
Rama Chaudhary	To study colonization and immunomodulatory effect of probiotic strains in Indian children	DBT	7,55,598
Shobha Broor	Multisite monitoring of human influenza viruses in India	ICMR	25,72,003
Shobha Broor	Acute respiratory viral infections in rural India	ICMR	16,37,973
Shobha Broor	Multisite epidemiological and virological monitoring of human influenza viruses in India	Sanofi Pasteur India	58,200
Urvashi B. Singh	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	2,24,070
National Drug Dependence Treatment Centre			
Rajat Ray	A post-marketing surveillance of Addnole-N	Russan Pharma	3,85,483
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	4,55,615
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	1,53,961
Neurology			
Kameshwar Prasad	Intravenous autologous bone marrow stromal cells (MSC) or mononuclear cells (MNC) for patients with acute ischaemic stroke: A multi-institutional project	DBT	4,90,668
Kameshwar Prasad	Clinical epidemiology unit	INCLIN	2,51,221
M.V. Padma	Intra-arterial autologous bone marrow mono nuclear cells (MNCs) infusion in patients with non-progressive (static) encephalopathy with special reference to cerebral palsy	DST	9,70,000
M.V. Padma	Normobaric oxygen therapy in acute ischaemic stroke	ICMR	8,48,072
Madhuri Behari	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 early idiopathic Parkinson's disease treated with a stable dose of dopamine	Quintiles Spectral India	11,45,710
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	CliniRx Research	11,19,176

Madhuri Behari	Identification of novel gene(s) familial Parkinson's disease	DBT	2,48,000
Madhuri Behari	Implantation of adult human retinal pigment epithelial (hRPE) cells in the 6-OHDA lesioned rat model of Parkinson's disease	DBT	20,01,578
Neuroradiology			
Ajay Garg	Phase imaging and diffusion tensor imaging novel MR contrasts in the evaluation of cryptogenic focal epilepsy	DST	7,17,800
Neurosurgery			
B.S. Sharma	DST FIST Programme-2006	DST	67,90,000
Nuclear Magnetic Resonance			
N.R. Jagannathan	Evaluation of the role of proton MR spectroscopy in non-invasive detection, assessment of treatment response and tumour metabolism in breast cancer	DST	4,71,843
N.R. Jagannathan	Upgradation of the existing animal MR scanner for biomedical research	DST	12,05,817
Nuclear Medicine			
G.P. Bandopadhyaya	Synthesis and chemical characterization of different formulations of alginate-tamoxifen beads	DST	6,26,433
G.P. Bandopadhyaya	To evaluate radiolabelling and efficacy of radiolabelled betacyclodextrin for infection imaging	ICMR	5,50,193
G.S. Pant	Radiation induced chromosome aberrations and their use in biodosimetry	Atomic Energy Regulatory Board	60,439
Obstetrics and Gynaecology			
Alka Kriplani	Diagnosis of genital tuberculosis in infertile women and the effect of anti-tubercular therapy	ICMR	3,14,923
Alka Kriplani	Role of mifepristone (RU-486) in the management of uterine bleeding	ICMR	3,10,248
Alka Kriplani	Efficacy and safety of administration of Evanova capsules in the management of menopausal symptoms	Charak Pharma	42,781
Alka Kriplani	Phase-I/Phase-II clinical trials on safety and capability of probiotic selected strains of lactobacilli to colonize vagina for reproductive health of women	DBT	1,09,402
Alka Kriplani	A prospective, comparative, randomized, multicentric study to compare the efficacy and safety of Praneem polyherbal vaginal tablet with betadine vaginal pessary in symptoms of abnormal discharge	Panacea Biotech	47,195
Neerja Bhatla	Association of chlamydia infection with cervical intraepithelial neoplasia and cervical cancer	ICMR	2,32,836
Neerja Bhatla	Development of HPV candidate vaccine/s preparation of clinical trial site/cohort for vaccine testing	DBT	27,42,259
Nutan Aggarwal	Weekly 70 mg oral alendronate therapy in postmenopausal osteopenic women	Troikaa Pharma	81,708
Nutan Aggarwal	Clinical effects of human placental extract (placentrex) in pelvic inflammatory disease	Khandelwal Laboratories	50,479

Suneeta Mittal	Human reproduction research centre	ICMR	22,30,000
Suneeta Mittal	Prevention of mother to child transmission of HIV	Delhi State AIDS Control Society	1,67,458
Suneeta Mittal	Sexual and reproductive health for rural and urban women with application of molecular genetics	DBT	2,82,232
Suneeta Mittal	Aneuploidies leading to mental retardation and fetardation and foetal loss	DBT	4,91,374
Suneeta Mittal	Pretreatment with misoprostol before vacuum aspiration versus MVA: A double blind RCT	MOHFW	4,02,019
Sunesh Jain	Evaluation of curcumin in the management of advanced cancer cervix	DBT	25,62,312
Orthopaedics			
A. Jayaswal	Role of free radical scavengers and the effects of antioxidants on their levels in patients with ankylosing spondylitis. To investigate the possible role of antioxidants as therapeutic agents in ankylosing spondylitis	ICMR	3,11,188
Rajesh Malhotra	Some medico-technical issues determining mechanical properties of ligaments and development of sterop-cameras for operative/anatomic video sequences	ICMR	3,81,541
Surya Bhan	A new hip hemiarthroplasty option based on femoral stem design suitable for the morphology of proximal femur of elderly Indian population	CSIR	3,71,081
Surya Bhan	Evaluation of efficacy of platelet concentrate in the treatment of non-union of fractures of long bones	ICMR	3,46,938
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	3,47,966
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	9,99,068
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	3,26,029
Paediatrics			
Arvind Bagga	Daily corticosteroids to prevent infection associated relapses in patients with frequently relapsing nephrotic syndrome	ICMR	2,39,610
Arvind Bagga	Dose ranging study to evaluate the safety and efficacy of olmesartan medoxomil in children and adolescents with hypertension	Quintiles Spectral India	7,97,743

Madhulika Kabra	IMD newborn screening for congenital hypothyroidism and congenital adrenal hyperplasia: A multicentric study	ICMR	8,24,989
Madhulika Kabra	An integrated approach for mutation analysis and identification of new gene (s) for X-linked mental retardation	DBT	3,84,317
Pankaj Hari	Antibiotic prophylaxis in the management of vesicoureteric reflux: A multicentric randomized double blind placebo controlled trial	ICMR	2,55,268
Pratima Ray	Cloning and expression of NSP4 enterotoxin of rotavirus in <i>E. coli</i> and evaluation of NSP4 specific immune responses during natural rotavirus infection in children	DST	4,02,258
Pratima Ray	Reactogenicity and immunogenicity of live, attenuated rotavirus vaccine candidate strains 116E and I321 in healthy adults	DBT	1,48,626
Pratima Ray	Characterization of rotavirus strains from a multicentric rotavirus surveillance study at AIIMS, Delhi	DBT	6,02,487
Rachna Seth	To understand the deviation in cell signalling 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	1,11,951
Rakesh Lodha	Integrated management of neonatal and childhood illnesses: Baseline assessment of childhood morbidity and mortality in selected districts in India	UNICEF	18,65,567
S.K. Kabra	Capacity-building for sweat chloride estimation test by indigenously developed method	Solvay Pharma	85,305
S.K. Kabra	A randomized, 2-period multicentre, double blind, parallel-group study comparing the effect of 2 doses of montelukast granules in the treatment of respiratory symptoms associated with respiratory syncytial virus associated bronchiolitis in children aged 3–24 months	Siro Clin Pharma	16,786
Sheffali Gulati	National polio certification committee for polio eradication	MOHFW	4,53,130
Shinjini Bhatnagar	Aetiological significance of microscopic colitis in chronic diarrhoea in children and its pathogenesis	ICMR	54,999
Shinjini Bhatnagar	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	DBT	10,69,142
Shinjini Bhatnagar	Efficacy of stem cell in improvement of left ventricular function in patients with acute myocardial infarction	DBT	6,47,887
Shinjini Bhatnagar	Effects of administering 10 mg 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	DBT	21,67,000
Vandana Jain	Kigs advanced patient outcome survey number SN87-052-38	Pfizer	84,897
Veena Kalra	FIST in subject area life sciences for Level II support	DST	13,77,152
Pathology			
A.K. Dinda	Genomic and molecular studies on the immunopathogenesis of bronchial asthma	DBT	5,42,814

A.K. Dinda	Development of nanoparticle system for selective receptor specific macrophage targeting	DBT	8,68,325
Chitra Sarkar	Myopathic disorders: A comparative clinico-pathological and <i>in vitro</i> proton magnetic resonance spectroscopy study on muscles biopsies	ICMR	1,04,830
S. Dutta Gupta	Multicentric study of interferon-glycyrrhizin combination therapy and interferon-ribavirin combination therapy in the management of chronic hepatitis C	ICMR	24,563
S.K. Panda	To study site reflection of hepatitis E virus (HEV) by localizing the viral replicase (RdRq) into the sub-cellular compartments by transfection studies using HepG2/Huh 7 cells and a fusion reporter construct	DST	2,28,700
S.K. Panda	FIST programme	DST	15,46,274
S.K. Panda	Development of non-radioactive antigen specific reporter release cytotoxicity assay and analysis of cytotoxicity against HEV proteins	DBT	7,07,060
S.K. Panda	Development of small interfering RNAs (siRNAs) for inhibition of hepatitis E virus (HEV) replication and transcription	DBT	10,90,067
Pharmacology			
D.S. Arya	Pharmacological and molecular studies on cardioprotective potential	CSIR	21,428
D.S. Arya	Pharmacological and molecular studies on cardioprotective potential of some Unani drugs in experimentally induced myocardial infection	Central Council for Research in Unani Medicine	11,63,625
S.K. Maulik	Modulatory effect of phytoadaptogens on cardiovascular and neurological changes induced by experimental stress in rats	DST	7,74,925
S.K. Maulik	Clinical trial of a standardized preparation of <i>Terminalia arjuna</i> in patients with left ventricular dysfunction	DBT	6,05,808
Surender Singh	Standardization and pharmacological studies of widely practiced anti-arthritic Unani preparation <i>Majoon Suranjam</i> based on clinical Unani literature	ICMR	12,16,596
Y.K. Gupta	Evaluation of herbal compounds in a rat model of sporadic dementia of Alzheimer's type	DST	2,01,947
Y.K. Gupta	Antiemetic study of ginger against cancer chemotherapy induced emesis	Dabur Research Foundation	7,38,879
Y.K. Gupta	National Pharmacovigilance Programme	MOHFW	4,27,754
Y.K. Gupta	Pharmacological evaluation of medicinal plants and their products	Ranbaxy/ EliLilly	3,27,522
Physiology			
Debabrata Ghosh	An mRNA expression array cluster analysis of human first trimester placental trophoblast cell functions	DST	4,11,997
Debabrata Ghosh	Defining endometrial receptivity for blastocyst implantation using cDNA based array technology	DST	12,05,342

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	2,06,402
J. Sengupta	Elucidating endometriosis using genomic strategy	DBT	12,10,400
K.K. Deepak	Development of digital EEG amplifier: An essential hardware for the autonomic function tests (heart rate variability)	DST	3,25,935
K.K. Deepak	Multicentric trial of integrated software for quantification of autonomic tone	Ministry of Communication and Information Technology	10,01,777
Rashmi Mathur	Motor responses to noxious/non-noxious stimuli in spinalised humans and rats: Role of electromagnetic stimulation in recovery	DST	13,16,800
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	3,41,000
Reproductive Biology			
Ashutosh Halder	Prevalence of 22q 11 deletion syndrome in children with structural cardiac malformation: A tertiary care referral hospital-based study in Delhi	ICMR	2,60,671
Surgery			
Sandeep Guleria	Evaluation of efficacy and tolerability of Tacrolimus in patients undergoing renal transplantation	Panacea Biotech	2,61,512
Sandeep Guleria	Save the Kidney	Rajiv Gandhi Foundation	9,08,533
Transfusion Medicine (Blood Bank Main Hospital)			
Kabita Chatterjee	Prevention of infection and strengthening the blood banking system in the country	MOHFW	3,09,531
Transplant Immunology and Immunogenetics			
D.K. Mitra	Impact of HIV infection on latent TB among patients with HIV-TB co-infection	ICMR	1,48,200
D.K. Mitra	Efficacy of oral zinc administration as an adjunct therapy in category I pulmonary tuberculosis along with assessment of immunological parameters	DBT	7,65,420
D.K. Mitra	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	9,36,994
D.K. Mitra	Studies on T cell mediated suppression of immunity in visceral leishmaniasis patients	DBT	19,10,083
D.K. Mitra	Impact of HIV infection on latent TB among patients with HIV-TB co-infection	DBT	11,04,000
N.K. Mehra	Comparative study on the immunogenetic similarities between European gypsies and North Indians to improve the utilization of bone marrow donor registries for diverse ethnic groups and to functioning genome programme	DST	72,920

N.K. Mehra	Monitoring T cell activation markers and cytokine production following allogenic renal transplantation	ICMR	1,87,006
N.K. Mehra	HLA profile of Raica community of Rajasthan	ICMR	9,38,878
N.K. Mehra	Genomic analysis of MHC genes (HLA and non-HLA) in type 1 diabetes in the Indian population	ICMR	16,49,703
N.K. Mehra	Programme support for advanced programme in histocompatibility and transplant immunology (PS-APHTI)	DBT	24,40,559
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	6,19,786

Ongoing research projects funded by World Health Organization

Investigator	Project	Funds (Rs)
Biotechnology		
J.S. Tyagi	Multicentric evaluation of a sensitive smear microscopy technique for detection of acid-fast bacilli in sputum	2,08,301
Haematology		
Renu Saxena	Evaluation of efficacy of haemoglobin colour scale with Sahli's method for haemoglobin estimation	71,196
Medicine		
A.B. Dey	Evaluation of health status and health needs of old home residents and establishment of minimum standards of health services on long stay institutions in India	2,45,573
Neurology		
Manjari Tripathi	A prospective study in Indian women: How pregnancy and epilepsy interact to produce psychological and mental health morbidity	30,219
Obstetrics and Gynaecology		
Neerja Bhatla	Evaluation of the comparative efficacy of single- and double-freeze technique of cryotherapy in controlling CIN lesion: Multicentre randomized clinical trial	1,67,548
Suneeta Mittal	Comparison of three misoprostol regimes after pretreatment with mifepristone for early pregnancy termination: A multinational RCT	5,97,889
Paediatrics		
A.K. Deorari	Multicentric study of clinical signs for predicting illness in young infants	1,71,093
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	27,02,772
V.K. Paul	South East Asia Regional Neonatal-Perinatal database network	3,01,289

Ongoing research projects funded by international agencies

Investigator	Project	Funding agency	Funds (Rs)
Biochemistry			
Kalpana Luthra	Characterization of HIV-1 subtypes from Indian subjects	NIH, USA	6,65,082
Cardiology			
V.K. Bahl	A clinical evaluation of the Xience TM V everolimus eluting coronary stent system in the treatment of patients with de novo coronary artery lesions	Abbott Vascular, USA	2,16,071
Centre for Community Medicine			
C.S. Pandav	Health systems reforms and ethics: Private practitioners in poor neighbourhoods in urban India, Indonesia and Thailand—A multidisciplinary comparative study	Danida Research Council	29,469
K. Anand	Evaluation of safe water systems intervention project in urban slums of Dehradun and Haridwar	INCLEN/ USAID	1,76,812
Computer Facility			
R.S. Tyagi	Mainstreaming HIV/AIDS concerns in on going drugs demand reduction programmes in South Asia	UN International Drug and Crime Control Programme	7,59,363
Dermatology and Venereology			
V.K. Sharma	A prospective, randomized, double-blind, placebo-controlled, parallel group, multicentre, 52 week trial to assess the efficacy and safety of adjunct Mycophenolate mofetil (mmf) to achieve remission with reduced cortico-steroids in subjects with active Pemphigus vulgaris	Aspreva Pharmaceutical Corporation, Canada	3,62,608
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	Clinocyte, USA	2,42,692
Dr B.R. Ambedkar Institute–Rotary Cancer Hospital			
Atul Sharma	A randomized phase 3 study of the efficacy and safety of glufosfamide compared with best supportive care in metastatic pancreatic adenocarcinoma previously treated with gemcitabine	Threshold Pharmaceuticals, USA	9,595
V. Raina	Randomized trial of adjuvant endocrine therapy and chemotherapy in women with early breast cancer: The adjuvant breast cancer trial (ABC trial)	Institute of Cancer Research UK Coordination Committee	3,97,666
V. Raina	Adjuvant tamoxifen long against short (ATLAS) trial	Oxford Univ., UK	11,12,865

V. Raina	Indox Cancer Trials Network Centre	Oxford Univ., UK	28,99,040
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	2,12,081
Endocrinology and Metabolism			
A.C. Ammini	A one year multicentre, international randomized double blind study with comparison of benfluorex (150 mg bd 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, France	1,68,650
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	1,33,005
Gastroenterology			
Rakesh Aggarwal	Landscape analysis of zinc and its effect on child morbidity and mortality	NIH, USA	7,03,320
Haematology			
Renu Saxena	Molecular characterization and treatment of acute lymphoplasmic leukemia on protocol MCP-943	INCTR, USA	17,26,287
Medicine			
Naveet Wig	Phase I planning grant to the international clinical, operational and health services research training for AIDS/TB programmes	NIH, USA	50,56,882
Naval K. Vikram	Body fat and its relationship with metabolic syndrome indicators in overweight pre-adolescents and adolescents	IAEA	4,32,555
S.K. Sharma	Evaluation of management strategy for pulmonary embolism	IAEA	1,80,278
Microbiology			
Rama Chaudhary	Prevention of infection in Indian neonates	Univ. of Maryland	61,448
Shobha Broor	Metapneumovirus infection of children in India	Univ. of Alabama, USA	6,18,714
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 Programme	13,58,388
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	La Jolla Pharmaceutical Company, California	5,09,242

Neurosurgery			
Ashish Suri	The International Infant Hydrocephalus Study (IIHS): A multicentre prospective randomized study	International Society for Paediatric Neurosurgery	81,000
Ashish Suri	A multi-national, multi-centre, open-label, active-controlled, randomized parallel-group dose-finding study to evaluate the efficacy and safety of 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	2,25,081
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	6,83,003
Nuclear Medicine			
Chetan D. Patel	Role of cerebral perfusion SPECT in the differential diagnosis of dementia	IAEA	5,74,843
Rakesh Kumar	Role of radionuclide technique in the management of neonatal hydronephrosis	IAEA	6,242
Rakesh Kumar	Role of nuclear cardiology techniques in Esecjemia assessment with exercise imaging in asymptomatic diabetes	IAEA	4,10,131
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	15,52,015
Neerja Bhatla	A phase Ib, double-blind, randomized, controlled study to evaluate the immunogenicity and safety of GlaxoSmith Kline biologicals HPV-16/18 ... 18-35 years.	GlaxoSmith Kline Asia	5,58,061
Neerja Bhatla	Parallel performance trial of Fast HPV versus HC2 for cervical cancer screening	Digene Corporation, USA	12,54,200
Paediatrics			
Arvind Bagga	Impact of zinc supplementation in low birth weight infants on severe morbidity and zinc status: A randomized controlled trial	KLPF, USA	6,64,154
Madhulika Kabra	Economic modelling study: Non-invasive (NI) RhD testing in Europe and Asia under SAFE Network	Univ. of Warwick, UK	10,51,406
N.K. Arora	Model infection centres (MICs): A program to improve infection practices in the country	INCLEN/ USAID	74,70,701
Pratima Ray	The Indo-US collaboration to develop rotavirus vaccine	NIH, USA	4,04,424
S.K. Kabra	Development of continuing medical education (CME) programmes to strengthen AIDS treatment in India	NIH, USA	5,56,272

S.K. Kabra	Strengthening of cystic fibrosis services at AIIMS	Cystic fibrosis World Wide, USA	
Shinjini Bhatnagar	Institutional capacity and competence building in research and education for promotion of child health and nutrition in South Asia	University of Bergen, Norway	10,29,464
Shinjini Bhatnagar	research or innovation project Norway 33,19,764	Specific targeted University of Bergen,	
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	13,27,157
V.K. Paul	Enhancing networking capacity for advancing newborn health in South East Asia	Saving Newborn Lives, USA	1,37,920
Physiology			
H.N. Mallick	Role of glutamate in the preoptic area in the regulation of sleep-wakefulness	Ajinomota Co., Japan	3,11,587
Surgery			
Anurag Srivastava	Adjuvant tamoxifen: Longer against shorter (ATLAS) for breast cancer patients	Oxford Univ., UK	1,19,247
Transplant Immunology and Immunogenetics			
N.K. Mehra	Type 1 diabetes genetics consortium (TIDGC): An international effort	NIH, USA	5,50,560

New research projects funded by Indian agencies

Investigator	Project	Funding agency	Funds (Rs)
Anatomy			
T.S. Roy	Prenatal development and maturation of human inferior colliculus	DST	14,00,000
Biochemistry			
D.N. Rao	Chronic immune activation associated with leprosy: Role of hyporesponsiveness and anergy	CSIR	6,52,000
Kalpna Luthra	SDF-1 and DC-SIGNR polymorphisms and expression in HIV-1 infection	ICMR	7,01,096
M.R. Rajeshwari	Neurological disorders Friedreich's ataxia (FRDA) and spinocerebellar ataxia (SCA) associated with DNA tri-nucleotide repeats; identification and development of protein biomarkers and circulating DNA for clinical diagnosis	ICMR	9,03,464
N.C. Chandra	An <i>in vitro</i> silencing of endogenous oxidized-LDL-receptor (LOX-I) gene by SiRNA: Study of NF-KB activated	DBT	14,05,000

	expression of proinflammatory cytokines and related atherogenic proteins—its evaluation against anti-inflammatory cytokine mediated responses		
Subrata Sinha	Deregulated initiation of translation in oral carcinogenesis	DST	5,25,000
Biomedical Engineering			
J.C. Bhardwaj	Evaluation of vaginal microbial flora and sperms after SMA application	IIT, Kharagpur	2,29,970
Sneh Anand	Analysis of autonomic nervous system correlates and health of rhythmic breathing techniques	AYUSH, MOHFW	15,92,700
Biophysics			
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	4,55,000
Biotechnology			
Anushree Gupta	Polymorphisms in genes of the endothelin system in patients undergoing coronary artery bypass grafting surgery and having a concomitant diagnosis of diabetes	ICMR	7,64,623
H.K. Prasad	Functional characterization of RV2986c, a DNA binding protein of <i>M. tuberculosis</i>	DST	9,00,000
H.K. Prasad	Development of vaccine for control of bovine tuberculosis	DBT	13,53,000
H.K. Prasad	Molecular switch in Th1-Th2 response by SMAR1: Its implications in <i>Mycobacterium</i> infection	DBT	6,50,000
J.S. Tyagi	Pharmacophore-based screening of compounds targeting DevR response regulator and assessment of their anti- <i>Mycobacterium tuberculosis</i> activity	DST	7,50,000
J.S. Tyagi	Reconstructing cellular network: Two-component regulatory systems	DBT	83,17,000
S.N. Das	Development and characterization of autologous NKT cell vaccine for active specific immunotherapy of oral squamous cell carcinoma	DBT	8,40,000
Cardiac Biochemistry			
R. Lakshmy	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	DST	29,00,000
R. Lakshmy	Low dose magnesium sulphate regimen for management of eclampsia: A randomized controlled trial	ICMR	24,915
Cardiology			
Balram Bhargava	Stanford India Biodesign (SIB) Programme	DBT	61,53,000
Balram Bhargava	Cardiovascular product evaluation support service for industry	DBT	53,14,000
Balram Bhargava	Biodesign in medicine	DBT	7,40,000
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	5,16,000

Centre for Behavioural Sciences (Psychiatry)			
Pratap Sharan	A study of the effects of LY, a selective norepinephrine reuptake inhibitor (NERI), in treatment of major depression	Ranbaxy/ Eli Lilly	6,72,024
Rajesh Sagar	Efficacy and safety of a Gomeiatine (25mg/day with potential adjustment at 50 mg/day with potential adjustment at 50mg/day given orally compared to placebo in addition to a mood stabilizer in bipolar patients with a current major depressive episode	Quintiles Spectral India	7,33,571
Centre for Community Medicine			
K. Anand	NCD risk factor surveillance under integrated diseases surveillance project	ICMR	2,00,000
K. Anand	Development of a model for integrated management of non-communicable diseases through existing health system in India	ICMR	16,61,179
Dermatology and Venereology			
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 postherpetic neuralgia (PHN)	Apothe- caries Ltd	46,500
Dr B.R. Ambedkar Institute–Rotary Cancer Hospital			
Lalit Kumar	Combination of P53, EGFR status and tumour grading in determining the outcome of early epithelial ovarian cancers	DBT	1,00,000
Lalit Kumar	To study the molecular biology of multiple myeloma	DBT	10,62,000
Lalit Kumar	Endothelial progenitor cells as biomarker of disease activity in multiply myeloma	DBT	10,54,000
Lalit Kumar	A study of the prevalence and type of anaemia in lymphoid malignancies	Global Cancer Concern India	60,000
P.K. Julka	A randomized double blind placebo controlled multicentre phase 3 study of denosumab on prolonging bone metastasis-free survival in Indian men with hormone refractory prostate cancer	Quintiles Spectral India	39,656
Ritu Gupta	Regulatory T-cells repertoire in plasma cell myeloma	DBT	8,59,000
Sameer Bakshi	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	2,65,913
V. Raina	A randomized double blind multicentre placebo controlled study of adjuvant lapatinib in women with early stage Erb B2 overexpressing breast cancer EGF 105485	GlaxoSmith Kline Asia	9,88,200
Dr R. P. Centre for Ophthalmic Sciences			
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	9,07,000

Endocrinology and Metabolism			
Nikhil Tandon	ANDES-AGI-1067 as a novel antidiabetic agent evaluation study.	Reliance Clinical Research Services	3,39,852
Nikhil Tandon	Effect of glycaemic control of once daily administration of liraglutide in combination with metformin versus glimepiride in combination with metformin in subject with type 2 diabetes, a 16-week randomized double blind double dummy, active control 4 armed parallel group multicentre multinational trial.	Nova Nordisk India	2,71,098
Rajesh Khadgawat	Correlation between first trimester glucose screening and serum insulin levels with development of gestational diabetes mellitus in pregnancy	ICMR	2,05,937
Gastroenterology and Human Nutrition			
Govind K. Makharia	Detection of mycobacterial pathogens in patients with Crohn's disease	DBT	12,15,000
Vineet Ahuja	Evaluation of efficacy and tolerability of curcumin (NCB-2) enema in ulcerative colitis	Himalaya Drug Co	1,00,009
Haematology			
Renu Saxena	Evaluation of platelet receptor polymorphism in patients with coronary artery disease	ICMR	7,78,680
Laboratory Medicine			
A.K. Mukhopadhyay	Assessment of risk factor associated with Alzheimer disease and vascular dementia	ICMR	2,72,682
M. Irshad	Cloning sequencing and expression of different genomic regions of transfusion transmitted virus (TTV) prevalent in Indian population	ICMR	4,01,432
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	7,52,000
Sarman Singh	Genotyping of <i>Mycobacterium tuberculosis</i> isolates from an endemic area of Delhi and determining their transmission dynamics in the household contacts and the community using molecular methods	ICMR	6,31,514
Sarman Singh	A novel multiplex PCR assay for simultaneous detection and differentiation of <i>Mycobacterium tuberculosis</i> , <i>M. avium</i> complex and other mycobacterium species directly from clinical samples of suspected tuberculosis cases	DBT	8,42,000
Medicine			
A.B. Dey	Determinants of the functional status of the older Indian	ICMR	5,67,839
Randeep Guleria	Genetic, metabolic and hormonal profile in obstructive sleep apnoea syndrome	DST	12,00,000
Randeep Guleria	Influenza awareness preparedness and response (IAPR). An INCLLEN AIMS NIHF programme for physicians in India	INCLLEN	10,00,000

Randeep Guleria	An interventional nutritional study in subjects with newly diagnosed active tuberculosis (TB)	GlaxoSmith Kline Asia	3,45,813
S.K. Sharma	Survey on prevalence of tuberculosis	MOHFW	44,78,980
Sanjeev Sinha	Nevirapine versus Efavirenz based highly active antiretroviral therapy regimens in antiretroviral-naive patients with HIV and tuberculosis infection in India	NACO, MOHFW	38,16,237
Microbiology			
Rama Chaudhary	Cloning and expression of flagellin gene of <i>Salmonella typhi</i> : An immunodiagnostic approach	ICMR	3,96,747
Rama Chaudhary	Administration of <i>Lactobacillus rhamnosus</i> GG for the prevention and treatment of <i>Clostridium difficile</i> infection and subsequent diarrhoea in Indian population	DBT	14,49,600
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	13,60,000
Seema Sood	Development of DNA biosensor for detection of <i>Neisseria gonorrhoeae</i> in clinical samples	DBT	14,73,800
Nephrology			
S.K. Agarwal	Detection of HCV core antigen (HCVc-Ag) for diagnostic screening of HCV infection in patients on maintenance haemodialysis	ICMR	4,76,293
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	3,30,630
Neurobiochemistry			
Vivekanandhan S.	The study of mitochondrial dysfunction in genesis of programmed cell death cascade in patients with amyotrophic lateral sclerosis	ICMR	2,46,946
Vivekanandhan S.	Health profile of population of Nellore (A.P.): An ICMR co-ordinated task force study	ICMR	8,60,264
Vivekanandhan S.	Pharmacogenetics of epilepsy drug therapeutics	DBT	10,92,000
Vivekanandhan S.	Validation of gel dosimetry as 3D verification tool for highly conformal radiotherapy techniques.	Atomic Energy Regulatory Board	5,81,250
Neurology			
Achal Kumar Srivastava	Mitochondrial variations and common founders for Friedreich's ataxia in the Indian population	ICMR	1,24,347
Kameshwar Prasad	Mobilization of stem cells using G-CSF for acute ischaemic stroke: A randomized clinical trial	DBT	25,00,000
Kameshwar Prasad	Central data management facility	DBT	12,90,000
Kameshwar Prasad	Capacity building for Stroke Research Programme	DBT	14,49,000

Madhuri Behari	Clinical correlation of AchR-Abs and MuSK-Abs in myasthenia gravis patients in context with phenotype and genotype variation	ICMR	5,98,355
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	6,95,939
Manjari Tripathi	Correlation of electrophysiological states and haemodynamic changes during simultaneous performance of EEG-fMRI (SEM) in intractable epilepsy: Another non-invasive tool for localization of seizures in patients with intractable epilepsy	DBT	17,25,000
Neuroradiology			
Ajay Garg	Quantitative vessel size imaging (VSI) in cerebral gliomas and correlation with histopathological grading and vascular endothelial growth factor expression	DBT	3,48,000
Neurosurgery			
P. Sarat Chandra	Evaluation of autonomic function, saccadic eye movement control and fibrilin gene (exon 24-28) in development of bony craniovertebral junction anomalies	DBT	5,82,000
Nuclear Magnetic Resonance			
N.R. Jagannathan	A proposal for 700 MHz NMR spectrometer for biomedical research	DST	78,00,000
Obstetrics and Gynaecology			
Suneeta Mittal	Estimation of oxidative stress during oral iron supplementation (daily vs weekly) with or without vitamin C among anaemic pregnant mothers	ICMR	53,388
Orthopaedics			
Kanchan Mittal	To study the profile of musculoskeletal pain in tea garden workers in north-east India	ICMR	6,52,050
Otorhinolaryngology			
Alok Thakar	Prevalence of hypothyroidism following treatment of head and neck cancer and its impact on quality of life	DST	6,00,000
Paediatric Surgery			
M. Bajpai	A study on prognostic impact of molecular genetic alterations in hepatoblastoma	DST	20,00,000
Paediatrics			
Arvind Bagga	A multicentre 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 Pharma-ceutical Development India	64,729
Arvind Bagga	A randomized multicentre double blind 6 week study to evaluate the dose response of valsartan on blood pressure reduction in children 1-5 year old with hypertension followed by a 2 weeks placebo withdrawal period	PPD Pharma-ceutical Development India	1,35,664

Madhulika Kabra	Programme support on genetic medicine	DBT	12,57,000
S.K. Kabra	Surveillance 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)	4,00,000
Pathology			
Chitra Sarkar	Glial tumours: A correlative clinicopathological study of chromosome 1p/19q status, epidermal growth factor receptor (EGFR) amplification and p53 expression	ICMR	5,11,400
S.K. Panda	Operation of the J.C. Bose Fellowship	DST	8,40,000
S.K. Panda	Study of viral proteins and other molecular markers in hepatitis E virus (HEV) infected cells using high throughput molecular techniques	DBT	35,55,000
N.K. Mehra	Haematopoietic stem cell transplantation in India: Challenges and opportunities and immunogenetic aspects of HIV infection	DBT	7,40,000
Seema Sen	Detection of human papilloma virus genome in malignant ocular lesions	ICMR	2,30,308
Vaishali Suri	Study of the role of bone marrow derived pluripotent cells in peripheral nerve repair in adult rats	ICMR	3,08,734
Pharmacology			
K.H. Reeta	Estimation of oxidative stress during oral iron supplementation (daily vs. weekly) with or without vitamin C among anaemic pregnant mothers	ICMR	3,41,110
Y.K. Gupta	Efficacy and safety evaluation on antiepileptic activity of selected Indian herbs	DST	2,68,000
Y.K. Gupta	Training module in clinical research	DBT	13,90,000
Physiology			
R. Mathur	Effect of bone marrow cells transplantation and magnetic stimulation in the sensory motor functional recovery of spinalised rat	ICMR	3,60,775
Raj Kumar Yadav	Psychoneuroimmune effects of meditation: An evaluation by PET and biochemical markers	DBT	5,64,000
S.C. Mahapatra	Immunomodulatory effects of <i>Tulsi (Ocimum sanctum)</i> on healthy human subjects	AYUSH, MOHFW	6,40,540
Reproductive Biology			
Anand Kumar	Testing of pregnancy kits produced by Hindustan Latex Ltd for supply to NRHM programme of Government of India	Hindustan Latex Ltd	80,000
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	2,60,776

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	13,00,000
D.K. Mitra	Study of NKT cells in polarized immunity among leprosy patients	ICMR	7,26,655
N.K. Mehra	Genetic basis for HIV-1 transmission resistance and disease progression polymorphism in MHC chemokine/cytokine and their receptor genes	DBT	38,42,000
N.K. Mehra	Immunotherapy of drugs in refractory leukaemias and lymphomas expressing HCG or subunits by a highly specific recombinant chimeric antibody against beta HCG linked to curcumin or other drugs	DBT	3,50,000
N.K. Mehra	Haematopoietic stem cell transplantation in India: Challenges and opportunities and immunogenetic aspects of HIV infection	DBT	7,40,000

New research projects funded by World Health Organization

Investigator	Project	Funds (Rs)
Centre for Behavioural Sciences (Psychiatry)		
Pratap Sharan	Development of an identification instrument for depression for South East Asia Region of the World Health Organization	1,85,850
Haematology		
Renu Saxena	Development of adaptation of haemoglobin colour scale for estimating haemoglobin in field situation	2,42,190
Paediatrics		
V.K. Paul	WHO guidelines for feeding of LBW infants: Feasibility, requirements and effects of their implementation in health facilities in India	5,71,732

New research projects funded by international agencies

Investigator	Project	Funding agency	Funds (Rs)
Cardiology			
Balram Bhargava	Future revascularization evaluation in patients with diabetes mellitus: Optimal management of multivessel disease (The FREEDOM Trial)	NIH, USA	8,70,253
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	2,28,850
Endocrinology			
Rajesh Khadghawat	A phase III, multi-centre, randomized, parallel group study of safety and efficacy of LB03002, a new sustained release formulation of human recombinant growth hormone as compared to standard daily therapy with Genotropin in treatment of naive children with growth failure due to insufficient secretion of endogenous growth hormone	Parexel International Ltd, UK	1,24,301

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	6,26,833
Neurosurgery			
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	London School of Hygiene & Tropical Medicine, UK	3,06,279
Paediatrics			
S.K. Kabra	Zinc supplementation in childhood tuberculosis patients in Delhi, India	Univ. of Bergen, Norway	6,97,850
Transplant Immunology and Immunogenetics			
N.K. Mehra	Comprehensive approach to understand streptococcal diseases and their sequelae to develop innovative strategies for diagnosis, therapy, prevention and control	European Commission	41,38,457

9.1 Anaesthesiology

Professor and Head

Ravi Saksena
(upto 10.10.2007, Deceased)

Chandralekha
(w.e.f. 11.10.2007)

Professors

M.K. Arora
S. Rajeshwari

D.K. Pawar
A. Trikha

Ravinder Kumar Batra
Maya

Additional Professors

L. Kashyap

G. Prasad

Associate Professors

V.K. Mohan

V. Rewari

Assistant Professors

A.P. Bhalla
Jyotsna Punj

V. Darlong
R. Pandey
Rashmi Ramachandran

Rani A. Sunder
Anjolie Chabbra

EDUCATION

- Academic activities of undergraduates, postgraduates and paramedical staff (BSc Nursing, MSc Nursing) are continuing as before.
- Training of doctors and technicians from India and abroad in various aspects of anaesthesia, intensive care management, pain medicine and emergency care is continuing as before.
- The number of short term and long term trainees came to the department were:-
 - Pain Clinic 2 doctors
 - ICU 8 doctors
 - Anaesthesia 8 doctors

Short- and Long-term Training

The following candidates undergone training in the department during the year:

Sl.No.	Name of the candidate
1.	Dr Ujjwalraj Duhedia
2.	Dr Rashmi
3.	Dr Ruchi Sharma
4.	Dr Jane Wanjiru Maina
5.	Dr Poonam
6.	Dr Avdleeb
7.	Dr Sumira
8.	Dr Rajesh
9.	Dr Madan Katoch
10.	Dr K.K. Senapati

CONTINUING MEDICAL EDUCATION

Professor Ravinder Kumar Batra

- Co-organized CME for DNB candidates held at Maulana Azad Medical College, New Delhi; 13–15 March 2008.

Professor Maya

- Organized a teaching and training programme in Cardiopulmonary resuscitation for the doctors of different specialties in Punjab at Radha Soami Sat Sang Beas; December 2007.

Lectures Delivered

Professor M.K. Arora

1. 'Management of anaesthesia for pediatric surgery patients cleft lip palate meningomyelocele', Postgraduate assembly, Lady Hardinge Medical College, New Delhi; 30 October 2007.
2. 'Difficult to wean patients from mechanical ventilation' at CME on Critical Care, Jabalpur; 4 November 2007.

Professor D.K. Pawar

1. 'Paediatric anaesthesia—General principles, monitoring, fluid therapy and peri-operative analgesia', Postgraduate assembly, Deptt. of Anaesthesiology, Lady Hardinge Medical College and Associated Hospitals, New Delhi; 30 October 2007.

Professor Ravinder Kumar Batra

1. 'Obstructive jaundice' in Examination-oriented Refresher Course for Anaesthesia Postgraduate, UCMS, New Delhi; 10 July 2007.
2. 'Benign hypertrophy of prostate' at "Post-graduate Assembly in Anaesthesiology" held at Lady Harding Medical College, New Delhi, 28 October 2007.
3. 'Chronic obstructive pulmonary disease' in CME for DNB candidates, Maulana Azad Medical College, New Delhi; 13 March 2008.
4. 'Chest tube' in CME for DNB candidates, Maulana Azad Medical College, New Delhi; 13 March 2008.
5. 'Anaesthesia for posterior fossa surgery' in CME for DNB candidates, Maulana Azad Medical College, New Delhi; 13 March 2008.
6. 'Advances in anaesthesia' at teleconferencing session for DNB candidates at IGNOU, All India Network, New Delhi; 13 April 2007.
7. 'Protocol, research and thesis'. Moderated the panel discussion and took lectures on 'Purpose and process of thesis' and 'Submission of thesis' at teleconferencing session for DNB candidates; 3 May 2007.
8. 'How to attempt short questions with examples from previous year papers?' at teleconferencing session for DNB candidates at IGNOU; 17 May 2007.
9. 'Anaesthesia and cardiovascular system': Moderated the session and took lecture on 'Preoperative evaluation and risk stratification of patient with Ischaemic heart disease coming for non-cardiac disease'; 06 October 2007.
10. 'Protocol and thesis' for DNB candidates in a radio-conferencing at IGNOU, Delhi Network; 06 December 2007.

11. Moderated workshop on ‘How to Plan research project and write a protocol?’ and took lectures on ‘Purpose and process of thesis’ and ‘Submission of protocol’, Workshop for Postgraduate and Postdoctoral Students at AIIMS (Academic Section); 1 March 2008.
12. Moderated workshop on ‘How to write thesis?’ and took lectures on: ‘How to write “Introduction” and “Aims and Objectives”’, ‘How to write discussion?’ and ‘How to submit thesis and communicate your thesis?’ Workshop for Postgraduate and Postdoctoral Students at AIIMS (Academic Section); 29 March 2008.

Professor S. Rajeshwari

1. CME lecture on ‘Fluid and electrolyte disorders in the obstetric patient’, FOGSI Annual Conference; February 2008.
2. ‘Anesthesia for bariatric surgery’, Workshop on Bariatric Surgery, at Department of Surgery; AIIMS, New Delhi in January 2008.

Professor Anjan Trikha

1. ‘Anesthesia for thoracic surgery: Special focus on chest drain, empyema, broncho pleural fistula and hydro-pneumothorax’, Lady Hardinge Medical College, New Delhi; 27 October 2007.
2. ‘Minimum monitoring standards in operation theatre and ICU’, CME hosted by The Nagpur Obstetric & Gynecology Society and Indian Society of Critical Care Medicine, Nagpur; 4 November 2007.
3. ‘Immediate postoperative care in obstetric patient’, Combined Workshop and CME organized by Indian Society of Critical Medicine (Nagpur Chapter) and The Nagpur Obstetrics & Gynecology Society, Nagpur; November 2007.
4. ‘How would I do it?’ Panel discussion on HELLP Syndrome. Combined Workshop & CME organized by Indian Society of Critical Medicine (Nagpur Chapter) and The Nagpur Obstetrics & Gynecology Society, Nagpur; November 2007.
5. ‘Monitoring devices in an ICU’, Combined Workshop and CME organized by Indian Society of Critical Medicine (Nagpur Chapter) and The Nagpur Obstetrics & Gynecology Society, Nagpur; November 2007.
6. ‘The parturient with a difficult airway—Unanticipated difficult airway’, CME on changing trends on obstetric anesthesia, Maulana Azad Medical College and Lok Naik Jai Prakash Hospital, New Delhi; 1 December 2007.
7. ‘Acute pain management—A review’, Combined Workshop and CME, Jaipur branch of ISA, Jaipur; November 2007.
8. ‘Anesthesia implications for an elderly patient’, EUROCAPS 2007, University College of Medical Sciences and Guru Tegh Bahadur Hospital, Delhi; July 2007.
9. ‘Double lumen endotracheal tubes, care of a chest drain, and bronchopleural fistula’, EUROCAPS 2007, University College of Medical Sciences and Guru Tegh Bahadur Hospital, Delhi; July 2007.
10. ‘A patient with a tracheostomy, EUROCAPS 2007, University College of Medical Sciences and Guru Tegh Bahadur Hospital, Delhi; July 2007.

Professor Maya

1. ‘Basic life support’ in the CME Programme organized for the teaching and training of doctors in Dera Hospital at Radha Soami Satsang, Beas, Punjab; December 2007.

Dr Vimi Rewari

1. 'Recent advances in anesthesia', at the teleconferencing session for DNB students at IGNOU, New Delhi; 13 April 2007.
2. 'Anesthesia for thoroscopic surgery', An Update on Anesthesia for Laparoscopic Surgery, Sir Ganga Ram Hospital, New Delhi; 6 May 2007.
3. 'Anesthesia for congenital heart disease', EORCAPS 2007, University College of Medical Sciences and Guru Tegh Bahadur Hospital, Delhi; 10 July 2007.
4. 'Cardiopulmonary resuscitation', Critical Nursing Update, College of Nursing, AIIMS, New Delhi; 29 February 2008.

NATIONAL AND INTERNATIONAL CONFERENCES*Lectures delivered***Professor Chandralekha**

1. '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, AIIMS; 16 February 2008.
2. 'The North Indian Dengue outbreak 2006: A retrospective analysis of ICU admissions in a tertiary care hospital', World Congress of Anaesthesiologist, 2008, Cape Town, South Africa; 2–7 March 2008.
3. 'Haemodynamic monitoring in ICU patients' 8th North Zone Conference of ISA (Amritsar City Branch), SGRD Institute of Medical Sciences & Research, Amritsar, Punjab; 17–18 November 2008.

Dr M.K. Arora

1. 'Branchial plexus blockade—Various approaches and adjuncts' 9th Annual Conference of Surviving Surgery: Role of the Anaesthesiologists, Pakistan Society of Anaesthesiologists, Lahore; 6–7 April 2007.
2. 'Panel discussion and case scenario for a ventilatory dependent patient for weaning', International Critical Care Congress and 14th Annual Conference of Indian Society of Critical Care Medicine, Indian Critical Care Society, Bhopal; 13–17 February 2008.

Professor D.K. Pawar

1. 'Recent concepts in clinical practice of paediatric anaesthesia', Indian Society of Anaesthesiologists (Jaipur City Branch), SMS Medical College, Jaipur; 11 August 2007.
2. 'Fluid therapy in children', XII Rajasthan State Conference of Indian Society of Anaesthesiologists, Sardar Patel Medical College, Bikaner, Rajasthan; 27–28 October 2007.
3. 'Pain management in children with limited resources', World Congress of Anaesthesiology, Cape Town, South Africa; 2–8 March 2008.

Professor Ravinder Kumar Batra

1. 'Infection management in immunocompromised patients' at CME, as a part of International Critical Care Congress and 14th Annual Conference of Indian Society of Critical Care Medicine, Bhopal; 13 February 2008.
2. 'Admission discharge criteria in ICU', Chaired thematic session at CME, as a part of International Critical Care Congress and 14th Annual Conference of Indian Society of Critical Care Medicine, Bhopal; 15 February 2008.

Professor Anjan Trikha

1. 'Laryngeal mask airway can be used for laparoscopic surgery' Pro/Con session, Annual Conference of Indian Society of Anesthetists, Delhi branch, New Delhi, April 2007.
2. 'What is new in anesthesia:Obstetrics, equipments', National Conference of Indian Society of Anaesthetists (ISACON 2007), Visakhapatnam; 26 December 2007.
3. 'Emergency care: Present status in India', Indo-US Healthcare Summit organized by API & IMA, Delhi; 14 December 2007.
4. 'Labour analgesia—What is new', 1st Conference of the Association of Obstetric Anaesthesiologists, Udaipur; April 2007.
5. 'Multi-organ failure: New therapeutic modalities', Critical Care Conference 2007, Government Medical College, Chandigarh; October 2007.

RESEARCH

Departmental Projects

Completed

1. A study to evaluate the efficacy and safety of bilateral paravertebral block for peri-operative analgesia in patients undergoing laparoscopy cholecystectomy
2. Effect of preoperative Dexamethasone in postoperative pain in patients undergoing operative gynecological laparoscopy—A dose response study
3. Advancement of epidural catheter up to thoracic intervertebral space in children—comparison of two different gauges of catheter

Ongoing

1. Comparison of general anesthesia versus epidural anesthesia for total extra- peritoneal laparoscopic inguinal hernia repair
2. Evaluation of feasibility of minimally invasive thyroidectomy in patient with solitary thyroid nodule
3. Safety and efficacy of paravertebral block for analgesia in laparoscopic cholecystectomy
4. Percutaneous dilatational tracheostomy: Griggs guide wire-dilating technique versus controlled rotating dilation technique—A prospective randomized study
5. Effect of pregabalin on pre-operative anxiety and post-operative pain after total abdominal hysterectomy—A dose ranging study
6. Ketamine as an adjunct with bupivacaine in paravertebral analgesia for breast surgery
7. Evaluation of the effect of epidural volume extension during CSE anaesthesia in patients undergoing vaginal hysterectomy
8. To study the safety and efficacy of glossopharyngeal nerve block in glossopharyngeal neuroalgia
9. Intrathecal morphine for postoperative pain relief in children—A comparison of 2 doses
10. Comparison of single tube versus two tubes technique of sub-mental intubation
11. Comparison of pain and postoperative nausea vomiting following vitreo-retinal surgery under general anaesthesia with sub-tenons block versus general anaesthesia in paediatric patients
12. To evaluate the postoperative pain and other post operative variables/complications with different surgical techniques of tonsillectomy
13. Comparison of efficacy of continuous epidural infusion of morphine fentanyl and combination of morphine and fentanyl with bupivacaine for post-operative analgesia in children.

14. To study the efficacy of Clonidine Vs Dexamethasone as adjuvant to 1.5% Lignocaine with adrenaline for infraclavicular brachial plexus block: A prospective randomized placebo control study
15. Spinal anaesthesia in children: Effect of ketorolac for post-operative pain relief
16. Peri operative entropathy in paediatric day care surgery
17. Pediatric internal jugular vein cannulation: Comparison of land mark and real time ultra sound guided technique.

Collaborative Projects

Completed

1. Phenotypic and genotypic characterization of clinical isolates of Candida species, Ph.D thesis (with Department of Microbiology)
2. Comparative clinical proteomics and identification and characterization of new proteins, PhD thesis (with Department of Biophysics)
3. Efficacy and feasibility of regional anaesthesia compared to general anaesthesia for total extra peritoneal laproscopic inguinal hernia repair(with Department of Surgery)
4. Role of stem cells in liver cirrohsis due to congenital surgical anamolies, Phd thesis(with Department of Paediatric Surgery)

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. Arora MK, A rare foreign body (bullet) in the bronchus of a child. *Paediatric Anaesthesia* 2007; **17**(7):703–4.
3. Gupta DK, Sharma S, Arora MK, Agarwal G, Gupta M, Grover VP. Esophageal replacement in the neonatal period in infants with esophageal atresia and tracheoesophageal fistula. *Journal of Pediatric Surgery* 2007;**42**:(9):1471–7.
4. Arora MK, Ray Soumya. Weaning difficult patient from ventilatory support. In: *CME Book on Recent Trends in the Management of Critically Ill Patients*; 2007; 52–61.
5. Batra RK, Garg R. Basic life support—Commentaries. *Journal of Postgraduate Medical Education, Training & Research*. 2007; **2** (5) :4.
6. Batra RK, Roy K. Anaesthetic management in chronic renal failure. *Journal of Postgraduate Medical Education, Training & Research*. 2007; **2** (5): 51.
7. Batra RK, Roy K. Pheochromocytoma and anaesthetic implications. *Journal of Postgraduate Medical Education, Training & Research*. 2007;**2** (5): 65.
8. Batra RK, Roy K. Myasthenia gravis and anaesthetic implications. *Journal of Postgraduate Medical Education, Training & Research*. 2007;**2** (5): 69.
9. Batra RK, Garg R. Anaesthesia for robotic surgery. *Journal of Postgraduate Medical Education, Training & Research*. 2007;**2** (5): 93.
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Books

Chumber S, Bhatla N, Chauhan S, Batra RK, Singh MK, Bithal P, Kant S, *Thesis and Dissertation*. New Delhi: Peepee Publisher, 2007.

Chapters in Books

Batra RK. Invasive monitoring in an Intensive Care Unit. In: *Manual of Medical Emergencies*, Second Edition. Ed. Grover, A, Agarwal V, Gera, P and Gupta R. Delhi: Pusphanjali Medical Publisher Pvt. Ltd. 2007, 29–40.

PATIENT CARE

The following facilities are available in the department:

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

Operations/Procedures

1. Main Operation Theatre	
• General Surgery	2744
• Gastrointestinal Surgery	342
• Urology	1385
• Otorhinolaryngology	983
• Gynaecology	1084
• Paediatric Surgery	1387
• Dental Surgery	162
2. Peripheral Operation Theatre	
• Maternity O.T.	1589
• Orthopaedics	1900
• Ophthalmic Surgery (RPC)	5736
• Casualty OT	3
3. Interventional Pain Management Procedures	448
4. Procedures done under GA in peripheral areas:	
• Modified ECTs (Psychiatry OPD)	537
• CECT/MRI	953
• Paediatric USG (RPC)	154

AB8/ICU

• Total number of patients admitted	301
• Number of patients discharged	230
• Number of Deaths	77

AB8 emergency duty

• Emergency operations done	2901
• Emergency calls attended (from wards, peripheral ICUs, casualty)	2773

OPD CLINICS: Total number of patients attended the clinic

• Pre-anaesthesia clinic	8374
• Pain clinic	- 5741

Voluntary community service

Dr Chandralekha: Governing Body Member and Advisor to the Council in the Centre of Social Research (NGO) and Women Power Connect.

Dr Maya: Provided Voluntary medical community services at Bhatti Centre in Radha Soami Satsang for 17 days. Provided first aid services, resuscitation and critical care till the patient is shifted to a AIIMS, New Delhi or Safdarjang Hospital. Dr Maya also provided medical service at the OPD of the dispensary at Bhatti Centre, New Delhi on all Sundays of the year except on when she was on emergency duty at AIIMS.

Dr Maya made a team of doctors with two other doctors who were in the department in the past but now working in other major Delhi hospitals organized a Teaching and Training Programme for Cardio Pulmonary Resuscitation (CPR) at Dera Hospital at Radha Soami Satsang Beas (Punjab) for doctors of different speciality working in different parts of Punjab for two days in December 2007.

SIGNIFICANT EVENTS

Professor M.K. Arora accompanied CBI team to Germany and provided medical assistance for extradition of accused fugitive AN Ghosh from Germany to India from 23 to 27 August 2007. This involved setting up of operation theatre with all drugs, monitors and resuscitation equipment in a chartered plane of Indian Air Force.

Professor Ravinder Kumar Batra was the expert for accreditation in postdoctoral fellowship programme in 'Critical Care' for National Board of Examinations, 2007; was nominated Member and Co-ordinator for Medical Council of India for 'Upgradation of Curriculum in Anaesthesiology for Undergraduates and Postgraduates in Anaesthesiology 2007–2008'; was nominated Member of 'Expert Group for Formation of Guidelines for Theory and Practical Examination for the DNB (Anaesthesiology) 2007'.

9.2 Anatomy

Professor and Head

Rani Kumar

Professors

Shashi Wadhwa

R.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

Arundhati Sharma
(Genetics)
T.C. Nag
(Electron Microscopy)

Assistant Professor

Ritu Sehgal

EDUCATION

Undergraduate

The department conducts MBBS, BSc (Hons) Nursing and post certificate Nursing, Ophthalmic, Radiographic technique and Speech Therapy training courses. Five MBBS students from AIIMS were awarded Summer Research Fellowships for carrying out research in Genetics, Cell biology, Immunology and submitted short-term projects under Kishore Vaigyanik Puraskar Yojana (KVPY).

Postgraduate

Besides training 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. Three MSc students from Jiwaji University, Gwalior were trained in neuroanatomical techniques. The department provided training to 6 WHO fellows in genetics from February 2007 till July 2007. The faculty delivered series of lectures to MSc students in neurosciences, medical genetics and embryology in Jiwaji University, Gwalior. The faculty also delivered lectures on anatomy for postgraduate diploma course in Developmental Therapy (University of Delhi), School of Rehabilitation, Hauz Khas, New Delhi.

Short- and long-term training

Two trainees from Calcutta and Jiwaji University, Gwalior were trained for 6 months and 6, respectively in neuroanatomical techniques, immunohistochemistry, Western blotting and RT PCR. Eleven students were trained in genetics for short-term training. Two students, one each of BTech and MSc Biotechnology from Amity University worked for their summer training in the cytogenetics laboratory on basic cytogenetic and molecular techniques. Six WHO trainees from different parts of India received training for a period of 3 months in molecular genetic techniques, basic cytogenetics and prenatal diagnostic techniques for detection of chromosomal disorders using CVS, amniotic fluid and cord blood samples, Yq microdeletion analysis, analysis of oxidative stress from semen

samples. An eLearning facility has been established in the Department of Anatomy, 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 theses and research.

Conferences organized

Dr A. Shariff

Organized/Conducted the following:

AIIMS-FAIMER NCME 2007, National Conference on Medical Education (NCME) 2007, in collaboration with the CMET, AIIMS and Foundation for Advancement of International Medical Education and Research (FAIMER), Philadelphia, USA.

A pre-conference workshop on 'Digital photography and video editing' in the Seventeenth National Conference of the Indian Association of Surgical Gastroenterology, AIIMS, New Delhi; 28 September 2007-2 October 2007.

Lectures delivered

Professor Rani Kumar

'Anatomy and relations of dural reflections of skull base', International Skull Base CME in WFNS Microsurgery and Endoscopy Cadaver Workshop and the 9th Annual Conference Skull Base Surgery Society of India [International Skull Base CME], AIIMS, New Delhi; 24–25 October 2007.

Professor Shashi Wadhwa

'Neural substrate controlling regulatory systems and expression of behaviour', DST sponsored First SERC School in Neurosciences, Department of Pharmaceutical Sciences, Nagpur University, Nagpur; 29 January 2008.

Professor T.S. Roy

'Topography of the cerebral cortex', DST and IBRO sponsored First SERC School in Neurosciences, Department of Pharmaceutical Sciences, Nagpur University, Nagpur.

Dr S.B. Ray

'Anatomy of nose and paranasal sinus in relation to the skull base and anatomy of temporal bone' in the International Skull Base CME in WFNS Microsurgery and Endoscopy Cadaver Workshop and the 9th Annual Conference Skull Base Surgery Society of India [International Skull Base CME, AIIMS, New Delhi.

Dr Rima Dada

Guest lecture and demonstrated PCR based Yq microdeletion analysis at DBT sponsored 'Hands on training workshop on methods in clinical diagnosis: Cytogenetics, biochemical, molecular and bioinformatic approaches', Gwalior.

Dr Renu Dhingra

'Anatomy of temporal bone' in the International Skull Base CME in WFNS Microsurgery and Endoscopy Cadaver workshop and 9th Annual Conference Skull Base Surgery Society of India [International Skull Base CME, AIIMS, New Delhi.

Dr R. Sehgal

'Anatomy and embryology' as guest faculty for the Royal College of Obstetrics and Gynaecologists North Zone Postgraduate Course at Amity University, Noida, 8 February 2008.

NATIONAL AND INTERNATIONAL CONFERENCES

The faculty delivered lectures, plenary talks and participated in the following:

Professor Rani Kumar

Chaired and participated in the National Symposium on Current Trends in Auditory Research, MAMC, New Delhi; 21-22 September 2007.

Professor S. Wadhwa

- Attended and presented her work at the Seventh IBRO World Congress of Neuroscience, Melbourne, Australia; 12–17 July 2007
- Delivered an invited talk and chaired a session in the National Symposium on Current Trends in Auditory Research, MAMC, New Delhi; 21–22 September 2007.
- Participated and chaired a session in the National Symposium on Glial Neurobiology, Jiwaji University, Gwalior; 23 October 2007.
- Delivered an invited talk at the National Symposium on Science of Life: The New Horizon, Miranda House College, Delhi University, Delhi; 22 November 2007
- Presented a paper, chaired a session and judged the best paper presented award session at the 55th National Conference of the Anatomical Society of India, Mumbai; 26–29 December 2007.

Professor R. D. Mehra

- Chaired a session in National Symposium on Current Trends in Auditory Research, New Delhi; September 2007.
- Participated in the International Workshop on The Negative side of Gram Positive Bacteria and Discussion on European Commission Project – 'ASSIST', Cochin; October 2007.
- Delivered invited lectures on the following:
- 'Hippocampus: An open window for estrogen based targeted therapy for neuroprotection and consolidation of memory', in the Indo-US Symposium on Novel Therapeutic Approaches for the Treatment of Neurological Disorders, New Delhi; November 2007
- 'An overview into role of estrogen in memory process', in the International Symposium on Advances in Neurosciences & Silver Jubilee Conference of IAN, Varanasi; November 2007.

Professor T.S. Roy

- Participated in the Workshop on Multiphoton and Spectral Laser Scanning Microscopy, National Center for Ultrafast Processes, University of Madras, Chennai; 20–22 August 2007
- Guest speaker at the Current Trends in Auditory Research, Maulana Azad Medical College, New Delhi; 21–22 September 2007.
- Participated and delivered lectures in the Second Meeting of the Asian Oceanic Pancreatic Association, Kobe, Japan; 18 October 2007 and International Symposium on Advances in Neurosciences and Silver Jubilee Conference of Indian Academy of Neuroscience, Banaras Hindu University, Varanasi; 22–25 November 2007.

Dr P. Dhar

- Participated and presented a paper in the National Conference of Anatomical Society of India, LTMMC, Mumbai; 26–29 December 2007
- Participated in Satellite Meeting for Free Radical Research (Society for Free Radical Research–India), AIIMS, New Delhi; 11-12 February 2008
- Participated in Conference on Economic Growth and National Integration, New Delhi ; July 2007

Dr S.K. Basu Ray

Presented papers at

- Twenty-fifth Annual Conference of Indian Academy of Neurosciences, Banaras Hindu University, Varanasi; November 2007
- Twenty-third Annual Conference of Indian Society for Study of Pain’ held in Christian Medical College, Vellore; February 2008.

Dr Rima Dada

Delivered invited lectures on the following:

- ‘Male health: Impact of environment and genetic factors’, in Workshop-cum-Symposium on Electromagnetic fields in Environment: Implications and Solutions, School of Environmental Sciences, JNU, New Delhi, 23 March 2008
- Developmental Genetics of Post graduates of Molecular and Human Genetics, Centre for Molecular and Human Genetics, Jiwaji University, Gwalior, December 2007
- Mitochondrial mutations and oxidative stress in men with idiopathic OA- in Indian National Congress of Clinical Biochemistry, New Delhi, 17 December 2007
- Genetic aspects of infertility at the Conference on OMICS in 21st Century at the 5th International Symposium on Genetics, Health and Disease, GNDU, Amritsar, 19 February 2007
- ‘Genetics of male infertility and recurrent ART failure’ at the Symposium on Male Infertility, CDRI, Lucknow, also chaired a session, 14 March 2007
- Chaired a session on Male Reproductive health –Effect of Environmental factors on male reproductive health-Symposium on male Infertility at CDRI, Lucknow, 14 March 2008.
- Attended International Symposium on Fetal Intervention including Genetic Counseling for Major Congenital Malformations, AIIMS, New Delhi, 2007.
- Presented posters ‘Oxidative stress induced spermatogenic arrest in infertile Indian men’ and ‘Increased lipid peroxidation, low antioxidant levels, nucleotide changes in mt DNA in idiopathic asthenozoospermic men of Indian origin’ at the meeting of Society for Free Radical Research, AIIMS, New Delhi February 2008
- ‘Mitochondrial mutations and their role in male infertility’ at the Thirty-third Annual Meeting of the Indian Society of Andrology, NIHFW, New Delhi; 15 and 16 December 2008.

Dr Arundhati Sharma

Delivered lectures on

- ‘Importance and awareness of genetic disorders and diagnostic tests in the Indian scenario’ in the National Seminar on Teratology and Genetic Disorders, Institute for Medical Sciences, BHU, Varanasi and also chaired a session in the seminar;
- ‘Amniocentesis for prenatal diagnosis of chromosomal anomalies’–Meeting of Delhi Society for Prenatal Diagnosis & Therapy (DESPAT), AIIMS, New Delhi, 8 March 2008

- Participated in the following meetings:
- XXXIII Annual Conference of the Indian Society of Human Genetics and International Symposium on Genetics Revisited; the Genomics and Proteomics Advantage, Department of Human Genetics, Andhra University, Visakhapatnam, Andhra Pradesh, 11–13 February 2008
- (Delhi Society for Prenatal Diagnosis & Therapy (DESPAT), AIIMS, New Delhi, 8 March 2008
- Symposium on Fetal Interventions and Genetic Counseling for Major Congenital Malformations, Department of Pediatric Surgery, AIIMS, New Delhi, 3 October 2007
- National Symposium on Immunity to Infection on the occasion of the 33rd Annual day celebrations of AIIMS, 8 October 2007.

Dr Renu Dhingra

Participated and presented a paper entitled ‘Plastination of embalmed and freshly preserved specimens of heart’ in the 9th International Interim Conference on Plastination, Ann Arbor, Michigan, USA 7–14 July 2007.

Dr Ritu Sehgal

Participated in the workshop on ‘Assessment Strategies in Medical Education’ K.L. Wig CMET, AIIMS, New Delhi, 21-23 February 2008.

PhD and MD students

Mr Kanhaiya Sharma participated and presented a poster in the 15th European Conference on ‘Apoptosis’ and also participated in a Training Course on ‘Concepts and methods in programmed cell death’, Portorz, Slovenia, October 2007.

Dr Sonali Kataria, Senior Tutor of the department, participated and presented a poster on ‘Subiculum an important target of estrogenic action’, in the 7th IBRO World Congress, Melbourne, Australia, July 2007 She also was invited to spend a month at the Melbourne University as an Observer-cum-trainee.

Ms Shilpi Dixit participated and presented a poster in 2nd Workshop on Neural Stem Cells and Frontier Technologies for Brain Repair and 2nd Australian Workshop on Computational Neuroscience at Adelaide, South Australia, December 2007.

Mukesh Tanwar presented poster at the 16th Annual Meeting of Indian Eye Research Group, 28 July 2007; Ultrastructural changes and genetic study in PCG and associated CG with SWS.

RESEARCH

Funded Projects

Completed

Role of cell cycle regulatory genes in Breast Cancer patients and hormonal therapy. PI Rani Kumar. Funded by DBT for 3 years. Funds: Rs 21 lakh.

Ongoing

- 1 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 for 3 years (2006-2009). (BT/PR6771/BRB/10/448/2005) Funds: Rs 18. 43 lakh.
- 2 Studies on immuno-expression of antiapoptotic and transcription marker molecules in ovariectomized rat hippocampus. PI : R.D. Mehra. Funded by ICMR for 4 years (2007-11). Funds: Rs 5. 21 lakh.
 - 3 Prenatal development and maturation of human inferior colliculus. PI: T. S. Roy. Funded by DST for 3 years (2007-2010). Funds: Rs 23. 88 lakh.
 - 4 Genetic and DNA fragmentation study in infertile couples opting for ART and couples experiencing recurrent IVF/ICSI failure. PI: Rima Dada. Funded by ICMR for 3 years 2008-2011. Funds: Rs 4.0 lakh.
 - 5 Analysis of mitochondrial DNA mutations in pathogenesis of spermatogenic arrest. PI: Rima Dada. Funded by ICMR for 3 years (2007-2010). Funds: Rs 4.33 lakh.
 - 6 AIIMS-OXPPOS mutations in infertile Indian men. PI: Rima Dada. Funded by AIIMS for 2 years (2006-2008). Funds: Rs 2.0 lakh.
 - 7 Mutational analysis of corneal dystrophies in north Indian patient population. PI: Arundhati Sharma. Funded by Department of Biotechnology for 3 years (2006-2009). Funds: Rs 36 lakh.
 - 8 Mutation analysis of 5q31-linked autosomal dominant corneal dystrophy in north Indian patients. PI Arundhati Sharma. Funded by AIIMS for 3 years (2005-2008). Funds: Rs 1.95 lakh.
 - 9 Screening of Von-Hippel Lindau gene for germline mutations in intracranial aneurysms: A prospective study. PI: Arundhati Sharma. Funded by AIIMS for a years (2008-2009). Funds: Rs 1.4 lakh.

Departmental Projects

Completed

Effects of arsenic exposure during early postnatal period on developing rat hippocampus

Ongoing

1. Effect of prenatal sound on the morphology of auditory and visual thalamic relay nuclei of domestic chick
2. Effect of prenatal chronic intense sound exposure on medio-rostral neostriatum/ hyperstriatum ventrale region of chick forebrain: A morphometric study
3. Hippocampal regulation of immune mechanism.
4. Development of the human auditory system
5. Age changes in the human cochlear nerve
6. Morphology of the fetal and adult human pancreatic duct system
7. Effects of arsenic exposure during early postnatal period on rat hippocampus
8. Effects of Perinatal Arsenic Exposure on rat testis : A morphological study
9. Effects of Lipoic acid as an antioxidant supplement on arsenic induced toxicity in developing rat hippocampus
10. Effect of sodium arsenite exposure during perinatal period on rat testis
11. Comparison of Yq microdeletions in genomic DNA isolated from blood and sperm
12. BPES and its association with premature ovarian failure
13. Cytogenetic and molecular studies in glaucoma
14. Role of circulating angiogenic markers in the pathogenesis of preeclampsia

15. Placental apoptosis and oxidative stress in the pathogenesis of preeclampsia
16. Apoptosis in trophoblastic cells of human placenta in preeclampsia
17. Plastination of hollow organs
18. Plastination of brain
19. Oxidative stress in fluorosis
20. Effect of amyloid beta (1-42) on the morphology and protein profile of the rat hippocampus

Collaborative Projects

1. Brain aging and neurodegeneration: Neuroprotective and biomodulatory roles of estrogens and glucocorticoids (Indo-Hungarian Collaborative research project). Funded by DST. (with Semmelweis University, Budapest).
2. Measurement of the depth of the terminal ductolobular units from the dermis in modified radical mastectomy specimens in carcinoma of breast to arrive at an optimum thickness of the skin flap (with Department of Surgery)
3. 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 agent in ankylosing spondylitis (with Department of Orthopedics)
4. Mutation analysis in congenital and developmental glaucoma and development in north Indian population (with RP Center).
5. Mutation spectrum of the CYP1B1 gene in north Indian, primary congenital glaucoma patients. (with R.P. Center).
6. Phase III clinical trial with intravasal injectable male contraceptive RISUG. (with Department of Biochemistry).

PUBLICATIONS

Journals

1. Chaudhury S, Nag TC, Wadhwa S. Calbindin D-28K and parvalbumin expression in embryonic chick hippocampus is enhanced by prenatal auditory stimulation. *Brain Res* 2008; 1191: 96-106.
2. Dada R, Kumar R, Sharma RK, Gupta NP. Epimutations and genetic aberration adversely affect ART outcome. *J Endocrinol Reproduct* 2007; 11: 49-51
3. Dada R, Kumar R, Shamsi MB, Kucheria K, Sharma RK, Gupta SK, Gupta NP. Higher frequency of Yq microdeletions in sperm DNA as compared to DNA isolated from blood. *Asian J Androl* 2007; 9:720-2.
4. Dada R, Kumar R, Ahmad ME, Kumar R, Sharma RS, Gupta NP, Mitra A, Gupta SK, Kucheria K. Klinefelter syndrome: Clinical implications of expanding phenotype. *Indian Journal for the Practising Doctors* 2007; 3: 14-23.
5. Dada R, Kumar R, Kumar R, Gupta NP, Kucheria K. Germ cell AZF deletion screening ideal prior to ART. *Obst & Gynae Today* 2007;11: 626-7.
6. Dada R, Kumar R, Shamsi MB, Sidhu T, Mitra A, Singh S, Kumar R, Sharma RS, Gupta SK, Gupta NP. Azoospermia factor deletions in varicocele cases with severe oligozoospermia. *Indian J Med Sci* 2007;61:505-10.
7. Dada R, Kumar R, Kumar Rj, Sharma R K, Gupta NP. Diagnostic and prognostic implication of cytogenetic abnormalities and Yq microdeletions in assisted reproduction. *J Reproduction and Contraception* 2007; 31: 45-6.

- 8 Dada R, Tanwar M, Dada T, Jasbeer Kaur. Genetics of Ocular Disorders. *Delhi J Ophthalmology* 2007; 12: 23-9.
- 9 Dada R, Tanwar M, Kumar R, Pathak D, Sihota R, Dada T. Genetics of glaucoma. *DOS Times* 2007; 13:25-33.
- 10 Dadhwal V, Deka D, Sharma A, Sharma Y, Bahadur A. Tetraploid mixoploidy presenting as refractory hydrops in a case of immune hemolytic anemia. *Prenatal Diagnosis* 2007; 27: 1262.
- 11 Kumar R, Bhat A, Bamezai R N K, Shamsi MB, R Kumar, Gupta NP, Aron M, Sharma RK, Dada R. Necessity of nuclear and mitochondrial genome analysis prior to ART/ICSI. *Indian J Biochem Biophys* 2007; 44: 437-42.
- 12 Kumar R, Shamsi M B, Gaznavi I, Jena M, Kucheria K, Kumar R, Sharma R K, Dada R. Structural chromosomal anomalies and their association with reproductive failure *Obs & Gynae Today* 2007; 3: 152-4.
- 13 Kumar R, Shamsi MB, Singh S, Kumar R, Kucheria K, Gupta NP, Dada R, Genetics of reproductive failure in men with severe testiculopathy. *Indian J Practising Doctors* 2007; 3: 96-71.
- 14 Mandal P, Roy TS, Das TK, Banerjee U, Xess I, Nosanchuk JD. Differences in the cell wall architecture of melanin lacking and melanin producing *Cryptococcus neoformans* clinical isolates from India: an electron microscopic study. *Braz J Microbiol* 2007; 38: 662-6.
- 15 Mehra RD. An overview into the role of estrogen in memory process. *Ann Neurosci* 2007; 14 (suppl): 61-2.
- 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 Nayak N, Nag TC, Satpathy G, Ray SB. Ultrastructural analysis of slime positive & slime negative staphylococcus epidermidis isolates in infectious keratitis. *Indian J Med Res* 2007; 125: 767-71.
- 18 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: 219-28.
- 19 Roy TS. Book Review: 'Human embryology'. *Natl Med J India* 2007; 20: 267.
- 20 Shamsi MB, T Mukesh, Dada R, Kumar R, Kumar R, Sharma RK, Kucheria K. Mosaic status of lymphocytes in infertile men with Klinefelter syndrome. *Int J Hum Genet* 2007; 7:133-6.
- 21 Shamsi MB, Kumar R, Bhatt A, Bamezai RNK, Kumar R, Gupta NP, Das TK, Dada R. Mitochondrial DNA mutations in etiopathogenesis of male infertility. *Indian J Urol* 2008; 24: 150-4.
- 22 Shamsi MB, Kumar R, Dada R. Evaluation of nuclear DNA damage in human spermatozoa in men opting for assisted reproduction. *Indian J Med Res* 2008; 127: 115-23.
- 23 Sharma V, Roy TS, Nag TC, Wadhwa S. Morphometry of the developing human inferior colliculus. *Ann Neurosci* 2007; 14 (Suppl): 63.
- 24 Sharma K, Mehra RD. Long-term administration of estrogen or tamoxifen to ovariectomized rats affords neuroprotection to hippocampal neurons by modulating the expression of Bcl-2 and Bax. *Brain Res* 2008; 136:1-15.
- 25 Varshney MK, Sharma K, Dhar P, Mehra RD. Modulation of synaptic activity in ovariectomized rat cerebellum following estrogen treatment. *Ann Neurosci* 2007; 14 (Suppl): 75-6.

Abstract

1. Arora Z, Kumar R, Sharma R.K, Kumar R, Dada R. Presence of Yq microdeletions in men with cryptorchidism, *AJHG* 2007; 321.
2. Chaudhury S, Nag TC, Wadhwa S. Effect of prenatal auditory stimulation on the synaptic density of chick hippocampus. *Seventh IBRO World Congress Neuroscience Book of Abstracts* 2007; p. 428.
3. Dada R, Kumar R, Kumar R, Gupta N.P, Sharma R.K. Analysis of sperm and Blood mitochondrial DNA in pathogenesis of oligoasthenozoospermia. *AJHG* 2007; 271.
4. Dada R, Kumar R, Sundararajan V, Sharma R K. Cytogenetic and Yq microdeletion analysis in couples experiencing recurrent IVF failure. *Indian J Clin Biochem* 2007; 22 (Supl): P1.19 3. p. 221,
5. Dhar P, Dixit S, Mehra RD. Exposure to sodium arsenite during rapid brain growth (Rbg) period reduces calcium binding protein expression in rat hippocampus. *Proceedings of Fifty-fifth NATCON Conference*, Mumbai, December 2007, p. 117.
6. Dhingra R, Kumar R . Plastination of embalmed and freshly preserved specimens of heart. *Proceedings of Ninth International Interim Conference on Plastination*. Ann Arbor, Michigan , USA, 7-14 July 2007, p. 15.
7. Dixit S, Dhar P. Morphological features of hippocampal CA1 pyramidal neurons and dentate gyrus granule cells in rat pups exposed to sodium arsenite. *Annals of Neurosci* 2007; 14 (suppl): p. 90 (Abstr).
8. Gupta R, Ray B, Sharma S, Roy TS. Morphology of the fetal and adult human pancreatic duct system. Proceedings of the National conference on electron microscopy and allied fields and 29th Annual Meeting of EMSI, New Delhi, 2007; p. 192.
9. Idris MG, Rupak M, Harpreet K, Saraswati KN, Kamboj SS, Bhardwaj S, Kucheria K, Dada R. Molecular study of five ethnic groups of Rajasthan. *AJHG* 2007; p. 146.
10. Ilavenil K, Dhingra R, Kumar R. Plastination of heart. *Proceedings of Fifty-fifth NATCON Conference*, Mumbai, December 2007; p. 98.
11. Kaler S, Dhar P. Exposure to arsenic during rapid brain growth period (RBGP) induces morphological and morphometric alterations in rat hippocampus. *Ann Neurosci* 2007; 14 (suppl.): p. 84.
12. Kaler S, Dhar P, Mehra RD. Effects of arsenic exposure during rapid brain growth period (RBGP) on dentate gyrus of rat hippocampus: a morphological study. *Proceedings of 55th NATCON Conference*, Mumbai, December 2007; p. 81.
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PATIENT CARE

Embalming of dead bodies

- | | |
|-------------------------------------|-----|
| 1. For transportation | 539 |
| 2. For teaching/research | 18 |
| 3. Cytogenetic analysis | 455 |
| 4. Yq microdeletion analysis by PCR | 122 |
| 5. Chromosome analysis | 375 |
| 6. Amniotic fluid/cvs/cord blood | 77 |

Fluorosis Diagnostic Laboratory: Fluoride estimation

- | | |
|-------------------|----|
| 1. Urine | 39 |
| 2. Blood/serum | 37 |
| 3. Drinking water | 98 |

AWARDS AND HONOURS

Professor R. Kumar was invited by Government of Sri Lanka to give guest lectures and have interactive sessions with faculty of various medical and dental colleges in Colombo w.e.f. 17-26

June 2007; continues to be (i) Member of Academic Committee of Gulf Medical College, Ajman (ii) Member of Publication Advisory Committee of National Academy of Medical Sciences

Professor Shashi Wadhwa continued to be a member of the editorial board of the following journals: *J Biosciences*, *J Anatomical Society of India* and *Annals of Neurosciences*.

Dr Mehra was nominated as the Fellow of the Indian Academy of Neurosciences, January 2008.

Dr P. Dhar was conferred 'Rashtriya Gaurav Award' and Certificate of Excellence by India International Friendship Society, July 2007

Dr Rima Dada received the following awards: (i) Rashtriya Gaurav Award and Certificate of Excellence for outstanding services and achievements, (ii) Rajiv Ratan Award in 2007. She was judged amongst the most distinguished personalities for her excellence of research in Genetics of Infertility in 2007 by India Publishing House, November 2007

Rakesh Kumar, PhD Student, received the Best Oral Presentation award on the following papers: 'Oxidative stress induced DNA damage and mutations in OXPHOS in infertile men in free radical biology meeting' at the Society for Free Radical Research, organized by the Department of Biochemistry, AIIMS, New Delhi, 11–12 February 2008; and (ii) 'Mitochondrial mutations in oligoasthenozoospermia' at the Thirty-third Annual Meeting of Indian Society of Andrology, NIHFW, New Delhi, 15-16 December 2007.

Miss Sraboni Chaudhury, PhD student received the 'SCITECHEDIT/IBRO 2007 – travel grant for attending IBRO World Congress 2007, Melbourne, Australia 12–17 July 2007 (she was selected as one of the two best applicant in Asia Pacific Region) where she presented a poster on 'Effect of prenatal auditory stimulation on the synaptic density of chick hippocampus'. She received the Japan Neuroscience Society and Indian National Science Academy, Government of India travel awards to attend the Annual Meeting of Japan Neuroscience Society held at Yokohama, Japan, 10–12 September 2007 and presented a poster on 'Altered levels of BDNF protein following prenatal auditory stimulation'. She also received the IBRO fellowship to attend 10th IBRO Associated School in Neuroscience held at Hangzhou, China; 24–28 October 2007.

Mr Vikram Sharma, PhD student was awarded research Fellowship under Indo-Finish Student Exchange Program for training under Dr Leonard Khirug at Neuroscience Centre, University of Helsinki, Finland for 6 months.

Mr Prabhakar Singh, PhD student of the department has been awarded following scholarships:

- IBRO travel award from International Brain Research Organization, Paris, France to attend the 'Eleventh Associate School of Neuroscienc' and 'Thirteenth Thai Neuroscience Society Conference' held at Phitsanulok, Thailand; July 2007.
- Travel fellowship from the International Society for Neurochemistry to attend 'International Symposium on Glia Activation and Function', held at Dalian, China; October 2007
- Scholarship from Asia Pacific Society for Neurochemistry for attending the 'Nineth APSN Neurochemistry School and Workshop', held in Dalian Medical University, Dalian, China; October 2007.

Mr Kanhaiya Sharma, PhD student of the department was awarded 'Marie Curie Scholarship' of European Union.

Ms Neerja Rani was awarded the travel award from International Federation for Placental Association, August 2007.

Ms Betsy Varughese was awarded the Jawaharlal Nehru Scholarship for Doctoral studies for 2 years (2008-2010) from Jawaharlal Nehru Memorial Fund, New Delhi. She was also awarded the Senior Research Fellowship from April 2008 for three years from ICMR.

SIGNIFICANT EVENTS

Professor Rani Kumar continues to be (i) Chairperson of Curriculum Committee Phase-I MBBS teaching; and (ii) for professional examinations for UGs and PGs of Anatomy; (iii) Member, Editorial Board, *Journal of Anatomical Society of India*; Chairperson, Store Purchase Committee, AIIMS; Incharge of B. B. Dixit Library, AIIMS; was President of DASMOS (DELHI ASSOCIATION OF MORPHOLOGICAL SCIENCES), Delhi. She was appointed as external expert for selection of faculty positions in Anatomy at Dental College, Chandigarh; Advisory member for selection of Members and Fellows of NAMS

Professor S. Wadhwa was nominated as Expert Committee member for selection of DST BOYSCAST Fellows, Advisory Panel member for election of NAMS Fellows and Expert Committee member for IRPHA Centre of Excellence at JNU, New Delhi. She was nominated as NAMS observer for CME on 'Teaching of neuroanatomy—A clinical perspective' held at Chandigarh Government Medical College, Chandigarh; 13–14 October 2007. She was also nominated member to Planning and Monitoring Board, Selection as well as Assessment Committee of NBRC, Manesar, Haryana. She was invited to validate a chapter on cell division and cell signaling by NISCAIR, New Delhi for an ebook on Cell Biology and Membrane Biochemistry for National Scientific Digital Library. She was invited as subject expert to the Selection Committee of Jawaharlal Nehru University, New Delhi. She continued to be a member and attended the meetings of the CSIR Travel Awards committee. She reviewed research papers submitted to *J Neurobiology*, *J Biosciences* and *J Anatomical Society of India*. She also reviewed neuroscience research projects and annual project reports for ICMR, DST and DBT.

Professor R. D. Mehra participated and presented a poster on 'Memory and immune regulation: Implications of estrogen therapy'. in the Thirteenth International Congress of Immunology, Rio de Janeiro, August 2007. She was also invited as an Observer to the IUIS Council and General Assembly meeting. She also visited the FIO CRUZ Institute and Health Sciences University of Rio de Janeiro.

Professor T.S. Roy was member of the expert committee for upgradation of Kolkata Medical College, under the Pradhan Mantri Swastha Suraksha Yojna. He continued to be a member of the Editorial Board of *Pancreas*.

Dr A. Shariff has been selected as a member of a High Level Committee formed by the Ministry of Health and Family Welfare (MOHFW), Government of India, under the Chairmanship of Additional Director General of Health Services, to formulate guidelines for implementation of National Health Information Network according to recommendations of the National Knowledge Commission to the Prime Minister of India.

He also worked as resource faculty in ‘National Workshop on Assessment Methods for Learning Evaluation in Basic medical Sciences’ AIIMS, 20–22 September 2007. He also worked as resource faculty for the following: (i) National Workshop on Assessment Methods for Learning Evaluation in Basic Medical Sciences, AIIMS, New Delhi; 20-22 September 2007, (ii) ‘Postgraduate Nursing Course on Media & Communication’ for the PG Nursing Students of the College of Nursing, AIIMS, August-September 2007, (iii) National Workshop on ‘Advanced Educational Technology in Nursing for Quality Patient Care’, Trained Nurses Association of India (TNAI) Headquarters, New Delhi, 21-28 November 2007

Dr P. Dhar was elected BTS Member of the British Toxicology Society, November, 2007); Vice President of ASI during Annual Conference of ASI (55th NATCON), Mumbai, December 2007; Nominated as General Secretary of DASMOS (Delhi Association of Morphological Sciences), 2007; invited for Author-Publisher meet (J. P. Publications), April 2007. He continues to be Member, Curriculum Committee for UG (AIIMS), Vice President – A.I.B.A., Life Member, Jagruti Kiran Foundation (recognized by the Ministry of Environment and Forests, Government of India)

Dr Rima Dada was Invited to be a member of Editorial Board of the *Journal of Paediatric Neurology* and *Online Journal of Health and Allied Sciences*. Reviewed articles for *Fertility and Sterility*, expert Reviews in *Gynaecology and Obstetrics*, *Asian J Andrology*, *Indian J Medical Res*, *Indian J Urology*; Member, ICMR task force on male Infertility. Reviewer for projects and annual reports submitted to ICMR, evaluated 2 MD thesis in Genetics; was nominated as Member of NAMS in Genetics, External examiner for advanced genetics course in GNDU, November 2007; Member Core committee for AIIMS convocation and Antiragging committee, Chaired session on ‘Male reproductive health–Effect of environmental factors on male reproductive health’ in the Symposium on male infertility, CDRI, Lucknow, 14 March 2007. Appeared on TV for NDTV, Star Plus and India TV channels for increase public awareness about affect on lifestyle on male reproductive health and effect of EMR on male reproductive health. Her articles on effect of clothing, lifestyle and smoking on male reproductive health appeared in *The Times of India*, *The Hindustan Times* and *the Asian Age*.

Dr Arundhati Sharma was appointed reviewer for *European Journal of Obstetrics & Gynecology and Reproductive Biology (EJOGRB)*. Worked as external expert on the Post Graduate Board of Studies in Biochem and Genetics (P.G. BOS) of MD University, Rohtak.

Dr R. Dhingra worked as resource faculty in ‘National Workshop on Assessment Methods for Learning Evaluation in Basic Medical Sciences’, AIIMS, New Delhi; nominated as executive member for DASMOS (Delhi Association of Morphological Sciences).

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

Visiting Scientist

Masha Stern, Microbrightfield Inc, VT, USA delivered a lecture on ‘Application of Stereology in neuroscience research.’ May 2007.

9.3 Biochemistry

Professor and Head

Subrata Sinha

Professors

Neeta Singh
Ranju Ralhan

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 including MBBS (two semesters), Nursing (one semester) and BSc (Hons) Nursing (one semester).

For the MBBS students, an innovative blend of problem based/case oriented small group discussions, interactive lectures and lab-based exercises is streamlined to facilitate self directed reason based learning. Eight to ten students are distributed in different groups. Each group discussion is facilitated by a faculty member and tutors. New problem based modules on pH and electrolyte balance, endocrine-metabolic interrelationships and immunodeficiency had been incorporated to facilitate the understanding of the concepts of biochemical regulation and molecular medicine. Student's feedback on Biochemistry (practical and theory) classes is made a compulsory item in the teaching schedule.

Postgraduate and Research

These include 6 MSc (first and second year) students and 7 MD students. The department also has 41 PhD students.

Short-term training

Summer training in research was provided to MBBS students from AIIMS. Ten MBBS (first year) students have conducted project work for the Kishore Vaigyanik Protsayan Yojana (KVPY) Scheme of the DST in different labs of the department and 5 students have been awarded the fellowships. Twenty students from India received short-term training for 3 to 6 months. The department also imparted short-term training (1 month) to 2 MSc students from B.P.Koirala Institute of Health Sciences (BPKIHS, Dharan, Nepal).

Continuing Medical Education

Organized Society for Free Radical Research – India [Satellite Meeting], AIIMS, New Delhi; 11-12 February 2008.

National and International Conferences

Lectures delivered

Subrata Sinha

- 1 'Generation of potentially therapeutic antibodies against target tumour antigens', International Symposium on Cancer Biology, New Delhi; 14-16 November 2007
- 2 'Molecular analysis of malignancy', Workshop on Basic technique in Molecular Biology, Bhubaneswar; 11-15 December 2007
- 3 'Genomic instability and mutations influencing phenotype: Contrasts in high and low grade tumours', 27th Annual Convention of Indian Association for Cancer Research (IACR), Ahmedabad, 7 -9 Feb 2008
- 4 'Molecular staging of glial tumours', Ranbaxy Science Foundation's 14th Annual Symposium on 'Emerging Frontiers in Management of Advanced Stage Cancers', New Delhi 14-15 January 2008
- 5 'Molecular biology of cancer', First Asian and Second National Medical Students' Research Conference, Moving Academy of Medical Sciences, Pune; 20-24 February 2008.

Neeta Singh

- 1 'Molecular profiling of human lung squamous cell carcinoma and chemoadjuvant action of curcumin', International Symposium on Genetic Instability and Cancer, Srinagar; 22-26 July 2007
- 2 'Assessment of viral factors involved in cervical cancer pathogenesis', International Papilloma Conference held in Beijing, China; 3-9 November 2007 (Poster)
- 3 'Apoptogenic effects of curcumin on human cervical cancer cell lines', 2nd International Symposium on Translation Research, Natural Products and Cancer, Lonavala; 9-12 December 2007
- 4 A study of HPV and molecular markers in cervical cancer, 34th National Conference of Association of Clinical Biochememistry of India, Delhi; 17-20 December 2007
- 5 'Molecular epidemiology of HPV types prevalent in cervical cancer in India and identification of HPV 16 L1, E6 and E7 variants', International Conference on Emerging and Re-emerging Viral Disease of the Tropics and sub-Tropics, New Delhi; 11-14 December 2007
- 6 'HPV and cervical cancer', IACRCON-2008 and 27th Annual Convention of IACR and International Symposium on Frontiers in Functional Genomics, Ahmedabad; 6- 9 February 2008
- 7 'Environment related hazards and nutrition and remedies, Seminar on Chemistry, Environment and You', Gargi College, Delhi University, 26 September 2007
- 8 'HPV and cervical cancer', Hyderabad University, Hyderabad; 15 October 2007
- 9 'Mechanism of cell death', 13th Refresher Course in Life Sciences, JNU, New Delhi; 15 January 2008
- 10 'Natural products and cancer', Refresher Course, Chemistry Department, Delhi University, Delhi; 7 January 2008.

D. N. Rao

- 1 'T cell anergy and its reversal in leprosy patients', Indian Immunology Conference, NARI, Pune; 20 December 2007
- 2 'Developing peptide based vaccine for plague', SBC meeting , Tirupathi; 26 November 2007

- 3 'Nanoparticles as vaccine delivery', National Biotechnology Symposium, Andhra University, Vishakapatnam; 16 September 2007
- 4 'Immuno-adjuvants and nanoparticles as vaccine delivery,' Indian Society for Parasitology Conference, Andhra University, Vishakapatnam; 20 December 2007

Nibhriti Das

- 1 'Oxidative stress and eNOS gene polymorphism in Essential Hypertension', International Society of Heart Research (ISHR-2008), Chandigarh; 29 February-2 March 2008
- 2 'Effective feedback: Feedback for students and evaluation of teachers by students: Is there a scope?' Workshop on Assessment Strategies in Medical Education. K.L. Wig CMET, AIIMS, New Delhi; 21-23 February 2008
- 3 'Association of paraoxonase enzyme activity and paraoxonase gene polymorphisms with Coronary Artery Disease (CAD) in the Indian subjects', 20th Annual Conference (ISARCON-2007), Tirupati, Andhra Pradesh; 22-23 December 2007
- 4 'Complement and complement regulatory proteins in autoimmune disorders', 34th Association of Clinical Biochemistry of India Conference, New Delhi; 15-20 December 2007
- 5 'Effect of cytokines and immune complex on CR1 expression and its significance in SLE', 34th Annual Conference Indian Immunology Society, Pune; 16-18 December 2007
- 6 'Assessment in theory: Essay, SAQ,' Workshop on Assessment Strategies in Medical Education, K.L. Wig CMET, AIIMS, New Delhi; 1-3 August 2007.

Ranju Ralhan

- 1 'Proteomic biomarkers and drug targets for oral precancer and cancer: Challenges and opportunities,' National Institute of Craniofacial and Dental and Research, National Institutes of Health, Bethesda, Maryland, USA; 20 March 2008
- 2 'Discovery and verification of head-and-neck precancer and cancer biomarkers by differential protein expression analysis using iTRAQ-labeling and multidimensional liquid chromatography and tandem mass spectrometry,' Fifth Early Detection Research Network Scientific Workshop, Poster Highlights Session, Bethesda, Maryland, USA; 17-19 March 2008
- 3 'Proteomics based disease biomarkers and drug targets', AIIMS, New Delhi; 11 January 2008.
- 4 'Clinical cancer proteomics: Discovery of novel drug targets.' Seventh Memorial Lecture in School of Biotechnology, Guru Gobind Singh, Indraprastha University, New Delhi; 12 January 2008
- 5 'Biology of head and neck cancer metastasis', XIV Annual Symposium of Ranbaxy Science Foundation Emerging Frontiers in Management of Advanced Stage Cancers, New Delhi; 14 January 2008
- 6 'Discovery of novel cancer biomarkers and drug targets using proteomics', Institute of Pathology, New Delhi; 16 January 2008
- 7 'Oncoproteomics for discovery of novel anticancer drug targets: The road ahead,' 2 International Conference of Society for Translational Cancer Research, Natural Products and Cancer, Lonavala; 9-12 December 2007
- 8 'Clinical cancer proteomics: Tools to develop novel potential biomarkers and drug targets,' Annual Meeting of Association of Clinical Biochemistry, New Delhi; 19-21 December 2007

S.S Chauhan

‘Transcriptional and translational regulation of expression of human cathepsin L, a lysosomal protease involved in tumor invasion and metastasis,’ 34th Annual Conference Clinical Biochemists of India, New Delhi; 18-20 December 2007

M.R. Rajeswari

‘Structural and functional role of DNA triplex associated with GAA/TTC repeat expansion in neurological disorder, Friedreich’s Ataxia, Vellore Institute of Technology, Vellore, Tamilnadu; 10 September 2007

Kalpana Luthra

As a resource person, gave a talk at the Workshop on Effective Teaching and Learning Strategies, AIIMS, New Delhi; January 2008

Alpana Sharma

‘Oxidant-antioxidant levels in patients with advanced cervical cancer: Correlation with treatment response’, International Conference on Free Radicals Research, Jaipur, Rajasthan; 16 February 2008

RESEARCH

Funded Projects

Completed

1. Developing new generation peptide based vaccine using F1 and V antigen of *Y. pestis*. D.N. Rao. Funded by DST for 3 years (2005-2008). Funds: Rs 24 lakh.
2. Technological feasibility for tetravalent vaccine. D. N. Rao. Funded by DBT for 3 years (2006-2008). Funds: Rs 13 lakh.
3. Functional analysis and clinical significance of Novel molecular targets in cytoskeletal reorganization and locoregional spread of oral cancer using proteomics. Ranju Ralhan. Funded by DBT for 3 years (2005-2008). Funds: Rs 38 lakh.
4. Proteomic analysis of outer membrane of acinetobacter baumannii and its resistant strains. M.R. Rajeswari. Funded by DBT for 3 years (2005-2008). Funds: Rs 17.39 lakh.
5. HIV resistance conferring polymorphisms in DCSIGN in high risk individuals—A pilot study. Kalpana Luthra. Funded by AIIMS for 3 years (2006-2007). Funds: Rs 2.45 lakh.
6. Determination of genetic polymorphism in north Indian population using RAPD-PCR DNA fingerprinting. Kunzang Chosdol. Funded by AIIMS for 2 years (2005-2007). Funds: Rs 1 lakh.
7. Studies on the possible development of hyperlipomia by oral contraceptives: An *in vitro* model. N.C. Chandra. Funded by MOH& FW for 2 years (2003-2007). Funds: Rs 10.27 lakh.

Ongoing

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. Generation and characterization of phage displayed recombinant antibodies to biochemically and immunologically relevant conformations and epitopes of the oncodevelopmental antigen Subrata Sinha. Funded by ICMR for 3 years (2006 –2009) Funds: Rs 13.48 lakh.

3. 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.
4. Funds for improvement of Science and Technology Infrastructure in universities and higher educational institutions (FIST). Subrata Sinha. Funded by DST for 5 years (2005-2010). Funds: Rs 115 lakh.
5. Development of a human papillomavirus vaccine prototype. Neeta Singh. Funded by DBT for 3 years (2005—2008). Funds: Rs 44.30 lakh.
6. Molecular epidemiology of HPV types prevalent in India and identification of HPV-16 L1 & E6 variants in cervical cancer. Neeta Singh. Funded by DBT for 2 years (2005—2008). Funds: Rs 21.50 lakh.
7. Mitochondria in apoptosis and human cancer. Neeta Singh. Funded by ICMR for 3 years (2005- 2008). Funds: Rs 9.43 lakh.
8. 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.
9. 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 (2006-2009): Funds: Rs 15 lakh.
10. Chronic immune activation associated with leprosy: role of hypo-responsiveness and anergy. D. N. Rao. Funded by CSIR for 2 years (2007-2009). Funds: Rs 12 lakh.
11. Immuno capture based diagnostic assay for the detection of *Plasmodium falciparum* HRP-2 and LDH antigens. D. N. Rao. Funded by ICMR for 2 years (2007-2009). Funds: Rs 10 lakh.
12. 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.
13. Developing defensins as a mucosal adjuvant /microbicide with peptide antigens of HIV. D. N. Rao Funded by DBT for 3 years (2006-2009). Funds: Rs 25 lakh.
14. Programme support for production diagnostics and development of prophylactics for neglected infections diseases with filaria as a model. D.N. Rao. Funded by DBT for 2 years (2007-2009). Funds: Rs 13 lakh.
15. Phase III clinical trials with an intranasal injectable male contraceptive RISUG. D.N. Rao. Funded by ICMR for 2 years (2008-2010). Funds: Rs 10 lakh.
16. A study to assess the effects of long term obstruction of epididymis on the morphology, functional and chromatin status of epididymal spermatozoa in men. D.N. Rao. Funded by ICMR for 2 years (2008-2010). Funds: Rs 20 lakh.
17. 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 11.96 lakh.
18. 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.
19. 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 (2007-2009) Funds: Rs 1.50 lakh.

20. Characterization and functional analysis of differentially expressed genes in esophageal cancer. Ranju Ralhan. Funded by DST for 3 year (2005-2008). Funds: Rs 20 lakh.
21. Mechanism (S) of regulation of human dipeptidyl peptidase III expression in tumor cell lines. S.S Chauhan. Funded by Defence Research and Development Organization, Government of India for 3 years (2008-2011). Funds: Rs 50.86 lakh.
22. 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.
23. 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.
24. 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 16.75 lakh.
25. 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.
26. Characterization of HIV-1 subtypes in Indian subjects. Kalpana Luthra. Funded by NIH, USA as a nested part of RO1 project 'Design and use of HIV V3 mimetic immunogens' for 5 years (2005-2010). Funds: Rs 39 lakh.
27. 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.
28. Genetic polymorphism of cholesterol ester transfer protein in hyperlipidemic patients: A case control study. Kalpana Luthra. Funded by ICMR for 3 years (2006-2009). Funds: Rs 13.13 lakh.
29. DC-SIGNR polymorphism and expression in HIV-1 infection. Kalpana Luthra. Funded by ICMR for 3 years (2007-2010). Funds: Rs 19 lakh.
30. Assessment of beta α 2 microglobulin, IL-6 and IL-2R as prognostic factors in Indian patients of multiple myeloma. Alpana Sharma. Funded by AIIMS for 3 years (2005-2008). Funds: Rs 2.75 lakh.
31. Distribution of cancer susceptibility modifying polymorphisms (MDM2 SNP309 and p53 codon72) in Indian population groups. Kunzang Chosdol. Funded by AIIMS for 2 years (2005-2007). Funds: Rs 2 lakh.
32. 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 for 3 years (2005-2008) Funds: Rs 1.0 lakh
33. 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 (2006-2007). Funds: Rs 18.0 lakh.
34. 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 for 3 years (2006-2009). Funds: Rs 22.99 lakh.

35. 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.

Departmental Projects

Ongoing

- 1 Molecular detection and genotyping of HPV in uterine cervix –A population based study
- 2 Molecular insights into the pathogenesis of cervical cancer—An *in vitro* study.
- 3 Effect of curcumin on advanced cervical cancer
- 4 Development of HPV-16 candidate vaccine prototype
- 5 Evaluation of efficacy of curcumin as an adjuvant along with radiotherapy and chemotherapy in advanced cases of cervical carcinoma
- 6 Role of eNOS gene polymorphisms in coronary artery disease in the Indian subjects.
- 7 Paraoxonase and its gene polymorphism in relation to CAD.
- 8 Elucidation of the expression of complement regulatory proteins in relation to the pathophysiology and severity of SLE.
- 9 Role of complement receptors in cell signaling and microbicidal properties of macrophages in relation to mycobacterium tuberculosis.
- 10 Complement Receptor 1 and its gene polymorphism in relation to the pathophysiology and susceptibility to severe malaria

Collaborative Research

Completed

- 1 A study of the expression & targeting of IAPs *in vitro*, and an analysis of their expression in head and neck cancer.
- 2 Study of the function of mitochondria in apoptosis and human disease
- 3 Analysis of apoptotic signalling mechanism induced by Benzamide Riboside and ATP analogs
- 4 Evaluation of molecular markers and anticancer agents in lung cancer
- 5 HPV and the genetics of cervical cancer
- 6 Molecular and biological factors in the pathogenesis of ovarian cancer
- 7 Expression of leukocyte Complement Receptor 1, its modulation and significance in the pathophysiology of systemic lupus erythematosus (SLE)
- 8 A comparative evaluation of levels of interleukin-1- α in GCF during canine distraction and canine refraction (with Department of Dental Surgery).
9. Detection of apoptosis in human periodontal ligament during orthodontic tooth movement. (with Centre for Dental Education and Research).

Ongoing

- 1 Elucidation of the role of the hypermethylation in cancer (HIC-1) gene in glial tumorigenesis (with Departments of Pathology and Neurosurgery).
- 2 Role of 1p and 19q loss of heterozygosity in human gliomas (with Departments of Pathology and Neurosurgery).

- 3 DNA fingerprinting methods for study of genetic alterations in gliomas (with Departments of Pathology and Neurosurgery).
- 4 MRI studies on murine liver and skin tumors (with Department of NMR)
- 5 Histopathological investigations on murine skin and liver tumors (with Department of Histopathology).
- 6 Isolation and analysis of the outer membrane proteins, beta lactamases of *Acinetobacter Baumanii* (with Department of Microbiology).
- 7 Structural investigations on the native and mutated outer membrane protein from *Acinetobacter Baumanii* (with Department of Bioinformatics, JNU).
- 8 Levels of interleukin-1- α in GCF during retention after successful orthodontic treatment (with Department of Dental Surgery).
- 9 Neurological disorders Freidreich's ataxia and spiniocerebellar ataxia associated with DNA trinucleotide repeats: identification and development of protein biomarkers and Circulating DNA for clinical diagnosis (with Department of Neurology).
- 10 Utility of antigen detection from the epidermis of Indian patients in pemphigus vulgaris. (with Department of Dermatology and Venereology)
- 11 A prospective study of oxidative stress markers and antioxidant levels in patients with pre-eclampsia (with Department of Obstetrics and Gynecology).
- 12 A pilot study to evaluate the inter-relationship of insulin, insulin receptor and LDL receptor in patients of Type 1 diabetes mellitus (with Departments of Endocrinology & Metabolism and Cardiology).
- 13 A case control pilot study on LDL receptor expression and serum lipid profile in cancer patients (with Departments of Obstetrics & Gynecology and Surgery).
- 14 Genetic diversity of *Entamoeba histolytica* isolates and identification of genotype-clinical phenotype correlations (with Department of Gastroenterology).
- 15 T-cell response in Parthenium induced contact dermatitis (with Department of Dematology & Venereology)
- 16 Immonohistochemical and molecular studies on Wnt/ β -catennin Signaling pathway in sebaceous cell carcinoma of the eye lid. (with Dr R.P. Centre for Ophthalmic Sciences).
- 17 Association of COMT catechol-O-methyltransferase gene polymorphism G158A in obsessive compulsive disorder in Indian subjects. (with Department of Psychiatry).
18. Development of HPV candidate vaccine/s; preparation of clinical trial site/ cohort for vaccine testing. (with Department of Gynaecology & Obstetrics).
19. Effect of curcumin on advanced human cervical carcinomas. (with Department of Gynaecology & Obstetrics).
20. Culture of limbal stem cells for ocular surface reconstruction in stem cell deficiency disorders. (with Dr R.P. Centre for Ophthalmic Sciences).
21. Detection of apoptosis in human periodontal ligament during orthodontic tooth movement. (with Centre for Dental Education and Research).
22. Detection of HPV in malignant ocular lesions. (with Department of Gynaecology & Obstetrics)..
23. Programme support for production of diagnostics and development of prophylactics for neglected infectious disease with filariasis as a model. (with CBT, Anna University).
24. PHASE II/ III randomized placebo controlled clinical trial of curcumin in respectable stage III and IV squamous head and neck cancers (oral cancers). (with Dr BRA IRCH).

25. Investigations of genetic basis, and gene-lifestyle interactions in generalized and regional obesity, insulin resistance and diabetes in Asian Indians. (with Department of Medicine).
26. Molecular analysis of gene markers in urine cytology and tissue histology specimens of Indian patients with superficial and muscle invasive TCC of urinary bladder. (with Department of Urology).

PUBLICATIONS

Journals

- 1 Alam MA, Husain SA, Narang R, Chauhan SS, Kabra M, Vasisht S. Association of polymorphism in the thermolabile 5, 10-methylene tetrahydrofolate reductase gene and hyperhomocysteinemia with coronary artery disease. *Mol Cell Biochem* 2008; 310: 111-17,
- 2 Bagadi R, Kaur J, Ralhan R. Establishment and characterisation of two novel breast cancer cell lines. *Cell Biol Int* 2008; 32:55-65.
- 3 Chattree V, Khanna N Bist V, Rao DN. Liposomal delivery of M. leprae antigens with murabutide and Trat peptide inhibits Fas-mediated apoptosis of PBMC derived from leprosy patients. *Indian J Biochem Biophysics* 2007; 44: 386-93.
- 4 Chattree V, Khanna N Bist, V, Rao DN. Inhibition of Fas-mediated apoptosis of T cells derived from leprosy patients and the activation of natural killer T cells and CD40-CD40L interaction using M. leprae antigen with murabutide and T cell peptide of Trat protein. *Mol Cellular Biochem* 2008; 309: 87-97.
- 5 Gandhi M, Tiwari SC, Kumar A, Dinda AK, Das N. Plasma C3d: Potential marker for disease activity in Glomerulonephritis patients. The Icfai. *J Biotechnol* 2007; 1: 7-14.
- 6 Goulet B, Sansregret L, Leduy L, Bogyo M, Weber E, Chauhan SS, Nepveu A. Increased expression and activity of nuclear cathepsin L in cancer cells suggests a novel mechanism of cell transformation. *Mol Cancer Res* 2007; 5: 899-907.
- 7 Kar R, Sen S, Singh A, Sharma H, Kumar S, Duttagupta S, Singh N. Role of apoptotic regulators in human epithelial ovarian cancer. *Cancer Biol Ther* 2007; 6: 1101-5.
- 8 Karthikeyan G, Baalasubramanian S, Seth S, Das N. Low levels of plasma soluble complement receptor type 1 in patients receiving thrombolytic therapy for acute myocardial infarction. *J Thromb Thrombolysis* 2007; 23: 115-20.
- 9 Keethivasan S, Keethivasan G, Mittal S, Chauhan SS. Transcriptional upregulation of human cathepsin L by VEGF in glioblastoma cells. *Gene* 2007; 399: 129-36.
- 10 Khan AA, Babu JP, Gupta G, Rao DN. Identifying B & T cell epitopes and studying humoral mucosal and cellular responses to nV antigen of *Y. pestis*. *Vaccine* 2008; 26: 316-32.
- 11 Khandpur S, Sharma VK, Sharma A, Pathria G, Satyam A. Comparison of desmoglein ELISA test and immunoblot assay in the diagnosis of Pemphigus vulgaris in Indian patients. *J Am Acad Dermatol* 2007; 56: 115.
- 12 Kuhar M, Imran S, Singh N. Celecoxib enhances the chemotherapeutic response of cisplatin and TNF-alpha in SiHa cells through ROS-mediated mitochondrial pathway. *Int J Biomed Sci* 2007; 3: 176-84.
- 13 Kuhar M, Imran S, Singh N. Curcumin and quercitin enhance cisplatin mediated apoptosis in human laryngeal carcinoma Hep2 cells through the mitochondrial pathway. *J Cancer Molecules* 2007; 3: 121-8.

- 14 Matta A, Bahadur S, Duggal R, Gupta SD, Ralhan R. Over-expression of 14-3-3zeta is an early event in oral cancer. *BMC Cancer* 2007; 2:169.
- 15 Meena K, Misra A, Pandey RM, Luthra K. CETP Taq1B polymorphisms and CETP activity in normolipidemic healthy northern Indians diabetes and metabolic syndrome. *J Cancer Molecules* 2007; 3: 121-8.
- 16 Miller M, Rhyne J, Chen H, Beach V, Ericson R, Luthra K, Dwivedi M, Misra A. APOC3 promoter polymorphisms C-482T and T-455C are associated with the metabolic syndrome. *Arch Med Res* 2007; 38: 444-51.
- 17 Mirza S, Sharma G, Prasad CP, Parshad R, Srivastava A, Gupta SD, Ralhan R. Promoter hypermethylation of TMS1, BRCA1, ERalpha and PRB in serum and tumor DNA of invasive ductal breast carcinoma patients. *Life Sci* 2007; 81:280-7.
- 18 Mishra YK, Mohopatra S, Avasthi DK, Kabiraj D, Lala MP, Pivin JC, Sharma H, Kar R, Singh N. Gold and silica nanocomposites for the detection of ovarian cancer cells: A preliminary study. *Nanotechnology* 2007;18:345606-11. doi: 10/088/0957-4484/18/34/345606.
- 19 Misra A, Alappan NK, Vikram NK, Goel K, Gupta N, Mittal K, Bhatt S, Luthra K. Effect of supervised progressive resistance exercise training protocol on insulin sensitivity, glycemia, lipids and body composition in Asian Indians with type 2 diabetes. *Diabetes Care* 2008; March 17 [Epub ahead of print].
- 20 Misra A, Chattopadhyay P, Chosdol K, Sarkar C, Mahapatra AK, Sinha S. Clonal mutations in primary human glial tumors: Evidence in support of the mutator hypothesis. *BMC Cancer* 2007; 7:190.
- 21 Prasad CP, Gupta SD, Rath G, Ralhan R. Wnt signaling pathway in invasive ductal carcinoma of the breast: Relationship between beta-catenin, disheveled and cyclin D1 expression. *Oncology* 2007; 73:112-17.
- 22 Ralhan R, Desouza LV, Matta A, Chandra Tripathi S, Ghanny S, Datta Gupta S, *et al.*, Discovery and verification of head-and-neck cancer biomarkers by differential protein expression analysis using iTRAQ-labeling, multidimensional liquid chromatography, and tandem mass spectrometry. *Mol Cell Proteomics* 2008; Mar 13 [Epub ahead of print].
- 23 Ralhan R, Kaur J. Alkylating agents and cancer therapy. *Expert Opin Ther Patents* 2007; 17:1061-75.
- 24 Ralhan R, Pandey M, Aggarwal BB. NF-kappa B: A potential target for cancer chemoprevention? *Frontiers in Biosciences* 2007 (in press).
- 25 Ramakrishnan G, Rana A, Das C, Chandra NC. Study of low-density lipoprotein receptor regulation by oral (steroid) contraceptives: Desogestrel, levonorgestrel and ethinyl estradiol in JEG-3 cell line and placental tissue. *Contraception* 2007; 76: 297-305,
- 26 Sawhney M, Rohatgi N, Kaur J, Gupta SD, Deo SV, Shukla NK, Ralhan R. MGMT expression in oral precancerous and cancerous lesions: correlation with progression, nodal metastasis and poor prognosis. *Oral Oncol* 2007; 43:515-22.
- 27 Sen S, Ateeq B, Sharma H, Datta P, Gupta SD, Bal S, Kumar A, Singh N. Molecular profiling of genes in squamous cell lung carcinoma in Asian Indians. *Life Sciences* 2008; 82: 772-9.
- 28 Sen S, Singh A, Pal A, Sharma C, Kar R, Singh N. Anticancer gene expression profile of curcumin identifies new therapeutic targets in squamous cell lung carcinoma *in vitro*. *J Clin Oncol* 2007; 25 (Suppl); (18S): 18203.
- 29 Sethuraman G, Sugandhan S, Sharma G, Chandra NC, Chandramohan, K Aggarwal K, *et al.*

- Familial homozygous hypercholesterolemia: report of two cases and review of literature. *Pediatr Dermatol* 2007; 24: 230-4.
- 30 Sharma A, Rajappa M, Saxena A, Sharma M. Cytokine profile in Indian females with cervical intraepithelial neoplasia and cancer cervix. *Int J Gynecol Cancer* 2007; 17: 879-85.
- 31 Sharma A, Satyam A, Sharma JB. Leptin, IL-10 and inflammatory markers (TNF-a, IL-6 and IL-8) in pre-eclamptic, normotensive pregnant and healthy non-pregnant women. *Am J Reprod Immunol* 2007; 58:21-30.
- 32 Sharma A, Rajappa M, Saxena A, Sharma M. Telomerase activity as tumour marker in detection of cancer in Indian women with cervical intraepithelial neoplasia and cervical cancer. *Mol Diagn Ther* 2007; 11:193-201.
- 33 Sharma H, Datta P, Singh A, Sen S, Bhardwaj NK, Kochupillai V, Singh N. Gene expression profiling in practitioners of Sudhershana Kriya. *J Psychosom Res* 2008; 64: 213-18.
- 34 Singh M, Sharma H, Singh N. Hydrogen peroxide induces apoptosis in HeLa cells through mitochondrial pathway. *Mitochondrion* 2007; 7: 367-73.
- 35 Singh M, Singh N. Induction of apoptosis by hydrogen peroxide in HPV-16 positive cancer cell lines—Involvement of mitochondrial pathway. *Mol Cell Biochem* 2008; 310: 57-65.
- 36 Singh N. Apoptosis in health and disease modulation of apoptosis for therapy: An overview. *Indian J Clin Biochem* 2007; 22: 6-16.
- 37 Srivastava K, Narang R, Das S, Sreenivas V, Das N. Association of eNOS Glu298Asp Gene polymorphism with essential hypertension in Asian Indians. *Clin Chim Acta* 2008; 387: 80-3.
- 38 Swarup V, Rajeswari MR. Circulating (cell-free) nucleic acids—A promising, non-invasive tool for early detection of several human diseases. *FEBS Letters* 2007; 581: 795-99.

Abstracts

- 39 Singh N, Datta P, Jain SK, Bhatla N, Datta Gupta S, Singh A. A study of HPV and molecular markers in cervical cancer. *Indian J Clin Biochem* 2007; 22 (Suppl): 91.
- 40 Singh M, Singh N. Induction of apoptosis in cervical cancer HeLa cells by curcumin, involvement of mitochondrial pathway. *Indian J Clin Biochem* 2007; 22 (Suppl):307.
- 41 Sen S, Sharma C, Pal A Kar R, Singh N. Multiple anticancer targets of chemopreventive curcumin in squamous cell lung carcinoma in vitro. *Eur J Cancer* 2008; 6 (Suppl): 53.
- 42 Satyam A, Sharma M, Sharma A. Circulating vascular endothelial growth factor levels as tumor markers in Indian females with advanced cervical carcinoma undergoing neoadjuvant chemoradiation. *Indian J Clin Biochem* 2007; 22 (Suppl) : 322.
- 43 Tripathi M, Satyam A, Akhtar N, Kumar L, Sharma A. Enzymatic and non-enzymatic antioxidant status in Indian patients of multiple myeloma. *Indian J Clin Biochem* 2007;22 (Suppl):325.

PATIENT CARE

Marker tests for pregnancy and prostate cancer:

PSA: 275 samples

Âeta hCG: 255 samples

AWARDS AND HONOURS

Dr Subrata Sinha elected as Fellow of the National Academy of Medical Sciences

Dr Neeta Singh IPVS Travel award by International Papillomavirus Society

Dr. D. N. Rao ICMR prize for Biomedical Research for the year 2005. Delivered key note address during Bioinformatics Conference, Biotechnology Department, AMU, Aligarh on March 16, 2008.

Dr Nibhriti Das Life Membership of National Environment Science Academy (NESA), Indian Immunology Society (IIS) and affiliated International Immunology Societies (IUIS, AIS, FIMSA).
Dr Ranju Ralhan Ranbaxy Visiting Professorship Awarded by Ranbaxy Science Foundation, 2008, UICC NCI- Novartis Translational Cancer Research Fellowship (TCRF) 2007

SIGNIFICANT EVENTS

Dr. Subrata Sinha Member of Project Review Committee (PRC), Chronic Diseases, Department of Biotechnology (DBT), 2005–07; 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, Institutional Biosafety Committee and Ethical Committee, National Institute of Immunology, (2000 -till date); Institutional Ethics Committee, JNU, 2001-till date; Academic Committee, JNU-Center for Cellular and Molecular Biology, 2006-07; Sectional Committee, Medical Sciences, INSA; Committee for Biochemistry Curriculum, MCI

Dr Neeta Singh Member, Scientific Advisory Committee of DRDO; Participated at the International Papilloma Conference at Beijing, China; 3-9 November 2007; Member, Project Review Committee of DBT, DST, ICMR; Reviewer for *Indian J Med Res*, *Intl J Biochem and Cell Biol*; Member, Indian Women Scientists Association, Indian Society of Lung Cancer and Indian Society for Free Radicals Research in India; 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; Chaired a session at Molecular Medicine Update , New Delhi; 28-29 March 2008

Dr D.N. Rao Organized Satellite Meeting of Free Radicals Research at AIIMS, 11-12 February 2008; Chairman and Member of Technical Advisory Committee of ICMR, Core Selection Committee of ICMR; Member of Board of studies of Jamia Hamdard and Aligarh Muslim University; Member of the Ethical Committee for small animals and Officer-in-Charge of Central Animal Facility, AIIMS Project review Committee of DBT, DST, CSIR, ICMR; Reviewer for *Vaccine*, *Mol Cell Biochem*, *Oncology* and *Indian J Biochem and Biophysics*

Dr Nibhriti Das Member of the International Complement Society; Professional Member American Heart Association; Member of the Executive Committee of NESA and ISAR; Life member of Society of Cell Biology, Association of Clinical Biochemists of India & Indian Society of Atherosclerosis Research (ISAR).

Dr Ranju Ralhan Councillor, International Academy of Oral Oncology, 2007; Editorial Board Member of *Carcinogenesis*, *Oral Oncology*, *International Journal of Cancer*

Dr M R Rajeswari Member of the Project Review Committee (Neurochemistry), ICMR; Member of the selection committee at National Accreditation Board for Testing and Calibration Laboratories, DST, New Delhi; Reviewer for *J Mol Structure*, *Indian J Biochem and Biophys*

Dr Kalpana Luthra Joint Organizing Secretary of Satellite Meeting for Society for Free Radical Research-India (SFRR), AIIMS, New Delhi; February 2008

Dr Alpna Sharma Organizing Committee Member of Satellite Meeting for Society for Free Radical Research-India (SFRR), AIIMS, New Delhi; February 2008; Reviewer for *Int J Gynecol Cancer*, *Eu r J Reprod Immunol*, *Am J Reprod Immunol*, *Indian J Clin Biochem*

Dr N.C. Chandra Treasurer in the Satellite Meeting for Society for Free Radical Research-India (SFRR), February 2008

9.4 Biomedical Engineering

Professor and Head

Sneh Anand

Professors

Dinesh Mohan

A.R. Ray

Harpal Singh

Associate Professor

Veena Koul

Principal Scientific Officer-I

Nivendita K. Gohil

Senior Design Engineer

S.M.K. Rahman

EDUCATION

National and International Conferences/Seminars/Workshops

Professor D. Mohan

- Third International Road Safety Conference, Perth, Australia; 28-30 November 2007.
- Seventh Eastern Asia Society for Transportation Studies International Conference, Dalian, China; 24-28 September 2007.

Professor A.R. Ray

- Conference on medical device, Ahmedabad; 25 February 2008.
- Indo-US Conference and Workshop, IIT, Chennai; 11-13 December 2007.

Professor Veena Koul

- Second International Conference on Translational Research, Pune; 9-12 December 2007.

RESEARCH

Sponsored research and consultancy projects

- 1 Development of low cost rapid biosensor for identification of pathogenic bacteria. Harpal Singh. Funded by DBT (till 2010). Funds: Rs 36 lakh.
- 2 Reversibility of inject able contraceptive for male technology development. J C Bhardwaj. Funded by Ministry of Health (till 2009). Funds: Rs 6.27 lakh.
- 3 Analysis of autonomic nervous system correlates and health benefits of rhythmic breathing techniques. Sneh Anand. Funded by AYUSH, MHFW (till 2009). Funds: Rs 29.63 lakh.
- 4 Development of nanoparticulate system for macrophage targeting. Co-PI: Veena Koul. Funded by DBT (till 2009), Funds: Rs 30 lakh.
- 5 Process optimization. Co-PI: Veena Koul. Funded by DBT (till 2008). Funds: Rs 17.17 lakh.
- 6 Pre-clinical trials of a portable electrically enhanced transdermal drug delivery system (RP 01890). Sneh Anand. Funded by DST (till 2008). Funds: Rs 18.18 lakh.
- 7 To develop an external counter pulsation device (RP01913). Sneh Anand. Funded by DBT (till 2008). Funds: Rs 57.60 lakh.

- 8 Studies of the fallopian tube function with luminal implants. J. C. Bhardwaj. Funded by M/S. Marksans Ltd. (till 2007). Funds: Rs 5.17 lakh.
- 9 Design and development of technological interfaces to rehabilitate spinal injury patients. Co-PI: Sneh Anand. Funded by Ministry of Social Justice & Empowerment (till 2007). Funds: Rs 26.33 lakh.
- 10 Design and development of BCI using peripheral blood flow. Co-PI: Sneh Anand . MHRD (till 2007). Funds: Rs 12 lakh.
- 11 MEMS based micro-cantilevers for chemical and biochemical sensors. Co-PI: Nivedita K. Gohil. Funded by DST (till 2007). Funds: Rs 24 lakh.
- 12 Development of biocompatible adhesive (RPO1734). Alok R. Ray. Funded by DST (till 2007). Rs 18.825 lakh.
- 13 Development of blood compatible polymeric biomaterials for medical devices (RPO1621). Alok R. Ray. Funded by MHRD (till 2007). Funded by Rs 12 lakh.
- 14 Development of artificial bone material (RPO1721). Alok R. Ray. Funded by ICMR (till 2008). Funds: Rs 87.43 lakh.
- 15 Sustainable urban transport in less motorised countries: Research and training (RPO1507). Dinesh Mohan. Funded by The Volvo Research Foundations (till 2008). Funds: Rs 64.56 lakh.
- 16 Smart macromolecular therapeutics design synthesis and evaluation of tailor made anti-cancer drug conjugates and local hypothermia for selective lysis of cancer cell (RPO 1713). Veena Koul . Funded by Life Science Research Board, DRDO, GOI (till 2007). Funds: Rs 17.62 lakh.
- 17 Development of polymer matrices from renewable resources for enzyme Linked immunosorbent assay (RPO 1653). Harpal Singh. Funded by DST. (till 2007). Funds: Rs 26 lakh

Technology transfer and Patents

Know-how developed/transferred

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

Patent

1. A novel contact killing antimicrobial quaternary amine acrylate copolymer and their applications thereof. Harpal Singh (Supriya Singh) DEL/2525
2. Modulated DC iontophoretic device. Sneh Anand, Veena Koul (Rachna Rastogi) 710/DEL/2006
3. Nanoporous polymeric micro particles for oral insulin delivery. Harpal Singh (Amit Tyagi). Patent Applied 16 June 2005.
4. Electro-oculogram based multi-mode controller. Sneh Anand, Jayashree Santhosh. Patent Applied 2 July 2007.

PUBLICATIONS

Journals/Conferences/Seminars

- 1 Kumar K, Verma N, Kaur G, Anand S. *E. coli* K-12 asparaginase-based asparagine biosensor for leukemia. *Artif Cells Blood Substit Immobil Biotechnol* 2007; 35:449-56.
- 2 Kumar K, Verma N, Kaur G, Anand S. Enhanced activity of L-asparaginase produced by genetically engineered recombinant *E. coli* cells. *Res J Biotech* 2007; 2:1

- 3 Kumar K, Verma N, Kaur G, Anand S. Asparagine biosensor for leudemia based on L-asparaginase obtained from *Erwinia Carotovora*. *J Life Sci* 2007; 4: 1-5.
- 4 Kumar K, Verma N, Kaur G, Anand S. L-asparaginase: A promising chemotherapeutic agent. *Crit Rev Biotech* 2007; 27:45-62.
- 5 Selvaraj N, Jaryal A, Santhosh J, Deepak KK, Anand S. Assessment of heart rate variability derived from finger-tip photoplethysmography as compared to electrocardiography. *J Med Eng Technol* 2008;32:479-84
- 6 Bhaskar M, Murari, Anand S, Gohil NK, Chaudhury NK. Fluorescence spectroscopic study of dip coated sol-gel thin film internal environment using fluorescent probes Hoechst 33258 and Pyranine. *J Sol-Gel Sci Tech* 2007; 41:147–55.
- 7 Prasad R, Koul V, Anand S, Khar RK. Effect of DC/mDC iontophoresis and terpenes on transdermal permeation of methotrexate: *In vitro* study. *Int J Pharm* 2007; 333:70-8.
- 8 Gajre SS, Singh U, Saxena RK, Anand S. Electrical impedance signal analysis in assessing the possibility of noninvasive diagnosis of knee osteoarthritis. *J Med Engg Techol* 2007; 31:288-99.
- 9 Kumar A, Anand S, Chari P, Yaddanapudi LN, Srivastava A. A set of EEG parameters to predict clinically anesthetized state in humans for halothane anaesthesia. *Med Engg Technol* 2007; 31: 46-53.
- 10 Singh D, Choudhary V, Koul V, Kuckling D, Dinda AK, Adler HJP. Site specific targeting for treatment of cancer using temperature sensitive nanoparticles. *PMSE preprints* 2007; 96: 356-7.
- 11 Singh D, Choudhary V, Koul V. Radiation synthesis of interpenetrating polymer networks based on N-vinyl pyrrolidone–acrylic acid copolymer and gelatin I. Swelling, morphology and thermal characterization for biomedical applications. *J Appl Polym Sci* 2007; 104: 1456-1463.
- 12 Prasad R, Koul V, Anand S, Khar RK. Effect of DC/mDC iontophoresis on transdermal permeation of methotrexate: *In vitro* study. *Int J Pharm* 2007; 333: 70-8.
- 13 Punyani S, Deb S, Singh H. Contact killing antimicrobial acrylic bone cements: Preparation and characterization. *J Biomaterial Sci Polymer Ed* 2007; 18: 131-45.
- 14 Punyani S, Narayana P, Vasudevan P, Singh H. Sustained release of iodine from a polymeric hydrogel device for water disinfection. *J Appl Polymer Sci* 2007; 103: 3340.
- 15 Das A, Ray AR. Synthesis and characterization of poly (acrylic acid-co-N-[3-(dimethylamino) propyl]-methacrylamide) hydrogel membranes for biomedical applications. *J Appl Polym Sci* 2008; 108: 1273–80.
- 16 Verma V, Verma P, Ray P, Ray AR. Preparation of scaffolds from human hair proteins for tissue-engineering applications. *Biomed Mater* 2008;3:25007. Epub 2008 Apr 15.
- 17 Dubey KK, Ray AR, Behera BK. Production of demethylated colchicine through microbial transformation and scale-up process development. *Process Biochemistry* 2008;43: 251-7.
- 18 Gupta B, Saxena S, Ray A. Plasma induced graft polymerization of acrylic acid onto polypropylene monofilament. *J Appl Polym Sci* 2007;107: 324-30.
- 19 Verma P, Verma V, Ray P, Ray AR. Formation and characterization of three dimensional human hepatocyte cell line spheroids on chitosan matrix for in vitro tissue engineering applications. *In Vitro Cell Dev Biol Anim* 2007;43:328-37. Epub 2007 Oct 20.
- 20 Mukherjee M, Ray AR. Biomimetic oxidation of l-arginine with hydrogen peroxide catalyzed by the resin-supported iron (III) porphyrin. *J Mol Cat A: Chemical* 2007; 266: 207-14.

21 Purnendu P, Ray AR, Ramanan A. Metathetic reaction in reverse micelles: Synthesis of nanostructured alkaline-earth metal phosphates. *J Am Ceramic Soc* 2007;90:1237-42.

AWARDS AND HONOURS

Professor Sneh Anand Shiksha Rattan Puraskar for excellence in teaching.

Professor A. R. Ray Tata Innovation Fellowship

9.5 Biophysics

Associate Professor and Head

Krishna Dalal

Associate Professors

A. Srinivasan

Punit Kaur

Assistant Professors

Savita Yadav

Sujata Sharma

Scientists

Sharmistha Dey

S. Baskar Singh

Asha Bhushan

EDUCATION

The faculty of the department participated in and delivered 35 lectures in continuing medical education programmes and symposia, national and international conferences during the year.

RESEARCH

Funded Projects

Completed

1. Proteomics of human body fluids: Structural characterization of proteins and target identification for drug discovery. A. Srinivasan. Funded by DBT (2005-2008).
2. Amino acid sequence and three-dimensional structure of scorpion phospholipase A2. A. Srinivasan. Funded by DST (2006-2008).
3. Structure determination and analysis of novel integrin-disintegrin complex and disintegrin, Punit Kaur. Funded by CSIR for 3 years (2005-2007). Funds: Rs 7.5 lakh.
3. Search of a magic drug: Isolation, purification, crystallization and three-dimensional structure determination of the functional C-lobe and antimicrobial peptides of lactoferrin and their applications in antimicrobial drug discovery. Sujata Sharma. Funded by DST (2005-2008).
4. Structure based rational drug design against inflammation, arthritis and rheumatism using phospholipase A2, cyclooxygenase-2 and lipoxygenase as target molecules. Sujata Sharma. Funded by DST (2005-2008).

Ongoing

- 1 A randomized clinical trial of reflexology therapy and usual drug treatment in the management of intractable epilepsy. Krishna Dalal. Funded by CCRYN, MHFW for 3 years (2005-2008). Funds: Rs 31.04 lakh.
- 2 Randomized clinical trial on the effect of patients suffering from diabetic neuropathy: Case studies. Krishna Dalal. Funded by ICMR for 3 years (2006-2009). Funds: Rs 20 lakh.
- 3 DBT Infrastructure Facility for Clinical Proteomics at AIIMS. A. Srinivasan. Funded by DBT for 3 years (2004-2009). Funds: Rs 449.96 lakh.
- 4 Isolation, purification and structural and functional characterization of new proteins from amniotic fluids and seminal plasma. Savita Yadav. Funded by DST for 3 years (2008-2011). Funds: Rs 22.8 lakh.

- 5 Structural studies of signaling proteins expressed during involution/breast cancer and ligand design. Sujata Sharma. Funded by DBT (2006-2009).
- 6 Isolation, purification, crystallization and three-dimensional structure determination of the novel signaling protein SPX-40 from mammary gland secretion during involution. Sujata Sharma. Funded by DST for 3 years (2006-2009). Funds: Rs 16 lakh.
- 7 Design, synthesis and evaluation of inhibitors of lipooxygenase as anti-inflammatory agents. Sharmistha Dey. Funded by DST for 3 years (2005-2009). Funds: Rs 20 lakh.
- 8 Structure based rational drug design: Development of specific anti-inflammatory agents using Phospholipase A2 and Cyclooxygenase-2 as target enzymes. Sharmistha Dey. Funded by CSIR for 3 years (2005-2009). Funds: Rs 15.71 lakh.

Departmental Projects

1. Structural and stability studies on antimicrobial lactoperoxidase.
2. Purification, crystallization and structure determination of prostate specific antigen from human seminal plasma.
3. Three-dimensional structure determination of cobra venom factor and its three independent subunits from the venom of Indian cobra by X-ray diffraction method and its structural and functional relationship with complement protein C3.
4. Structure–Function relationship of Alzheimer related proteins.
5. Structure–Function relationship of type –II diabetic related proteins.
6. Structure–Function relationship of osteoarthritis related proteins.

Collaborative Projects

1. Functional analysis and clinical significance of novel molecular targets in cytoskeleton reorganization and locoregional spread of oral cancer using proteomics.
2. Identifying proteomic mass fingerprints predictive of disease flares in systemic lupus erythematosus.
3. Proteomics of hepatitis virus infections.
4. Proteomics of human body fluids and tissues: Structural characterization of proteins and target identification for new drug discovery.
5. Proteomic mass fingerprinting of patients with gall stone disease and gall bladder cancer: Putative pathogenic links.
6. Proteomics in muscular dystrophies.

PUBLICATIONS

Journals

- 1 Chatterjee U, Bose PP, Dey S, Singh TP, Chatterjee BP. Antiproliferative effect of T/Tn specific Artocarpus lakoocha agglutinin (ALA) on human leukemic cells (Jurkat, U937, K562) and their imaging by QD-ALA nanoconjugate. *Glycoconj J* 2008; 25:741-52.
- 2 Das U, Hariprasad G, Pasha S, Mann A, Ganguli M, Sharma S, Kaur P, *et al.* Interface peptide of Alzheimer’s amyloid beta: Application in purification. *Biochem Biophys Res Commun* 2007; 362: 538-42.
- 3 Das U, Hariprasad G, Ethayathulla AS, Manral P, Das TK, Pasha S, *et al.* Inhibition of protein aggregation: Supramolecular assemblies of arginine hold the key. *PLoS ONE* 2007; 2: e1176.

- 4 Ethayathulla AS, Srivastava DB, Kumar J, Saravanan K, Bilgrami S, Sharma S, *et al.* Structure of the buffalo secretory signalling glycoprotein at 2.8 Å resolution. *Acta Crystallogr Sect F Struct Biol Cryst Commun* 2007; 63: 258-65
- 5 Hassan MI, Waheed A, Yadav S, Singh TP, Ahmad F. Zinc alpha2 glycoprotein: A multi-disciplinary protein. *Mol Cancer Res* 2008; 6: 1-15.
- 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.
- 7 Hassan MI, Kumar V, Singh TP, Yadav S. Proteomic analysis of human amniotic fluid from Rh(-) pregnancy. *Prenat Diagn* 2008; 28: 102-8.
- 8 Hassan MI, Kumar V, Somvanshi RK, Dey S, Singh TP, Yadav S. Structure-guided design of peptidic ligand for human prostate specific antigen. *J Pept Sci* 2007; 13: 849-55.
- 9 Hassan MI, Kumar V, Singh TP, Yadav S. Structural model of human PSA: A target for prostate cancer therapy. *Chem Biol Drug Des* 2007; 70: 261-7.
- 10 Kumar V, Hassan MI, Kashav T, Singh TP, Yadav S. Heparin-binding proteins of human seminal plasma: Purification and characterization. *Mol Reprod Dev* 2008; 75:1767-74.
- 11 Kumar J, Ethayathulla AS, Srivastava DB, Singh N, Sharma S, Kaur P, Srinivasan A, *et al.* Carbohydrate-binding properties of goat secretory glycoprotein (SPG-40) and its functional implications: structures of the native glycoprotein and its four complexes with chitin-like oligosaccharides. *Acta Crystallogr D Biol Crystallogr* 2007; 63: 437-46.
- 12 Prem Kumar P, Singh N, Sharma S, Kaur P, Srinivasan, Singh TP. Crystal structures of complexes of phospholipase A₂ with natural and synthetic inhibitors. *FASEB J* 2007;21: 649-6.
- 13 Saravanan K, Hariprasad G, Jitesh O, Das U, Dey S, Sharma S, *et al.* Endothelin and its receptor interactions: Role of extracellular receptor domain and length of peptide ligands. *Protein Pept Lett* 2007; 14: 779-83.
- 14 Sherawat M, Kaur P, Perbandt M, Betzel C, Slusarchyk WA, Bisacchi GS, *et al.* Structure of the complex of trypsin with a highly potent synthetic inhibitor at 0.97 Å resolution. *Acta Crystallogr D Biol Crystallogr* 2007; 63: 500-7.
- 15 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.
- 16 Singh N, Somvanshi RK, Sharma S, Dey S, Kaur P, Singh TP. Structural elements of ligand recognition site in secretory phospho-lipase A2 and structure-based design of specific inhibitors. *Curr Top Med Chem* 2007; 7: 757-64.
- 17 Somvanshi RK, Kumar A, Kant S, Gupta D, Singh SB, Das U, *et al.* Surface plasmon resonance studies and biochemical evaluation of a potent peptide inhibitor against cyclooxygenase-2 as an anti-inflammatory agent. *Biochem Biophys Res Commun* 2007; 361: 37-42.
- 18 Srivastava DB, Ethayathulla AS, Kumar J, Somvanshi RK, Sharma S, Dey S, Singh TP. Carbohydrate binding properties and carbohydrate induced conformational switch in sheep secretory glycoprotein (SPS-40): Crystal structures of four complexes of SPS-40 with chitin-like oligosaccharides. *J Struct Biol* 2007; 158: 255-66.

PATIENT CARE

The following services are provided by the department:

1. Characterization and analysis of kidney/gall stones using X-ray diffraction techniques. More than 61 stones have been analyzed by this technique in the current year
2. Protein N-terminal sequencing
3. Characterization of biomolecules using MALDI-TOF
4. Receptor-ligand binding studies – BIA-core instrument
5. Peptide synthesis
6. X-ray intensity data collection for small molecules
7. X-ray intensity data collection for macromolecules

AWARDS/HONOURS

Dr Punit Kaur has been nominated as a member of the National Academy of Medical Sciences, India.

Dr Sujata Sharma has been awarded the National Women Bioscientists Award for 2007 which was given by Her Excellency, The President. She has also been awarded the ‘Women Scientist of the year 2006’ of the Biotech Research Society of India (BRSI).

Dr S. Baskar Singh has been awarded INSA fellowship for 3 months to undertake advanced research work in the area of Molecular Biology in Germany, under International Collaboration/Bilateral Exchange programme during 2008-2009.

Dr S. Dey awarded the Overseas Associateship award from the Department of Biotechnology, Government of India, 2007.

Ms A. Bhushan was selected as the outstanding scientist of the 21st century award by International Biographical Centre, Cambridge, England.

SIGNIFICANT EVENTS

Ms A. Bhushan attended the Structure determination (BIOXIT) course in crystallography in Heraklion, Greece; 23–25 June 2007.

The department is involved in the Clinical Proteomics programme supported by the DBT.

VISITING SCIENTISTS

Dr D. Velmurugan, Chennai; Dr K. L. Khanduja, Chandigarh; Dr M. Vijayan, Bangalore; Dr Ch. Betzel, Germany; Dr R. Barthwal, Roorkee.

9.6 Biostatistics

Additional Professor and Head

S. N. Dwivedi

Professor (on long leave)

R. M. Pandey

Associate Professor

V. Sreenivas

Scientific Staff

R.K. Ahuja Scientist-IV	Rajbir Singh Scientist-III (on long leave)	Guresh Kumar Scientist-II
M Kalaivani Scientist-I	Ombir Singh Statistician	Kulwant Singh Kapoor Statistician
Ashish Upadhyay Statistical Assistant	Bhupinder Singh Statistical Assistant	

EDUCATION

The department conducts Biostatistics classes for the following courses:

MD (Community Medicine); MBiotech; MSc (Nursing); MBBS (3rd Semester); MBBS (5th Semester); BSc (Medical Technology in Radiography); and BSc (Nursing).

Lectures delivered by departmental faculty and staff

Drs S.N. Dwivedi and V. Sreenivas

- 5 lectures on Biostatistics for DNB students through the Indira Gandhi National Open University's Video Conferencing Facility, National Board of Exams, New Delhi; 10 May 2007.
- 15 lectures (evening classes) on Research Methodology and Biostatistics for the new Residents and PhD students, AIIMS.

Dr S.N. Dwivedi

- An invited talk on 'Types and design of clinical trials' during a Training Workshop on Research Methodology for the Faculty Members of Government Ayurvedic Post-Graduate Institutions organized under WHO Biennium, New Delhi; 15-16 December 2007.
- An invited talk on 'Study designs and causality in medical research' at a National seminar held at Panjab University, Chandigarh; 18-19 March 2008.

Dr V. Sreenivas

Participated as a faculty for the practical orientation on Survival analysis, organized by the Clinical Epidemiology Unit, AIIMS.

Dr Guresh Kumar

2 lectures on application of Epi_info statistical software at the NIHF, New Delhi; 1-2 November 2007.

Ms Kalaivani

‘Application of statistical methods by SPSS’ for the PhD scholars in Nursing, through video conferencing organized by the Indian Nursing Council, New Delhi.

NATIONAL AND INTERNATIONAL CONFERENCES

Lectures delivered by the faculty and staff

Dr S. N. Dwivedi delivered an invited talk on ‘Structure of a research proposal’, pre-conference seminar on ‘Research Methodology for Health Sciences’, Annual Conference of the Indian Society for Medical Statistics, Manipal University, Manipal; 29 November-2 December 2007.

Ms Kalaivani delivered a guest lecture on ‘Experimental design and statistical methods of analysis’, pre-conference workshop: The Basic Concepts of Scientific Research and Communication, Fortieth Annual IPS-NIPER 2007 Conference, Mohali, Chandigarh; 31 October 2007

RESEARCH

Funded Projects

Completed

1 Multilevel epidemiological analysis to assess the role of community level effects on public health/ family welfare. PI: S. N. Dwivedi. Funded by ICMR for two years (2006-2007). Funds: Rs 2 15 547 lakh.

Ongoing

- 1 A study on primary, secondary and tertiary delays for prevention and treatment to breast, oral and oesophagus cancer patients. S.N. Dwivedi. Funded by the ICMR for 3 years (2007-2009). Funds: SRF.
- 2 A multicentric randomized controlled trial of adefovir, adefovir + lamivudine and combination of adefovir and glycyrrhizin in HBV related decompensated cirrhosis. National Coordination: V. Sreenivas. Funded by the ICMR 3 years (2007-2009). Funds: Rs 9.0 lakh.
- 3 Development of appropriate prevention and intervention strategies for non-communicable nutritional related disorders among women in post-reproductive period. R.M. Pandey and Ms M. Kalaivani. Funded by the DST for 3 years (2006-2008). Funds: Rs 8.0 lakh.
- 4 New born screening for congenital hypothyroidism and congenital adrenal hyperplasia: A multicentric study. R.M. Pandey and Ms M. Kalaivani. Funded by the ICMR for 3 years (2007-2009). Funds: Rs 6 lakh.

Departmental Projects

Ongoing

- 1 A biostatistical study on pattern of referral and timing of treatment of cancer patients with special reference to breast cancer (with the Dr B.R. IRCH).
- 2 Comparison of some statistical models in the survival of acute liver failure (with Department of Gastroenterology)

Collaborative Projects

1 Efficacy of radio-frequency ablation and percutaneous acetic acid (PAI) in the management of small hepatocellular carcinoma (HCC) in patients of cirrhosis of liver (with the departments of Gastroenterology and Radio-diagnosis).

2 Randomized controlled trial (RCT) of transarterial chemoembolization (TACE) versus TACE and oral drug therapy in the treatment of unresectable hepatocellular carcinoma (with the departments of Gastroenterology and Radio-diagnosis).

PUBLICATIONS

- 1 Pathak P, Kapil U, Yajnik CS, Kapoor SK, Dwivedi SN, Singh R. Iron, folate, and vitamin B12 stores among pregnant women in a rural area of Haryana State, India. *Food Nutr Bull* 2007;28:435-8.
- 2 Singh V, Pal HR, Mehta M, Dwivedi SN, Kapil U. Pattern of tobacco use among school children in National Capital Territory (NCT). *Indian J Pediatr* 2007; 74: 1013-20.
- 3 Kumar V, Jagannathan NR, Kumar R, Thulkar S, Gupta SD, Dwivedi SN, Hemal AK, Gupta NP. Apparent diffusion coefficient of the prostate in men prior to biopsy: Determination of a cut-off value to predict malignancy of the peripheral zone. *NMR Biomed* 2007;20: 505-11.
- 4 Singh R, Begum S, Ahuja RK, Chandra P, Dwivedi SN. Prediction of child survival in India using developed Cox PH model: A utility for health policy programmers. *Statistics in Transition- new series*. April 2007, Vol. 8, No.1, pp 97-110.
- 5 Chandra P, Dwivedi SN, Bal CS, Kumar A, Pandey A. Innovative role of imputation method/analysis in clinical trial on remnant ablation in differentiated thyroid cancer. *Statistics in Transition- new series*. August 2007, Vol. 8, No.2, pp 251-72.
- 6 Agarwal R, Agarwal K, Acharya U, Christina P, Sreenivas V, Seetaraman S. Impact of simple interventions on neonatal mortality in a low-resource teaching hospital in India. *J Perinatol* 2007; 27: 44-9.
- 7 Ray D, Goswami R, Banerjee U, Dadhwal V, Goswami D, Mandal P, Sreenivas V, Kochupillai N. Prevalence of *Candida glabrata* and its response to boric acid vaginal suppositories in comparison with oral fluconazole in patients with diabetes and vulvovaginal candidiasis. *Diabetes Care* 2007; 30: 312-7.
- 8 Dominic JF, Kumar L, Kochupillai V, Raina V, Sharma A, Bakshi S, Seth T, Kapil A, Sreenivas V. A randomized prospective open labelled study of oral amoxicillin-clavulanate and levofloxacin with intravenous ceftriaxone and amikacin in chemotherapy induced low risk febrile neutropenia. *Indian J Med Pediatric Oncol* 2007;28: 7-15.
- 9 Shyam C, Dakshina Murty KV, Sreenivas V, Ram R. Chronic kidney disease: Need for a national action plan. *Indian J Med Res* 2007; 125: 498-501.
- 10 Vajpayee M, Kaushik S, Mojumdar K, Sreenivas V. Antiretroviral treatment in resource-poor settings: A view from India. *Indian J Med Sci* 2007; 61: 390-7.
- 11 Sharma SK, Mishra HK, Sharma H, Goel A, Sreenivas V, Gulati V, Tahir M. Obesity, and not obstructive sleep apnea, is responsible for increased serum hs-CRP levels in patients with sleep-disordered breathing in Delhi. *Sleep Med* 2007 July 6 [Epub].
- 12 Batham A, Narula D, Toteja T, Sreenivas V, Puliyeel JM. Systematic review and meta analysis of prevalence of hepatitis B in India. *Indian Pediatr* 2007; 44: 663-75.
- 13 Jacob KS, Sharan P, Mirza I, Garrido-Cumbrera M, Seedat S, Mari JJ, Sreenivas V, Saxena S. Mental health systems in countries: Where are we now? *Lancet* 2007; 370: 1061-77.
- 14 Srinivas V, Puliyeel JM. Estimation of true incidence of polio: Overcoming misclassification errors due to stool culture insensitivity. *Indian Pediatr* 2007; 44: 596-7.
- 15 Paul SB, Sreenivas V, Gulati MS, Madan K, Gupta AK, Mukhopadhyay S, Acharya SK. Incidence

- of hepatocellular carcinoma among Indian patients with cirrhosis of liver: An experience from a tertiary care center in northern India. *Indian J Gastroenterol* 2007; 26: 274-8.
- 16 Shyam C, Sreenivas V, Dakshinamurthy KV. Chronic kidney disease in India. *Indian J Med Res* 2007; 126: 485.
 - 17 Agarwal A, Sankaran S, Vajpayee M, Sreenivas V, Seth P, Dandekar S. Correlation of immune activation with HIV-1 RNA levels assayed by real-time RT-PCR in HIV-1 subtype C infected patients in Northern India. *J Clin Virol* 2007; 40: 301-6.
 - 18 Paul SB, Gulati MS, Sreenivas V, Madan K, Gupta AK, Mukhopadhyay S, Acharya SK. Evaluating patients with cirrhosis for hepatocellular carcinoma: Value of clinical symptomatology, imaging and alpha-fetoprotein. *Oncology* 2007; 72 Suppl 1: 117-23.
 - 19 Srivastava K, Narang R, Sreenivas V, Das S, Das N. Association of eNOS Glu298Asp gene polymorphism with essential hypertension in Asian Indians. *Clin Chim Acta* 2008; 387: 80-3.
 - 20 Sreenivas V, Puliye JM. Estimation of true incidence of polio (reply). *Indian Pediatr* 2008; 45: 159.
 - 21 Goswami R, Ray D, Sharma R, Tomar N, Gupta R, Gupta N, Sreenivas V. Presence of spondyloarthropathy and its clinical profile in patients with hypoparathyroidism. *Clin Endocrinol (Oxf)* 2008; 68: 258-63.
 - 22 Ray TK, Pandav CS, Anand K, Kumar G. Morbidity pattern and health seeking behavior in rural community of northern India. *Indian Practitioner* 2007; 60, No.6, June 2007.
 - 23 Chowdhury UK, Subramaniam KG, Joshi K, Varshney S, Kumar G, Singh R, Venugopal P. Rechanneling of total anomalous pulmonary venous connection with or without vertical vein ligation: results and guidelines for candidate selection. *J Thorac Cardiovasc Surg* 2007; 133: 1286-94.
 - 24 Marwaha RK, Tandon N, Desai A, Kanwar R, Grewal K, Aggarwal R, Sastry A, Singh S, Ganguly SK, Mani K. Reference range of thyroid hormones in normal Indian school-age children. *Clin Endocrinol (Oxf)* 2007 Sep 24[Epub ahead of print]
 - 25 Bajpai M, Bal CS, Tripathi M, Kalaivani M, Gupta AK. Prenatally diagnosed unilateral hydronephrosis: Prognostic significance of plasma renin activity. *J Urol* 2007; 178: 2580-4; [Epub 2007 Oct 22].
 - 26 Karthikeyan G, Thachil A, Sharma S, Kalaivani M, Ramakrishnan L. Elevated high sensitivity CRP levels in patients with mitral stenosis and left atrial thrombus. *Int J Cardiol* 2007; 122: 252-4 [Epub 2007 Jan 31].
 - 27 Gupta V, Srinivasan G, Sharma A, Kapoor KS, Sihota R. Comparative evaluation of bimatoprost monotherapy in primary chronic angle closure and primary open angle glaucoma eyes: A three-year study. *J Ocular Pharmacol Therapeutics* 2007;23: 351-8.
 - 28 Dubey S, Kabra M, Bajpai A, Pandey RM, Hasan M, Gautam RK, Menon PS. Serum leptin levels in obese Indian children relation to clinical and biochemical parameters. *Indian Pediatr* 2007; 44: 257-62.
 - 29 Bhatla N, Mukhopadhyay A, Kriplani A, Pandey RM, Gravitt PE, Shah KV, Iyer VK, Verma K. Evaluation of adjunctive tests for cervical cancer screening in low resource settings. *Indian J Cancer* 2007; 44: 51-5.
 - 30 Sethi V, Kashyap S, Aggarwal S, Pandey RM, Kondal D. Positive deviance determinants in young infants in rural Uttar Pradesh. *Indian J Pediatr* 2007; 74: 594-5.

- 31 Naithani P, Sihota R, Sony P, Dada T, Gupta V, Kondal D, Pandey RM. Evaluation of optical coherence tomography and heidelberg retinal tomography parameters in detecting early and moderate glaucoma. *Invest Ophthalmol Vis Sci* 2007; 48:3138-45.
- 32 Appaiahgari MB, Pandey RM, Vрати S. Seroprevalence of neutralizing antibodies to adenovirus type 5 among children in India: Implications for recombinant adenovirus-based vaccines. *Clin Vaccine Immunol* 2007; 14:1053-5.
- 33 Bajpai A, Pandey RM, Kabra M, Menon PS. Growth pattern and final height in 21-hydroxylase deficiency. *Indian Pediatr* 2007; 44:771-3.
- 34 Bhatt SP, Handa R, Gulati GS, Sharma S, Pandey RM, Aggarwal P, Ramakrishnan L, Shankar S. Peripheral vascular disease in systemic lupus erythematosus. *Lupus* 2007; 16: 720-3.
- 35 Kumar V, Ramesh P, Lodha R, Pandey RM, Kabra SK. Montelukast vs. inhaled low-dose budesonide as monotherapy in the treatment of mild persistent asthma: A randomized double blind controlled trial. *J Trop Pediatr* 2007; 53: 325-30.
- 36 Anand K, Lakshmy R, Janakarajan VN, Ritvik A, Misra P, Pandey RM, Kapoor SK, Sankar R, Bulusu S. Effect of consumption of micronutrient fortified candies on the iron and vitamin A status of children aged 3-6 years in rural Haryana. *Indian Pediatr* 2007; 44: 823-9.
- 37 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* 2007 Dec 21[Epub ahead of print]
- 38 Misra A, Jaiswal A, Shakti D, Wasir J, Vikram NK, Pandey RM, Kondal D, Bhushan B. Novel phenotypic markers and screening score for the metabolic syndrome in adult Asian Indians. *Diabetes Res Clin Pract* 2008; 79: e1-5.
- 39 Dinand V, Malik A, Unni R, Arya LS, Pandey RM, Dawar R. Proliferative index and CD15 expression in pediatric classical Hodgkin lymphoma. *Pediatr Blood Cancer* 2008; 50: 280-3.
- 40 Goel K, Gupta N, Misra A, Poddar P, Pandey RM, Vikram NK, Wasir JS. Predictive equations for body fat and abdominal fat with DXA and MRI as reference in Asian Indians. *Obesity (Silver Spring)* 2008; 16: 451-6.
- 41 Shastri SS, Kabra M, Kabra SK, Pandey RM, Menon PS. Characterisation of mutations and genotype-phenotype correlation in cystic fibrosis: Experience from India. *J Cyst Fibros* 2008; 7: 110-5.

AWARDS AND HONOURS

Dr S.N. Dwivedi was awarded a WHO fellowship on Epidemiology and Biostatistics and availed of the same at the Faculty of Medicine, Khon Kaen University, Thailand; 1 July 2007 to 15 August 2007; Member of expert group attending Steering Committee meeting related to a multicentric study on 'Estimating the preventable burden of Hib meningitis and pneumonia in India', ICMR, Ministry of Health & Family Welfare and DBT, Government of India; nominated as one of the Editors, *Demography India*; External Examiner for evaluating Ph.D thesis submitted at Gauhati University, Assam and Nagpur University, Maharashtra; Expert for promotion as Professor of a Faculty at Zamia Hamdard, New Delhi

Dr Dwivedi continued as Member, Scientific Advisory Committee of National Institute of Medical Statistics, ICMR, New Delhi; External Expert Member, Board of Studies on Health Statistics, Institute of Medical Sciences, BHU, Varanasi; Member, Editorial Board, *Indian Journal of Chest Diseases & Allied Sciences*; Reviewer, *Indian Journal of Medical Research*; *International Society*

for Clinical Biostatistics; Assam Statistical Review; Demography India; Journal of Royal Statistical Society, UK (Series A); and Contribution to Applied and Mathematical Statistics (Gauhati University); Member, Editorial Advisory Committee of the international journal—Biometrics; Member, Editorial Advisory Board, Demography India; Statistical Consultant, Indian Journal of Psychiatry (IJP); Member of the 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; Chairman/ Member of the Screening/ Selection Committee at (i) National Institute of Medical Statistics, New Delhi; (ii) Indian Council of Medical Research, New Delhi; and (iii) All India Institute of Medical Sciences, New Delhi; Elected Member, International Union for Scientific Study of Population (IUSSP), France; Member, International Society for Clinical Biostatistics, Geneva; Elected Member, International Statistical Institute, The Netherlands; Member, International Epidemiological Association, USA; Fellow of the Royal Statistical Society, UK; Correspondent from Indian Region for the Biometric Bulletin of the International Biometric Society

Dr V. Sreenivas was awarded the Commonwealth Academic Staff Fellowship and availed of the same at the London School of Hygiene & Tropical Medicine, London, United Kingdom from 1 October 2007 to 31 March 2008; Nominated as Member Secretary, Data and Safety Monitoring Board (DSMB) for 3 research projects sponsored by the Department of Biotechnology, Government of India; Member, International Clinical Epidemiology Network (INCLIN) and *Journal of Clinical Epidemiology* (JCE) Joint Editorial Committee for the *Journal of Clinical Epidemiology*; Member, Review Committee on Non-communicable Diseases, Indian Clinical Epidemiology Network (IndCLIN); Advisor (Biostatistics) to the *Journal of Neonatology*, India

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

Post Graduate Teaching

The department continues with its 2 years postgraduate program in Medical Biotechnology leading to M. Biotech degree. The teaching program 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 content of the course is updated at frequent intervals to accommodate latest development in the field. The Bioinformatics course was expanded to a 5.5 credit (theory) and 4.0 credit (practical) points with introduction of newer topics in the fields of QSAR and metabolic networks. The infrastructural facilities were expanded with the acquisition of new computer soft-wares and hard-wares to make available one computer to each student during bioinformatics practical exercise. Experts are invited from JNU, IGIB, ICGEB, NII and NIIT besides AIIMS faculty from various specialties 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 program in the area of Medical Biotechnology.

Short-term Training

The Faculty of the department provided summer training to students from the Universities of Amritsar, Rajasthan, Delhi, Gwalior, Haryana and institutions such as the Indian Institute of Technology, Roorkee; Jaypee Institute of Information Technology, Noida, UP; Indraprastha Engineering College, Sahibabad, Ghaziabad (UP); Bioengineering and Research Centre (Maharishi Dayanand University), Faridabad; Sindhu Mahavidyalaya, Nagpur.

Students and faculty from Department of Biotechnology, V.E.S. College of Arts, Science and Commerce, Chembur, Mumbai visited the department during November 2007.

Long-term Training

Faculty of the department provided long-term training to two scientists from Maulana Azad Medical College, New Delhi and Central Research Institute (AY), CCRAS, Department of AYUSH, New Delhi; under WHO Training program. Dr. Lt. Col. M. Kumar DBT-post doctoral fellow (DBT-

PDF) completed 2 years training in December 2007. Dr. Rajesh K. Gupta is presently undergoing training as DBT-PDF.

National and International Conferences

Lectures delivered

Dr. Y.D. Sharma

- ‘Does genetic mutations in malaria match the ecological changes’, Annual Meeting of Indian Academy of Sciences, Thiruvananthapuram; October 2007.
- ‘Molecular epidemiology of drug resistant malaria’, International symposium on Molecular aspects of Malaria Research, Jabalpur; October 2007.
- ‘Molecular epidemiology of drug resistant malaria in India’, International Symposium on Vectors and Vector Borne Diseases, Puri; February 2008.

Dr J.S. Tyagi

- Invited lecture ‘DevR regulator of *Mycobacterium tuberculosis*’, Workshop-cum-Training programme on ‘Basic Techniques in Molecular Biology’, Institute of Life Sciences, Bhubaneswar; December 2007.
- ‘Transcriptional regulation of *Rv3134c-devRS* operon in *Mycobacterium tuberculosis*’, Guha Research Conference, Sunderbans, West Bengal; December 2007.
- Foundation Day Lecture, National JALMA Institute of Leprosy and Other Mycobacterial Diseases, Agra; December 2007.
- Invited lecture on ‘DevR transcriptional regulator of *Mycobacterium tuberculosis*’, 13th Refresher Course in Life Sciences, Jawaharlal Nehru University, New Delhi; January 2008.

Dr H.K. Prasad

- ‘Modulation of Th1 cytokine receptors by *M. tuberculosis*: An immune escape mechanism’, Second INSA-DFG joint seminar on ‘Immunology in Health and Disease’, Berlin, Germany; 1-3 July 2007.
- ‘The dilemma of tuberculosis’, National Symposium on Current Innovations and Future Trends in Molecular Biology, Department of Biochemistry, Shivaji College, University of Delhi, New Delhi; 27 October 2007.
- ‘Modulation of immuno-competent cells by *M. tuberculosis*’, Indo-Swedish Interactive Meeting on Biology, Diagnosis and Treatment of TB, Ministry of Science and Technology, Department of Biotechnology, New Delhi; 11-12 February 2008.
- ‘Science of nutrition and immunity’, National Conference on Nutrition and HIV/AIDS: From Knowledge to Action’, International Life Sciences Institute-India (ILSI-India), Nagpur, Maharashtra, 13-14 February 2008.

Dr S. N. Das

- ‘BRCA gene mutations in Breast-Ovarian cancer’. Indo-German Workshop on Cancer, Heidelberg, Germany; 12-14 July 2007.
- ‘Familial ovarian cancer and mutation in BRCA1 and BRCA2 genes’. Symposium on Ovarian Cancer, AIIMS, New Delhi; 13-14 April 2007.
- ‘Molecular markers in head and neck cancer’. Head and Neck Cancer Group CME Program, AIIMS, New Delhi; 15-17 March 2008.

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. Post Graduate Training Program 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. Evaluation of *devR* mutant of *Mycobacterium tuberculosis* in animal model of tuberculosis and in cultured bacilli: Virulence and gene expression analysis. J.S. Tyagi, (AIIMS); V. Balasangameshwara, V. Challu (NTI, Bangalore); V.D. Ramanathan (TRC, Chennai). Funded by DBT for 3 years (2005-2008). Funds: Rs 50.37 lakh.
5. High throughput PCR assays for diagnosing tuberculosis caused by *Mycobacterium tuberculosis* and *M. bovis* using molecular beacons. Chief investigator: J. S. Tyagi, H.K. Prasad (AIIMS), V.M. Katoch (CJIL); Sanjay Tyagi (PHRI). Funded by DBT Indo-US VAP for 3 years (2006-2009). Funds: Rs 41.69 lakh.
6. Reconstructing cellular networks: Two-component regulatory systems. Chief investigator: J.S. Tyagi, H.K. Prasad (AIIMS), A. Mittal (IIT, Delhi), S. Mehra (IIT, Bombay), S. Krishnaswamy (MKU), S. Mande (CDFD). Funded by DBT (2007-2010). Funds: Rs 363 lakh.
7. 'Study of transmission of livestock derived pathogenic mycobacteria and its prevalence among humans (Zoonotic Tuberculosis).' Chief Investigator: H.K. Prasad. Funded by DBT for 3 years (2005-2008). Funds: Rs. 33.192 lakh.
8. 'Development of vaccine for control of bovine tuberculosis.' Chief Investigator: H.K. Prasad. Funded by DBT 3 years (2007-2010). Funds: Rs. 22.04 lakh.
9. 'Functional characterization of Rv2986c, a DNA binding protein of *M. tuberculosis*,' Chief Investigator: H.K. Prasad. Funded by DST for 3 years (2007-2010). Funds: Rs 23 lakh.
10. Development and characterization of autologous NKT cell-based dendritic cell vaccine for oral squamous cell carcinoma. Chief Investigator: S. N. Das. Funded by DBT for 3 years. Funds: Rs 23 lakh.
11. 'Polymorphisms in genes of the endothelin system in patients undergoing coronary artery bypass grafting surgery and having a concomitant diagnosis for diabetes'. Chief Investigator: Anushree Gupta. Funded by ICMR for 3 years (1 January 2008 -31 December 2010). Funds: 1st year being Rs 11 lakh.

Completed

1. Multicentric evaluation of a smear microscopy technique for the detection of acid-fast bacilli in sputum specimens. Chief investigator: J.S. Tyagi (AIIMS), V. Balasangameshwara (NTI), P. Kumar (NTI), N. Selvakumar (TRC), P. Visalakshi, V.K. Arora (L.R.S. Institute), WHO, 2005-2008; US\$64,418.
2. Evaluation of antiproliferative, apoptotic and immunomodulatory activity of some Indian System and homoeopathic anti cancer drugs. Investigator: S. N. Das, Funded by Ministry of Health and Family Welfare, AYUSH for 4 years. Funds: Rs 22 lakh.

3. 'Modulation of Endothelin-1 in coronary artery bypass grafting patients imparted with pre-operative relaxation therapy.' Investigator: Anushree Gupta. Funded by AIIMS for 3 years (2005-2008). Funds: Rs 2.32 lakh.

Collaborative Projects

Ongoing

1. 'High throughput PCR assays for diagnosing tuberculosis caused by *Mycobacterium tuberculosis* and *Mycobacterium bovis* using molecular beacons.' Co-Principal Investigator: H. K. Prasad
2. 'Molecular switch in Th1-Th2 response by SMAR1: Its implications in Mycobacterium tuberculosis infection' Co-Investigator: H. K. Prasad. Funded by DBT 3 years (2007-2010). Funds: Rs 19.50 lakh.
3. '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.' Co-Principal Investigator: H.K.Prasad. Funded by DBT for 2 years (2007-2010). Funds: Rs 40.34 lakh.
4. 'Detection of mycobacterial pathogens in patients with Crohn's disease.' Co-Investigator: H. K. Prasad. Funded by DBT 3 years (2007-2010). Funds: Rs 35.26 lakh.
5. Studies 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 gastroesophageal junction adenocarcinoma (with BRA-IRCH).
6. Studies on P21 proteins as a potential tumour marker in Oral cancer patients (with BRA-IRCH and Department Biophysics).
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 Department of Cardiac Anaesthesia, CTC).

PUBLICATIONS

1. Vinayak S, Alam MT, Upadhyay M, Das MK, Dev V, Singh N, Dash AP, Sharma YD. Extensive genetic diversity in the *Plasmodium falciparum* Na⁺/H⁺ Exchanger 1 Transporter Protein implicated in quinine resistance. *Antimicrob Agents Chemother* 2007; 51: 4508-11.
2. Siddiqui AA, Singh N, Sharma YD. Expression and purification of a *Plasmodium vivax* antigen PvTARg 55 tryptophan- and alanine – rich antigen and its immunological responses in human subjects. *Vaccine* 2007; 26: 96-107.
3. Garg S, Alam MT, Das MK, Dev V, Kumar A, Dash AP, Sharma YD. Sequence diversity and natural selection at domain I of the apical membrane antigen 1 among Indian *Plasmodium falciparum* populations. *Malar J* 2007; 6: 154.
4. Rawat DS, Lumb V, Sharma YD, Pasha ST and Singh G. Histone as future drug target for malaria. *J Commu. Dis* 2007; 9:119-128.28.
5. Vinayak S, Sharma YD. Inhibition of *Plasmodium falciparum* ispH (lytB) Gene Expression by Hammerhead Ribozyme. *Oligonucleotides* 2007; 17: 189-200.
6. Alam MT, Agarwal R, Sharma YD. Extensive heterozygosity at four microsatellite loci flanking *Plasmodium vivax* dihydrofolate reductase gene. *Mol Biochem Parasitol* 2007; 153: 178-85.
7. Siddique AA, Jalah R, Sharma YD. Expression and purification of HtpX-like small heat shock integral membrane protease of an unknown organism related to *Methylobacillus flagellatus*. *J Biochem Biophys Methods* 2007; 70: 539-46.

8. Haldar S, Chakravorty S, Bhalla M, De Majumdar S, Tyagi JS. Simplified detection of *Mycobacterium tuberculosis* in sputum using smear microscopy and PCR with molecular beacons. *J Med Microbiol* 2007; 56: 1356-62.
9. Pathak D, Chakravorty S, Hanif M, Tyagi JS. Lysis of tubercle bacilli in fresh and stored sputum specimens: implications for diagnosing tuberculosis in stored and paucibacillary specimens by PCR. *BMC Microbiology* 2007; 7: 83
10. Taneja NK, Tyagi JS. Resazurin reduction assays for screening of anti-tubercular compounds against dormant and actively growing *Mycobacterium tuberculosis*, *Mycobacterium bovis* BCG and *Mycobacterium smegmatis*. *J Antimicrob Chemotherapy* 2007; 60:288–93.
11. Singhal A, Jaiswal A, Arora VK, Prasad HK. Modulation of interferon Gamma receptor 1 by *Mycobacterium tuberculosis*: A potential immune evasive mechanism. *Infection and Immunity* 2007; 75: 2500–10.
12. Agarwal A, Mohanti BK, Das SN. *Ex vivo* triggering of T cell mediated immune responses by autologous tumor cell vaccine in oral cancer patients. *Immunopharmacol Immunotoxicol* 2007; 29: 95-104.
13. Das SN. Familial ovarian cancer, BRCA1 and BRCA2 mutation: AIIMS Experience. *Ind J Med Paed Oncol* 2007; 27 (Suppl1): 20.
14. Gupta R, Sharma SC, Das SN. Association of *TNF- α* and *TNFR1* promoters and 3' UTR region of *TNFR2* gene polymorphisms with genetic susceptibility to tobacco related oral carcinoma in Asian Indians. *Oral Oncol* 2008; 44: 455-63.
15. 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.

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.

- | | |
|-------------|---------------------------|
| 1. European | 03813287.4-2402-IN0300302 |
| 2. U.S. | 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

Prof. Y.D. Sharma is a Fellow of all the three National Science Academies. He continue to be Member of Sectional Committee of Indian National Science Academy (INSA); Member, Rajasthan Government State Biotechnology Advisory Board; Member, DBT Task Force Sub-committee on Human Resources Development; Task Force Member, DBT's International Project Advisory Committee (IPAC); Member, JRF examination of DBT; Member of Course Curriculum Committee for PG program in Biotechnology of DBT. He was chairman of Sub-group on Medical Biotechnology Task Force of DBT, Research Advisory Committee on Parasite Biology of NIMR, Delhi; Member,

Board of Research Studies of NICD-IP University; Academic Committee of Guru Nanak Dev University, Amritsar; Member, Board of Studies of Biotechnology at Jawaharlal Nehru University, New Delhi; Interdisciplinary Biotechnology Unit at Aligarh Muslim University, Aligarh; Expert Member; Board of PG Studies in Biotechnology of Vanasthali Vidyapeeth; Expert Member, Teaching Advisory Committee of Devi Ahilya University, Indore; Member, Editorial Board of *Indian Journal of Malariology*; Member, International Reviewer Panel of 'Medical Science Monitor'; Member, Editorial Board of 'Biotechnology'; Member, NML Book Selection Committee; Member, Research Committees of AIIMS; Member, Recombinant DNA Bio-safety Committee of AIIMS; Co-Chairman of Special Committee on Computerization of AIIMS; Member, Selection Committee for Scientists for ICMR; Indian Vet Res. Inst., Bareilly; Faculty positions of GNDU, Amritsar; Expert, Review Committee of NII.

Dr J. S. Tyagi has been elected Fellow of the Indian Academy of Sciences, 2008. She transferred TB diagnostic technology to Arbro Pharmaceuticals Limited, New Delhi, February 2008. She has been nominated as Member, Scientific Advisory Committee, Tuberculosis Research Centre, Chennai and Member, DBT Expert Group on Tuberculosis.

Dr H.K. Prasad is a Member, Guha Research Conference (GRC); Member, Organizing Committee of the Molecular Immunology Forum-2008, IMTECH, Chandigarh; 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 & Other Mycobacterial Diseases, Agra and the Institute of Life Sciences, Bhubaneswar; Expert Member, Selection Committee of the National Institute of Immunology, ICMR, DBT, ICGEB, SGPGIMS, Central Drug Research Institute (CDRI), National Centre for Cell Science (NCCS); Member, Medical Biotechnology Sectional Committee, MHR-20 under MHDC, Bureau of Indian Standards; Member, Sub-Committee for the construction of Molecular Biology Centre at AIIMS. H. K. Prasad Co-convoked Annual Meeting, 'Molecular Immunology Forum-2008', Institute of Microbial Technology, Chandigarh, 14-16 March 2008.

Dr S.N. Das continues to be Fellow, International Academy of Biological Therapy; Member, National Academy of Medical Sciences, India; Life Member, Indian Immunology Society; Member, American Association of Cancer Research, USA; Member, DKFZ Alumni Association, Heidelberg, Germany; Life Member, The Cytometry Society, India; Member, Task Force Group on Cancer Cervix, DBT, Govt. of India; Member, Terry Fox Run Grant Committee on Cancer Research; Member, Technical Committee, Institute of Pathology (ICMR) New Delhi; Member, Editorial Board, *International Journal of Osteoporosis and Metabolic Disorders*; Referee, *International Journal of Immunogenetics*; *Cancer Immunology and Immunotherapy*; and *Oral Oncology*; Awarded travel grant from DKFZ Alumni Association, Germany, to attend Indo-German Workshop at Heidelberg, Germany.

OTHER ACTIVITIES

Bioinformatics Centre

The bioinformatics resource centre of the department provides database and 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 Institute as well as other neighboring institutes. The department has taken a 512 kbps leased line from VSNL for internet services.

Liquid Nitrogen Plant

The department has an automated liquid nitrogen plant that on request caters liquid nitrogen to departments/ laboratories and hospital at AIIMS.

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

Sanjay K. Rai

Nongkynrih Baridalyne

Y.S. Kusuma Kumari

EDUCATION

The education programmes for undergraduates, postgraduates, and nursing students remain unchanged.

Undergraduate (MBBS)

Rural posting: the programme remains the same. The students were posted for five weeks in the VII semester. It was a residential posting.

Urban posting: IV and V semester students were posted in the urban area for five weeks. As a part of their teaching program, exhibitions and health talks were organized to observe:

- “World No Tobacco Day”
- “World Population Day”
- “Global Iodine Deficiency Disorder Day”
- “World Obesity Day”
- “World AIDS Day”
- “World Water Day”
- “World TB Day”

In addition awareness generation program was organized on the following topics:

- “Awareness Programme on Eye Care”
- “Dengue Awareness Programme”

Fifty families were identified and allotted to UGs for clinico-psycho-social case review and supervised for various interventions and follow-up. Four research projects were undertaken by UGs during their field posting. They also attended other community welfare activities including:

- Well Baby Show, exhibitions & film shows
- Blood Donation Camp at IIT Delhi was organized with the support of Cardio Neuro Centre (AIIMS) Blood Bank (120 units of blood were collected)

- Health Mela & Health Exhibition on TB, meningitis, tobacco hazard, bird flu and migraine was organized at Kusum Pur Pahari, Vasant Vihar

Interns

The programme remains unchanged. The interns were posted for 4 weeks each in Dayalpur or Chhainsa primary health centre (PHC). It was a residential posting.

Postgraduates (MD)

The postgraduates of Community Medicine were posted in the rural areas for 18 months. This enabled them to gain experience in the referral hospital at Ballabgarh and at the PHCs. They participated actively in decision-making. Following the initiation of a computer facility the postgraduate students were encouraged to use computers for data analysis for their theses. They also participated in various field based and regular teaching (seminars, family and case presentations, etc.) exercises during the posting

Foreign Students

In keeping with its unique position as a centre of excellence for public health teaching, CRHSP Ballabgarh hosted around 80 scholars from different medical institutes of USA in May 2007. The visit, which was a part of International Scholar Laureate Programme, provided unique opportunity to foreign students to have a first hand experience of community and community health in India. Four undergraduate students from USA came to the department for short term training in community medicine in the first week of February 2008.

Continuing Medical Education

The Centre for Community Medicine (CCM) has started a Guest Lecture series from 21 July 2005. Details of the Guest Lectures are as follows:

1. 14th Guest Lecture on “Discovering your Whole Brain” by Tamaryn Britz & Sanjay Chotkan, on 28 August, 2007 at LT-I, AIIMS, New Delhi.
2. 15th Guest Lecture on “Experiences in Human Sexuality and Reproductive Health” by Professor Prema Bali, on 6 September 2007 at Conference Hall, AIIMS, New Delhi.
3. 16th Guest Lecture on “Health and Education of Rural Girl Child” by Dr Rajeev Seth, Secretary Indian Academy of Pediatrics (Child Abuse, Neglect & Child Labour Group), on 15 November 2007 at CCM, AIIMS, New Delhi.
4. 17th Guest Lecture “Non Targeted and Sex Differential Effects of Health Interventions in High Mortality Areas” by Dr Peter Aaby & Dr Henrik Ravn, Bandim Health Project, Guinea Bissau on 14 January 2008 at LT- I, AIIMS, New Delhi.

A pre-conference meet on “Non Communicable Diseases – a Public Health Primer” was held at Comprehensive Rural Health Services Project (CRHSP), Ballabgarh on 6 March 2008 as a part of the National Conference of Indian Public Health Association. About twenty five postgraduates and junior faculty from different medical colleges of India participated. The faculty was from CCM, Ministry of Health, Indian Council for Medical Research (ICMR), and World Health Organization (WHO).

Lectures Delivered

Dr. K. Anand

1. “Economic Considerations in Health Policy, Planning, Management & Evaluation of Health Care Services” for Master of Public Health students of National Institute of Communicable Diseases, New Delhi, 18 January 2008

2. “Non Communicable Disease (NCD) Surveillance” for students of Department of Community Health, St. Stephens Hospital, 18 January 2008
3. “On STEPs approach to NCD Surveillance,” Madras Diabetes Research Foundation, Chennai, 14–15 July 2007 and 28–30 March 2008

Dr. Nongkynrih Baridalyne

1. “Issues in Education of Health Personnel,” National Workshop on Human Resources in Health: Challenges & Options, Ministry of Health and Family Welfare (MOHFW), Government of India (GOI)–World Health Organization, New Delhi, April 2007.
2. “Sample Size and Related Issues,” 51st All India Congress of Obstetrics and Gynecology, Pre Conference workshop on Essentials of Research Methods and Good Scientific Writing in Reproductive Health. AIIMS, New Delhi, February 2008.
3. “Community Health in managing Urban Areas,” Training Programme for Overseas Professionals under Indian Technical and Economic Cooperation/Special Commonwealth African Assistance Programme/Colombo Plan on “Managing Cities in Developing Countries - Environment and Infrastructure Framework”, Human Settlement Management Institute, HUDCO, New Delhi, February 2008.

RESEARCH

Funded Projects

Completed

1. “Social and Cultural Dimensions of Hypertension in Neo- and Settled Migrants in Delhi: a Preliminary Study” (Y.S. Kusuma, Sanjeev K. Gupta). Funded by AIIMS Research Grant, Funds: Rs. 97,000, 2007-2008.
2. “Development of a Rapid Assessment Approach to Estimate Prevalence of Non Communicable Diseases and their Risk Factors” (Sanjeev K. Gupta). Funded by AIIMS Research Grant. Rs. 1 lakh, 2007-2008.

Ongoing

1. “Regional Research Center for NCD Surveillance under the Integrated Disease Surveillance Project” (K. Anand). Funded by World Bank & ICMR; Funds: Rs. 38 lakhs, October 2007-September 2010.
2. “Development of a Model for Strengthening of Existing Health System to Address Non Communicable Diseases in India” (K. Anand). Funded by ICMR; Rs. 22 lakhs, October 2007 – March 2009.
3. “Development of Appropriate Prevention and Intervention Strategies for Non-communicable Nutritional Disorders among Women in Post-Reproductive Period: A Multi-Site Study” (Puneet Misra). Funded by Department of Science and Technology, GOI, March 2005-March 2007.
4. “Model Injection Centre (MICs): a Programme to Improve Injection Practices in the Country” (Sanjay K. Rai, CS Pandav, Shashi Kant, Puneet Misra). Funded by IndiaCLEN Programme Evaluation Network; Funds: Rs. 2.5 lakhs, December 2007- December 2008.

Collaborative Projects

Completed

1. Rapid Assessment of Trachoma in a Previous Hyperendemic Area (Department of Community Ophthalmology, Dr R. P. Centre).

Ongoing

1. Development of an Integrated Predictive Model for Evidence-based Eye Care (Department of Community Ophthalmology, Dr R. P. Centre)
2. Prevalence of Tuberculosis in Faridabad District of Haryana (SK Sharma, Sanjeev Gupta, SK Rai) (with MOHFW, GOI)

Departmental

Completed

1. Quality of Life in Patients with Breast Cancer Reporting to a Tertiary Care Hospital.

Ongoing

1. Association of Blindness and Hearing Impairment with Mortality among the Elderly in Rural Area.
2. School-Based Healthy Lifestyle Program in Ballabgarh Town.

PUBLICATIONS

1. Anand K, Lakshmy R, Janakarajan VN, Ritvik A, Misra P, Pandey RM, Sankar R, Bulusu S. Effectiveness of consumption of micronutrient fortified candies on the iron and vitamin A status of children aged 3-6 years in Rural Haryana. *Indian Pediatrics* 2007; 44:823-9.
2. Anand K, Pandav CS, Shah B, Yadav K, Singh R, Mathur P, Paul E, Kapoor SK. Are the urban poor vulnerable to non-communicable diseases? A survey of risk factors for NCDs in urban slums of Faridabad. *Nat Med J India* 2007; 20:115-20.
3. Anand K, Ritvik A, Chowdhury D. Cost of anti-epileptic drugs in India. *Neurol Asia* 2007; 12 (Suppl 1): 42-3
4. Anand K, Shah B, Gupta V, Khaparde K, Paul E, Menon G, Kapoor SK. Risk factors for non-communicable disease in urban Haryana: a study using WHO STEPs approach. *Indian Heart J* 2008; 60:9-18.
5. Baridalyne N, Acharya A, Lakshmy R, Ritvik A, Anand K, Shah B. Profile of biochemical risk factors for non communicable diseases in urban, rural and periurban Haryana, India. *J Assoc Physician India* 2008; 56:165-70
6. Baridalyne N, Anand K, Kusuma YS, Rai SK, Misra P., Goswami K. Linking undergraduate medical education to primary health care. *Indian Public Health* 2008; 52:28-32.
7. Desai SP, Desai MS, Pandav CS. The discovery of modern anaesthesia – contributions of Davy, Clarke, Long, Wells and Morton. *Indian Anaesthesia* 2007; 51:472-6.
8. Gupta SK, Murthy GV, Morrison N, Price GM, Dherani M, John N, Fletcher AE, Chakravarthy U. Prevalence of early and late age-related macular degeneration in a rural population in northern India: the INDEYE feasibility study. *Inves Ophthalmol Vis Sci* 2007; 48:1007-11.
9. Kant S, Goswami K, Rai SK, Dhar L and Misra P. Quality assurance of annual HIV sentinel surveillance 2006: experience of Regional Institute, Central Zone. *Indian Public Health* 2007; 51:28-32
10. Kusuma YS, Babu BV, Naidu JM. The association of tobacco smoking and blood pressure in some low socioeconomic groups from Andhra Pradesh, India. *High Blood Pressure and Cardiovascular Prev* 2008; 15:29.
11. Kusuma, YS, Babu BV, Naidu JM. Chronic energy deficiency in some low socio-economic populations from South India: relationships between body mass index, waist-hip ratio and tonicity index. *HOMO: J Comparative Human Biol* 2008; 59:67.

12. Lal V, Goswami A, Anand K. Self-medication among residents of urban resettlement colony, New Delhi. *Indian J Public Health* 2007; 51:249-51.
13. Lal V, Pandav CS. Book Review (A Reader in Promoting Public Health – Challenge and Controversy). *Nat Med J India* 2007; 20:211.
14. Mohan V, Mathur P, Deepa R, Deepa M, Shukla DK, Menon GR, Anand K, Desai NG, Joshi PP, Mahanta J, Thankappan KR, Shah B. Urban rural differences in prevalence of self-reported diabetes in India. The WHO-ICMR Indian NCD risk factor surveillance. *Diabetes Res Clin Pract* 2008; 80:159-68.
15. Moorthy D, Patro BK, Das BC, Sankar R, Karmarkar MG, Pandav CS. Tracking progress towards sustainable elimination of iodine deficiency disorders in Orissa. *Indian J Public Health* 2007; 51:211.
16. Pandav CS. Book Review (Public Health in Rajasthan). *Nat Med J of India* 2007; 20:316.
17. Patro BK, Nongkynrih B. Review of screening and preventive strategies for cervical cancer in India. *Indian Public Health* 2007; 51:216-21.
18. Singh B. Infant mortality rate in India: still a long way to go! *Indian Pediatrics* 2007; 74:454.
19. Singh B. Dengue outbreak in 2006: failure of public health system? *Indian Community Med* 2007; 32:99-100.
20. Singh B, Goswami A, Chawla N, Shyam S. Role of helplines in dissemination of information during an outbreak of dengue fever in Delhi, India in 2006. An experience. *Dengue Bull (WHO)* 2007; 31:87-9.
21. Singh R, Gupta SK. Payments for health care: do they aggravate poverty? *Nat Med J India* 2007; 20:139-41.
22. Verma S, Rai SK, Kant S, Chaudhary K. Morbidity profile of pediatrics inpatients at a community health centre and a nearby district hospital in northern India. *Indian Public Health* 2007; 52:125-6.

Books and Chapters in Books, Monographs

1. Barialyne N. A module on “Community Based Interventions for Non-communicable Diseases: Planning and Monitoring Indicators - Guide-book” New Delhi: CCM, AIIMS & WHO - South East Asia Regional Office, 2007.
2. Nath LM, Singh B (Consulting Editors and Contributing Experts). *HIV/AIDS: Your Questions Answered*. New Delhi: Doctor NDTV & Byword Publications 2007; pp 167.
3. Rai SK. Resource person. In: Taneja DK (Ed.). *Health Policies and Programmes in India*. 7th Edition. New Delhi: Doctor Publication, 2008.
4. Singh B (Contributing Expert). *Sex: Your Questions Answered*. New Delhi: Doctor NDTV & Byword Publications 2007; pp168.

PATIENT CARE

This has been divided into five broad categories.

1. CRHS Project Ballabgarh
2. Urban Health Programme
3. Sex & Marriage Counseling Clinic
4. AIDS Education & Training Cell
5. National Service Scheme (NSS) Unit, AIIMS

CRHS Project, Ballabgarh

Referral Hospital, Ballabgarh

Outpatient Department (OPD)

The following OPDs operate on a daily basis: General OPD for adults, Child Welfare Centre, Obstetrics & Gynecology OPD, Ophthalmology OPD, and Dental OPD. The Antenatal Care Clinic is held thrice a week and the Otorhinolaryngology OPD and Rehabilitation OPD operate twice in a week. The Psychiatry OPD and Pediatric Surgery (cum Surgery) OPD follow a weekly schedule. Similarly, the Non-Communicable Diseases Clinic is held at weekly intervals.

OPD Registration

New patients	-	89599
ANC Registration	-	7814
Immunization	-	6505
Total OPD Patients	-	166623

Inpatients

The number of beds has remained unchanged at	-	50
Total admissions including birth	-	6339
Bed occupancy rate		
- (including newborns)	-	52.25
- (excluding newborns)	-	39.66
Average duration of stay (in days)	-	1.8
Admissions		
- via emergency	-	839
- via OPD	-	3973
- newborn	-	1527

Distribution of inpatients by specialty

Medicine	-	1514
Surgery	-	196
Obstetrics and Gynaecology	-	2092
Pediatrics	-	937
Ophthalmology	-	73

Casualty

Number of patients registered	-	15550
Number of medicolegal cases	-	2856

Diagnostic tests performed

Lab investigations (including malaria slides)	-	83618
X-ray (total)	-	7917
Malaria slides	-	3826
Malaria cases	-	85
- Plasmodium. vivax	-	81
- Plasmodium. falciparum	-	4

Total number of surgical procedures performed

Male	-	566
Female	-	1049
Total	-	1615

Intensive Field Practice Area (IFPA)

Population	-	84678
Birth (Birth Rate)	-	1813 (21.41 per thousand)
Death (Mortality Rate)	-	387 (4.57 per thousand)
Neonatal Mortality Rate	-	34 (18.75 per 1000 live births)
Infant Mortality Rate	-	64(35.30 per 1000 live births)
Maternal Mortality Rate	-	1 (55.16 per lakh live births)
Anternal Clinic	-	2193
Tetanus toxoid	-	1893 (86.32)
Deliveries by staff and hospitals	-	593
Number of eligible couples	-	15961
Couple Protection Rate	-	9726 (60.24)
Family planning acceptors in 2007	-	1533
Tubectomy	-	264
Vasectomy	-	7
Conventional contraceptive users	-	813
Intrauterine devices	-	222
Oral pills	-	225

Immunization coverage of children 12–23 months of age

Total eligible children	-	1924
BCG	-	1907 (99.12%)
DPT3	-	1899 (98.70%)
OPV3	-	1899 (98.70%)
Measles	-	1856 (96.47%)

National Programmes

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

Total number of slides collected	-	6754
Total number of positive cases	-	10

Indices

1. Annual blood examination rate	-	8.0%
2. Annual parasite incidence rate	-	0.01/1000 population
3. Slide positivity rate	-	0.01%

Tuberculosis

The Revised National Tuberculosis Control Programme 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 total Field Practice Area is as follows:

Category 1	-	64
Category 2	-	35
Category 3	-	24
Total	-	123

Urban Health Programme

Mobile Health Clinic at Dr Ambedkar Nagar

Total number of patient	:	25,695
Total number of referrals	:	862
Total number of health talks	:	160

Immunizations

Zero dose OPV	:	103
BCG	:	278
DPT I	:	572
DPT II	:	548
DPT III	:	531
DPT B	:	522
OPV I	:	572
OPV II	:	548
OPV III	:	531
OPV B	:	522
DT I + OPV	:	68
DT II + OPV	:	13
DT (Booster) + OPV	:	209
Measles	:	502
MMR	:	540
TT I (ANC)	:	206
TT II (ANC)	:	145
TT (Booster)	:	88
TT Others + above 6 years	:	79
Hepatitis B Zero dose	:	N/A
I dose	:	572
II dose	:	562
III dose	:	522
Typhoid	:	715
Vitamin A (dose)	:	107
Iron supplement (number of adult beneficiaries)	:	1084

Family Planning Acceptors

Nirodh	:	4,470
Oral Contraceptive Pills	:	98 cycles

Laboratory Services

Blood smear for material parasite	:	2
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Hemoglobin	:	428
Urine routine & microscopic examination	:	86
Urine pregnancy test	:	55
Social services for patients		
Patients identified for social services	:	3840
Financial help arranged		
Medicine	:	10
Education	:	2
Occupation	:	4
Charges exempted	:	15
Counseling		
Individual	:	3200
Family	:	340
Group	:	207
Referral services to welfare organizations	:	63
Rehabilitation services		
Job	:	4
Cancer patients	:	2
Handicapped	:	12
School dropout	:	6
Widows/Deserted	:	8
Nutritional supplement	:	15
Cataract surgery	:	14
Sex & Marriage Counseling Clinic		
New Patients	:	2315
Old Patients	:	2596
Total Patients	:	4911
Investigations:		
Hormone analysis	:	656
Blood sugar	:	389
Semen analysis	:	680
Tests for infections (C/S, VDRL, HIV)	:	126
Urine (routine/microscopy)	:	115
Hemoglobin	:	28
Fine Needle Aspiration Cytology	:	169
Radiological: Ultrasound/Doppler/ X-Ray	:	354

AIDS Education & Training Cell

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

The following activities were organized by the Cell in 2007-08:

1. The telephone helpline on HIV/AIDS and contraception (“Shubhchintak”) attracted a good number of calls daily.

2. The internet based helpline “E-shubhchintak” on HIV/AIDS and contraception received 3–5 requisitions for IEC materials and queries on HIV/AIDS, STDs, sexual problems, and contraception daily.
3. The cell produced and disseminated educational material on HIV/AIDS to general public.
4. About 60 new and many follow-up patients were given personal counseling on HIV/ AIDS.
5. Organized a health talk cum exhibition on “HIV/AIDS Awareness” in the community on the World AIDS Day (1 December 2007).
6. Organized a one-day training program on “HIV/ AIDS & STD” for community health workers of Baghpat, Uttar Pradesh (24July 2007).
7. Organized a one-day training program on “HIV/ AIDS & STDs” for officers and jawans of Border Security Force at New Delhi (24 October 2007 and 14March 2008).

N.S.S. Unit, AIIMS

The NSS Unit of AIIMS is located at the CCM. Dr Bir Singh is Programme Coordinator and Dr. Anil Goswami and Mrs Kiran Singh are Programme Officers of this unit.

Health Promotion and Health Communication (HPHC) Unit (IEC Material Development)

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

Six Posters on “Dengue” were modified and displayed at three places i.e. Dengue Screening OPD, AIIMS and at CCM & CRHSP Ballabgarh. The unit also developed or modified 5 posters on bird flu, 2 posters on field data and 1 poster each on NSS, conjunctivitis, Health Promotion & Health Communication, Thookoo (Sputum), Health Mela, Millennium Development Goals, Field Practice Area Map, and article. It also produced 5 pamphlets/brochures on ICCIDD and 5 handbills on dengue.

Nine film shows were conducted under various teaching and training programmes; and 4 role-plays were performed in the community on issues related to alcohol misuse, drug misuse, family planning, polio, personal hygiene, obesity, mother and child health and gender bias.

AWARDS, HONOURS & SIGNIFICANT EVENTS

Foundation of a new hostel: A new hostel for undergraduate and resident doctors was inaugurated by the Director of AIIMS, Professor T. D. Dogra on 21 February 2008 at Ballabgarh. The hostel is scheduled to be completed by July 2008.

Land Transfer: Considering the special contribution made by the CRHSP Ballabgarh; the Haryana State Government very graciously transferred around 6 acres of land on which CRHSP Civil Hospital stands to AIIMS in May 2007. This step would provide administrative freedom to AIIMS and also aid in future expansion plans at CRHSP.

Blood Storage: In another major upgradation of health infrastructure, from 22 August 2007 CRHSP Ballabgarh has been designated as a blood storage facility. With a capacity to store 50–60 packs of whole blood at a given time, this would enable the centre to provide timely care during obstetric and surgical emergencies.

New Community Health Centre at Fatehpur Billoch Village: on insistence of the community, it was decided to establish a new Community Health Centre at Fateh Pur Billoch Village. In recognition

of services delivered by Centre for Community Medicine and AIIMS, around 7 acres of land was donated by the community for this purpose.

Sarpanch's meeting: In continuation of our long-standing strategy to work along with community and to enhance their participation, a meeting of the Sarpanchs of 28 villages under CRHSP Ballabgarh was organized in January, 2008. The meeting witnessed an overwhelming participation by the community and a detailed plan for future co-ordination between the CRHSP and the community was chalked out.

Gramin Swasthya Samaroh (GSS): In an innovative approach to promote behaviour change towards healthy practices and healthy life style, a community participatory activity called Gramin Swasthya Samaroh (GSS) was launched in March 2008. With a focus on information, education and communication (IEC), special camps were organized in villages served by CRHSP. This activity was incorporated in routine working of PHCs with each PHC conducting one camp every fortnight.

Professor C.S. Pandav was awarded the fellowship of Bharat Scouts and Guides by His Excellency Dr APJ Abdul Kalam, President of India, the country's highest honour for a Scout (11 July 2007). He was selected to deliver the Dhanvantari Oration of Indian Association of Preventive and Social Medicine for the year 2009 during the 35th Annual National Conference of IAPSM (Puducherry, January, 2008). He was the Team Leader for the "Health Mela" organized by the Civil Surgeon cum Chief Medical Officer at Gidhour (Jamui), Bihar; as a demonstration of provision of quality health care to rural community envisaged under the "National Rural Health Mission" from 5–8 January 2008. He participated in the 35th Annual National Conference of Indian Association of Preventive & Social Medicine from 22–25 January 2008 at JIPMER, Pondicherry in the capacity of President of IAPSM. He was the external examiner for MD (Community Medicine) Examination and a member of the Selection Committee and conducted interviews for faculty positions in Postgraduate Institute of Medical Education and Research, Chandigarh. He attended the 8th Scientific Committee of the National Institute of Epidemiology of ICMR (Chennai, 18 February 2008); the International Clinical Epidemiology Network Review Board Meeting (Chennai, 23–24 February 2008); the State AIDS Control Society, National AIDS Research Institute meeting (Pune, 24–26 March 2008). He also attended the meeting for reviewing the current Iodine Deficiency Disorders Monitoring System (Bhutan, 1–10 April 2007), the First International Meeting of Micronutrient Forum (Istanbul, Turkey, 16-18 April 2007); the Project Workshop on Health Systems Reform and Ethics: Private Practitioners in Poor Neighborhoods in Urban India, Indonesia, and Thailand (Thailand, 19–24 June 2007); the Expert Consultative Meeting for Elimination of Iodine Deficiency Disorders in South-East Asia Region (Bangkok, Thailand, 25–26 June 2007); the National Iodine Deficiency Disorders Review Meeting (Bangkok, Thailand, 29–31 January 2008); and the seminar on Challenges of Childhood Mortality & Morbidity (by Family Welfare Training & Research Centre, Government of India, Maharashtra from 4–6 May 2007).

Professor Bir Singh was an international consultant to United Nations Children Fund for development of National Strategic Plan for HIV/ AIDS (PMTCT) for Cambodia for 2008–2015 (December 2007). He was a consultant to WHO-SEARO, New Delhi for evaluation of Tsunami Consultants in Sri Lanka (May–June, 2007); and UNICEF and State AIDS Control Societies for reviewing the HIV/AIDS – PPTCT Program and development of strategic plan for states of Gujarat,

Bihar, Uttar Pradesh and Orissa (May–August 2007), and for the development of patient information material on PPTCT programme. He was the convener of the Disease Prevention & Outbreak Response Cell (DPORC) at AIIMS for prevention and control of Dengue at AIIMS. He continued to be a member of the National Technical Advisory Committee on Science and Technology Communication for Water Resources, Department of Science & Technology (DST), GOI. He was nominated as a Member of the Scientific Advisory Committee of Desert Medicine and Research Centre (ICMR) for a period of two years. He was an Inspector for Medical Council of India for inspecting Government Medical College, Jammu (May 2007). He was an Expert to the State Public Service Commission of Jammu and Kashmir for selection of medical faculty posts (13 February 2008); to University College of Medical Sciences New Delhi – Delhi University for selection of Senior Residents (28 September 2007); to Council for Scientific and Industrial Research (CSIR) for selection of Junior Research Assistants (November 2007); and to the ICMR for selection of scientists (5 March 2008). He was a Resource Person for a training programme on dengue fever for private medical practitioners – jointly organized by Indian Medical Council – Delhi; Municipal Corporation, Delhi and AIIMS at New Delhi (11 September 2007). He delivered a Guest Lecture on HIV/AIDS in the Republic Day Camp for NSS volunteers of India (14 January 2008). He organized and delivered a public lecture on dengue fever at AIIMS on the Institute Day (25 September 2007). He chaired sessions in the Annual National Conference of Indian Public Health Association (New Delhi, March 2008) and the 35th Annual National Conference of IAPSM (Puducherry, January 2008).

He delivered 16 radio talks and participated in 8 television programmes. The radio talks were entitled “Reedh Ki Haddi aur Upchaar” (23 April 2007), “Current Status of HIV/ AIDS: Efforts for Control” (22 May 2007), “Osteoporosis Ki Bimari” (23 July 2007), “Breast Feeding & its Advantages” (1 August 2007), “Dengue & Malaria: Bachaav tatha Upchaar” (6 August 2007), “Bachchon mein pet ke Keede: Bachaav aur Upchaar” (5 September 2007), “Dengue: Prevention & Treatment” (8 October 2007), “Modern Life Style and Heart Disease” (1 November 2007), “Fire Accidents on Diwali” (5 November 2007), “HIV/ AIDS Control: Kitna Paas, Kitna Door” (26 November 2007), “HIV/ AIDS: Prevention and Treatment” (3 December 2007), “Diseases of Abdomen and their Treatment” (14 January 2008), “Live Phone-in Programme on Osteoporosis” (21 January 2008), “Live Phone-in Programme: on Heart Diseases” (7 February 2008), “Rational use of Drugs” (19 February 2008), and “Live Phone-in Programme on Toxicity of Common Medicine in Children” (11 March 2008). The television programs were entitled “Condom Controversy” (IBN-7 Channel, June 2007), “Sex Education” (IBN-7, June 2007), “Dengue & its Prevention” (Janmat (June 2007), “HIV/ AIDS” (S-1, 1 December, 2007), “HIV/AIDS” (NDTV – Metro-Nation, 1 December 2007), “HIV/AIDS” (DD News, 2 December 2007), “Bird Flu” (DD News, 15 January 2008), and “Bird Flu” (DD News, 16 January 2008).

Professor Sanjeev K. Gupta was the Co-chairman of the Scientific Programme Committee of the 52nd National Conference of Indian Public Health Association organized at Maulana Azad Medical College, New Delhi on 7–9 March 2008

Dr Kiran Goswami participated as Central Coordinating Team member for IndiaCLEN Programme Evaluation Network (IPEN). She was a field supervisor of Model Injection Centre Programme at Gwalior and Agra; she undertook the “Rapid Assessment of Essential Newborn Care Services and

Needs in NRHM: Priority Status of India,” a study by Programme for Appropriate Technology in Health (PATH) & IPEN; was a resource person for regional workshops at two districts for the same and for the regional training workshop entitled ‘IMNCI: Baseline assessment of childhood morbidity and mortality in selected districts in India’ in one district, she conducted quality assurance visits to supervise fieldwork in one district for the PATH-IPEN study and for ‘HIV Sentinel Surveillance’ of the National AIDS Control Organization (NACO) in two states. She participated as resource person under “Model Injection Centres: A programme to Improve Injection Practices in the Country.” She supervised the monitoring survey and focus group discussions on the ‘Evaluation of Safe Water System Project’ in Uttranchal.

Dr K. Anand was a member of the technical audit team of Community Medicine AIIMS for the post-tsunami work of WHO. For this he visited Indonesia (April–May 2007). He worked as a Temporary International Professional with WHO SEARO (May–June 2007 and December 2007) to support WHO’s activities related to non-communicable disease (NCD) surveillance, prevention and control. He served as a member of the Technical Advisory Group for NCD Surveillance under the Integrated Disease Surveillance Program (IDSP); and the Steering Committee of the National Program for Prevention and Control of Diabetes, Cardiovascular Diseases and Stroke by the MOHFW, GOI. He served as a member of the Taskforce on Urban Mental Health problems of ICMR; the Project Review Group of ICT in Primary Health Care of Media Lab, Asia; and the High Court Chennai constituted Committee in the case related to Hindustan Lever Ltd. versus employees. He attended the expert committee review meeting of Government of Gujarat for the drafting of the Public Health Act in Gandhinagar, the South East Asian Regional Network for NCDs (SEANET) Meeting (Phuket, October 2008). He is a peer reviewer for Indian Pediatrics, National Medical Journal of India, Indian Journal of Community Medicine, and Journal of Epidemiology & Community Health.

Dr Puneet Misra served as member of the Program Advisory Council of DST, GOI. As a part of this responsibility he served as a member of the Expert Group of DST for assessment of work of Society for Rural Industrialization at Ranchi, and also undertook assessments of projects entitled “Economic, Health and Environmental Improvement of Community - A scientific approach;” and “Study on Knowledge, Attitude and Practices of Dietary Habits among Mother and Housewives in the Field of Medical Nutrition and Health.”

Dr Sanjay K Rai participated in the WHO sponsored “Workshop on Model Based HIV Estimation”(New Delhi, 18–20 April 2007); the “Expert Consultation and Consensus Building Meeting on HIV Estimation in India” (New Delhi, 4–6 June 2007); the “Expert Group Meeting on HIV / AIDS Data Triangulation for the states of Manipur & Nagaland” (NIHFW, New Delhi, 12 May 2007); the “Annual Sentinel Surveillance for HIV infection 2007 – Pre Surveillance Meeting for Technical Resource Group & Regional Institute” (NIHFW, New Delhi, 14th August 2007); the “Peer Review Meeting on Standard Treatment Guidelines” (Pune, 26 August 2007); the meeting of technical experts to review evidence from intervention in the area of “Community Based Newborn care” (NIHFW, New Delhi, 26–27 September 2007); the “Pre Service IMNCI planning meeting” (Delhi, 4 October 2007 and 19 November 2007); the meeting on “Integrated Management of Childhood Illnesses: Baseline Assessment of Childhood Morbidity and Mortality in Selected Districts of India” (Gwalior, 30 October - 2 November 2007). He attended a UNICEF sponsored

training course for “Training of Trainers on IMNCI” (New Delhi, 26 November - 5 December 2007); and 2-days orientation workshop on “Two Weeks Field Epidemiology Training Programme under Integrated Disease Surveillance Project for Training Institutes” (NIHFW, New Delhi, 15–16 January 2008). He was nominated by Delhi University as a member of the Board of Examiners in community medicine for 2007–2008 and conducted the final professional MBBS examination at Maulana Azad Medical College (14 December 2007). He conducted supervisory field visit of Bihar and Uttar Pradesh to monitor HIV Sentinel Surveillance (6–8 November 2007 and 15–21 December 2007). He participated in the “Health Mela” at Gidhaur (Jamui, Bihar, 5–8 January 2008). He peer reviewed manuscripts for Health & Population Perspective and Issues, and Indian Journal of Public Health. He was elected as a Central Council Member of the Indian Public Health Association (North Zone) for the year 2007–2009 and organized the “Regional Workshop on HIV Sentinel Surveillance 2007 (Central Zone)” (Faridabad, 7–8 September 2007).

Dr Nongkynrih Baridalyne attended a Training of Trainers workshop in National Institute of Medical Sciences, ICMR for NCD surveillance under IDSP, Phase 1 (July 2007). She attended workshops on “Strengthening Public Health Services in India” organized by the Public Health Education & Research Consortium Networking & Partnership (WHO & NIHFW collaboration) (New Delhi, November 2007); and “Development of IEC Toolkit for Health Care Workers for Implementing Preventive and Promotive Care Aspects of NCDs” organized by NIHFW and WHO (New Delhi, 3-7 December 2007).

Dr Y. S. Kusumakumari participated in workshops on “Development of Curriculum for three Short-Term Training Courses on Health Promotion and Health Education” organized by Central Health Education Bureau (CHEB), NIHFW and WHO (New Delhi, 27–31 August 2007); “Development of IEC Toolkit for Health Care Workers for Implementing Preventive and Promotive Care Aspects of NCDs” organized by NIHFW and WHO (New Delhi, 3–7 December 2007) and “Child Anemia” organized by NIHFW and A2Z Micronutrients Project (USAID) (New Delhi, 6 February, 2008).

VISITING SCIENTISTS

Dr Peter Aaby, Site Leader Bandim Demographic Surveillance System (DSS), Guinea-Bissau and Board Member, International Network for Demographic Evaluation for Population and their Health (INDEPTH) Trust visited Ballabgarh DSS from 14–17 January 2008 and reviewed our activities, discussed potential for collaboration and gave a guest lecture on Non-specific effects of vaccines.

9.9 Dermatology and Venereology

Professor and Head

V.K. Sharma

Professors

Neena Khanna

K.K. Verma

Additional Professor

M. Ramam

Associate Professors

Binod K Khaitan

Sujay Khandpur

G Sethuraman

Assistant Professor

Somesh Gupta

EDUCATION

Continuing Medical Education

AIIMS Dermatology Update 2007: Urticaria, Drug reactions, Acne & Psoriasis. New Delhi, 14-15 April 2007.

Lectures delivered

Dr. V.K. Sharma

1. "Clinical and Etiological Study of Sepsis in a Dermatology Ward." 16th European Academy of Dermatology & Venereology, Vienna (Austria), 16-20 May 2007.
2. Delivered two lectures on "Alopecia Areata" and "Occupation Dermatoses." 21st World Congress of Dermatology-2007, Buenos Aires (Argentina), 1-5 October, 2007.
3. "Approach to management of Urticaria." 71st Annual Indian Association of Dermatologists Venereologists & Leprologists, Kodaikanal, on May 12-13, 2007.
4. "Alopecia Areata: Management Strategies." Conference of Punjab Branch of Indian Association of Dermatologists, Venereologists and Leprologists, 19-20 October, 2007.
5. "Recent Advances in the Management of Chlamydial Infections." 31st National Conference of Indian Association for the Study of Sexually Transmitted Diseases & Aids (IASSTD & AIDS), Rohtak, 26-28 October.
6. "Current Options in Management of Leprosy and Reactions in Leprosy." Dermatology Society of Bhopal, Bhopal, 3-4 November 2007.
7. "Management of the Side Effects of Long-term Systemic Steroids." 25th Annual Conference of the Indian Association of Dermatologists Venereologists & Leprologists of UP Branch, Allahabad, 23-24 November 2007.
8. "Gene Therapy in Dermatology." Annual Conference of the Delhi State Branch of the Indian Association of Dermatologists, Venereologists & Leprologists, Delhi, 23 December 2007.
9. "Recent Advances in the Management of Pemphigus." 36th National Conference of the Indian Association of Dermatologists, Venereologists, Leprologists, Chandigarh, 24-27 January 2008.

Dr. Binod K Khaitan

1. "A study to characterize segmental vitiligo" (Khaitan BK, Dash S, Ramam M). 2nd Conference of the Asian Society for Pigment Cell Research (ASPCR), Singapore, 6-8 July 2007.
2. "Oral Mini Pulse Therapy in Dermatology." Delivered talk on award of Dr. B M Ambady Oration during 36th National Conference of Indian Association of Dermatologists Venereologists & Leprologists, Chandigarh, 25-27 January 2008.

Dr. Sujay Khandpur

1. 'Management of Atopic Dermatitis.' Pediatric Dermatology CME, New Delhi, 8 April 2007.
2. 'Diagnosis of Vesicobullous Disorders.' Mid-summer Symposium of the Indian Association of Dermatologists Venereologists & Leprologists (Delhi State Branch), April 2007.
3. "Verruciform Xanthoma of the Glans Penis." International Dermatopathology Symposium, Bangalore, 28-29 April 2007.
4. "Mycophenolate Mofetil in Vesicobullous Disorders." Silver Jubilee Symposium on Pulse Therapy in Pemphigus and Other Diseases, New Delhi, 1-2 September.
5. 'Evaluation of Immunoblot Assay as a Diagnostic Tool in Indian Pemphigus Vulgaris.' 21st World Congress of Dermatology, Buenos Aires (Argentina), 30 September – 5 October 2007.
6. 'Management of Dermatological Emergencies.' 33rd Annual Conference of Indian Association of Dermatologists Venereologists & Leprologists, North Zone, Jalandhar, 20-21 October 2007.
7. "Verrucous Tuberculid Masquerading as Kyrle's Disease." 28th Symposium of the International Society of Dermatopathology, Paris (France), 14-17 November 2007.
8. "Diagnosis in pemphigus - from Microbiology to Molecular Biology." 6th National Conference of Society of Dermatology, Venerology & Leprosy of Nepal, Dhulikhel (Nepal), 22 March 2008.
9. "Intralesional sclerotherapy for vascular malformations.' Presented as award paper at 36th National Conference of Indian Association of Dermatologists Venereologists & Leprologists, Chandigarh, 24-27 January 2008.
10. "Clinico-Epidemiological Study of Pure Neural Leprosy." 17th International Leprosy Congress, Hyderabad, 30 January – 4 February 2008.

Dr. G. Sethuraman

1. "Molecular Analysis of Lipoid Proteinosis in three Indian Families." 21st World Congress of Dermatology, Buenos Aires (Argentina), 1-5 October.

Dr. Somesh Gupta

1. "Sexually Transmitted Infections in Tropics." 21st World Congress of Dermatology, Buenos Aires (Argentina), 1-5 October 2007.
2. "Genital Ulcer Disease and HIV: Partners in Crime." 15th International Union against Sexually Transmitted Infections - Asia-Pacific Congress, Dubai (United Arab Emirates), 3-6 February 2008.

RESEARCH**Funded Projects****Ongoing**

1. A prospective randomized, double-blind, placebo-controlled, parallel group, multi center, 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. (V. K. Sharma). Funded by Aspreva Pharmaceuticals, USA, Funds: Rupees 12,000 per patient; 2005-2008.

2. 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 (V. K. Sharma). Funded by Clincyte, USA; Funds: Rs. 5 lakhs; March 2006-June 2008.
3. Evaluation of cyctophosphamide pulse therapy as adjuvant in the management of pemphigus (V. K. Sharma). Funded by Indian Council for Medical Research (ICMR); Funds: Rs. 3 lakhs; October 2007-October 2010.
4. Randomized clinical trial of azathioprine weekly pulse versus daily azathioprine for the treatment of Parthenium dermatitis (K. K. Verma, G. Sethuraman). Funded by ICMR. Funds: Rs. 12 lakhs; August 2006 – July 2009.
5. Clinicopathological correlation of cutaneous vasculitis (G. Sethuraman). Funded by: AIIMS, Funds: Rs. 1 lakh.
6. Comparison of efficacy of transplantation of basal cell layer enriched epidermal suspension in patients with stable vitiligo vulgaris and segmental vitiligo (Somesh Gupta). Funded by: AIIMS, Funds: Rs. 1 lakh.

Collaborative Projects

Ongoing

1. Evaluation of topical cyclosporine in ocular involvement in Stevens-Johnson syndrome (K.K. Verma) (Department of Ophthalmology, Dr. R P Centre) (Funded by ICMR).
2. A cross-sectional study of infectious disease prevalence among prison inmates in the Tihar jail complex Delhi (K. K. Verma) (Departments of Medicine and Microbiology).
3. Dermatological complications in renal transplant recipient patients - A follow up study (K. K. Verma) (Department of Nephrology).
4. Role of electron beam radiation therapy for the treatment of mycosis fungoides (K. K. Verma) (Department of Radiation Oncology).
5. 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. (B. K. Khaitan) (Department of Endocrinology) (Funded by AIIMS).

Departmental Projects

Ongoing

1. Evaluation of cyclophosphamide pulse in treatment of pemphigus (V. K. Sharma)
2. Desmoglein 1 and 3 antibodies in pemphigus (V. K. Sharma)
3. Psoralen (PUVA) therapy in treatment of psoriasis: cost-effectiveness of PUVA versus Psoralen and sunlight (PUVA SOL) (V. K. Sharma)
4. Sepsis in dermatology ward (V. K. Sharma)
5. Segmental vitiligo : Response to tacrolimus (V. K. Sharma)
6. Comparative efficacy of 40 mg betamethason-G monthly and equivalent doses of biweekly pulse in treatment of alopecia areata (V. K. Sharma)

7. Clinical response of urticaria to levocetirizine and autologous serum skin test positivity (ASST) (V. K. Sharma)
8. Clinical and histopathological profile of PMLE (V. K. Sharma)
9. Psychosocial effects of vitiligo (V. K. Sharma)
10. Comparison of dexamethasone-cyclophosphamide and cyclophosphamide pulse in pemphigus (V. K. Sharma)
11. Evaluation of mucocutaneous disorders in HIV infected patients and their correlation with CD4 lymphocytes (K. K. Verma)
12. CO₂ laser as a therapeutic modality for the treatment of epidermal and sebaceous nevi (K. K. Verma)
13. Evaluation of CO₂ laserabrasion as a therapeutic modality in extensive facial angiofibromas in tuberous sclerosis and acne scars (K. K. Verma)
14. Azathioprine as a corticosteroid sparing agent in the treatment of air borne contact dermatitis (K. K. Verma)
15. To evaluate the role of immunosuppressive drugs for the treatment of chronic urticaria (K. K. Verma)
16. Long-term safety and toxicity of azathioprine in patients of air-borne contact dermatitis (K. K. Verma)
17. Imiquimod cream for the treatment of basal cell carcinoma (K. K. Verma)
18. Imiquimod cream for the treatment of Bowen's disease (K. K. Verma)
19. Weekly azathioprine pulse (WAP) therapy for the treatment of extensive plaque psoriasis (K. K. Verma)
20. A study of the psychosocial effects of vitiligo (M. Ramam, B. K. Khaitan)
21. Evaluation of mRNA PCR for the diagnosis of cutaneous tuberculosis (M Ramam)
22. Dexamethasone – cyclophosphamide pulse therapy in pemphigus (B K Khaitan)
23. A randomized study to evaluate efficacy and safety of 0.1% tacrolimus ointment vs. 0.05% fluticasone propionate cream in patients with segmental vitiligo (B K Khaitan)
24. A study to characterize segmental vitiligo (B K Khaitan)
25. A study of clinicopathological features of photosensitive lichenoid eruption (B K Khaitan)
26. A study to evaluate the efficacy of 0.1% tacrolimus ointment in patients with lichen sclerosus et atrophicus (B. K. Khaitan)
27. Effects of epilation by waxing on skin (B. K. Khaitan)
28. Cutaneous vasculitis- etiological and clinicopathological correlation (B. K. Khaitan)
29. Study on isolation, characterization and evaluation of differentiation potential of hair follicle stem cells (B. K. Khaitan)
30. Clinico-epidemiological study of palmoplantar psoriasis (Sujay Khandpur)
31. Comparison of coal tar versus steroid-coal tar combination in palmoplantar psoriasis (Sujay Khandpur)
32. Comparison of topical PUVASOL versus steroid-coal tar combination in palmoplantar psoriasis (Sujay Khandpur)
33. Comparison of daivobet ointment versus coal tar in chronic plaque psoriasis (Sujay Khandpur)
34. Comparison of dexamethasone cyclophosphamide pulse with daily cyclophosphamide versus cyclophosphamide pulse with daily steroid in pemphigus vulgaris (Sujay Khandpur)
35. Utility of antigen detection in Indian patients in pemphigus vulgaris (Sujay Khandpur)

36. Comparison of ELISA test versus immunoblotting in diagnosis of pemphigus vulgaris (Sujay Khandpur)
37. Utility of ELISA test in the detection of relapse in pemphigus vulgaris (Sujay Khandpur)
38. Role of sclerotherapy in vascular malformations (Sujay Khandpur)
39. Clinico-epidemiological study of pure neural leprosy (Sujay Khandpur)
40. Evaluation of mycophenolate mofetil as an adjuvant to corticosteroids in pemphigus vulgaris (Sujay Khandpur)
41. Role of cyclophosphamide pulse as adjuvant therapy in pemphigus vulgaris (Sujay Khandpur)
42. Clinico-histological and etiological study of acquired palmoplantar keratoderms (Sujay Khandpur)

Completed

1. Evaluation of patients with multiple drug hypersensitivity (M Ramam)
2. Characterisation of the diagnostic clinical features of segmental vitiligo (M Ramam)
3. Randomised clinical trial of tacrolimus and fluticasone in the treatment of segmental vitiligo (M Ramam)

PUBLICATIONS

1. Baba CS, Sharma PK, Deo V, Pal S, Sethuraman G, Gupta SD, Makharia GK. Association of Ehler's Danllos syndrome and solitary rectal ulcer syndrome. *Ind J Gastroenterol* 2007;26:149-50.
2. Bansal A, Kumari R, Ramam M. Cross reaction between two azoles used for different indications. *Ind J Dermatol Venereol Leprol* 2008;74:81.
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11. Malhotra A, 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. *JAAD* 2008; 58:596-602
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21. Sethuraman G, Sharma VK, Salotra P. Indian mucosal leishmaniasis due to *Leishmania Donovanii*. *New Eng J Med* 2008; 358:313-5.
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25. Sharma VK, Sethuraman G. Parthenium dermatitis. *Dermatitis* 2007; 18:183-90.
26. Tejasvi T, Sharma VK, Kaur J. Determination of minimal erythematous dose for narrow band-ultraviolet B radiation in north Indian patients: comparison of visual and DermoSpectrometer readings. *Indian J Dermatol Venereol Leprol* 2007; 73:97-9.
27. Verma KK. Type I hypersensitivity to parthenium hysterophorus in patients with parthenium dermatitis. *Indian J Dermatol Venereol Leprol* 2007; 73:265.
28. Verma KK, Mahesh R, Srivastava P, Ramam M. Comparison of effectiveness and safety of azathioprine versus betamethasone for the treatment of parthenium dermatitis. *Brit J Dermatol* 2007; 157 (Suppl 1):9.

BOOKS

1. Sharma VK (Chief Editor), Khandpur S (Co-Editor). *Handbook of Urticaria*. 1st edition. New Delhi: Massey Art Press, 2008.
2. Khaitan BK, Bansal M. Topical Corticosteroids and Other Topical Immunomodulators. In: Thomas J, Jerajani HR, Amladi S (Eds.). *IADVL Drug Formulary (IDF)*. Indian Association of Dermatologists, Venereologists and Leprologists, 2007; pp 129-34.
3. Khaitan BK, Tejaswi T, Bhat R. Sexually transmitted diseases in women. In: Shamsunder. S. *Manual of Gynaecology*. New Delhi: CBS Publishers and Distributors, 2007; pp 119-44.

AWARDS/HONOURS/SIGNIFICANT EVENTS

Dr. V.K. Sharma is the National President Elect of the Indian Association of Dermatologists, Venereologists & Leprologists. He was awarded the Fellowship of National Academy of Medical Sciences, and the M.A Wali Oration titled “Recent Advances in the Management of Clamydial Infections” at the 31st National Conference of IASSTD & AIDS at Rohtak (26-28 October 2007). He is the Editor-in-Chief of the “Guidelines for Stevens-Johnsons Syndrome & Toxic Epidermal Necrolysis and Psoriasis” (IADV&L); Textbook and Atlas of STD & AIDS” (IASSTD & AIDS); and the “Hand Book of Urticaria” (New Delhi: Massey Art Press). He is the Chairman of the Therapeutic Guidelines Committee of the Indian Association of Dermatologists, Venereologists & Leprologists; and the Technical Resource Group for Sexually Transmitted Infection for National AIDS Control Programme Phase III. He is on the editorial Board of the Journal of European Society of Contact Dermatitis named “Contact Dermatitis” and the Journal of American Society of Contact Dermatitis named “Dermatitis”. He is a member of the Academic Committee of the MCI-Issue Committee of the IADVL. He was the Organizing Chairman of the AIIMS Dermatology Update 2007: Urticaria, Drug reactions, Acne & Psoriasis, New Delhi (14-15 April 2007). He was the Chairperson and Chief Convener for the symposium “Plant Dermatitis: Epidemiology and Treatment” of the CODFI South East Asia Contact Dermatitis Workshop, Kolkata (22 April 2007). He was also the Chairperson of the session on “Pediatric Psoriasis & its Management” of the Society for Pediatric Dermatology, New Delhi (8 April 2007); the session on “Hair and Nail” at the 21st World Congress of Dermatology at Buenos Aires, Argentina (1-5 October 2007); the session on “How to Treat Difficult Atopic Dermatitis” of the Indian Society of Pediatric Dermatology at Thrissure, (17-18 November 2007), the session on “Anecdotal Treatment in Dermatology” of the Maharashtra Branch of Indian Association of Dermatologists, Venereologists and Leprologists at Mumbai (8-9 December 2007); a session at the 36th National Conference of Indian Association of Dermatologists, Venereologists, Leprologists at Chandigarh (24-27 January 2008); and a session on “Thymidine vs non-thymidine containing backbone” at HIV Congress-2008 at Mumbai (21-23 March 2008). He was a resource person for the Indian Acne Alliance Third Meeting at Mumbai (26 August 2007). He was the expert for selection of Professor and Lecturer at Banaras Hindu University, Varanasi and of Professor and Associate Professor at Postgraduate Institute of Medical Education and Research, Chandigarh. He was the external examiner for MD (Dermatology & Venereology) examination at the Maharaja Sayajirao University of Baroda at Vadodara and at Dharan, Nepal. He is the external expert for the proposal entitled “Centre of excellence for skin pigmentation and melanocyte-keratinocyte biology” of the Department of Biotechnology, Ministry of Science & Technology.”

Dr. Kaushal K Verma received the Professor Sardari Lal Award in Venereology for the year 2007 by the Indian Association of Dermatologists, Venereologists and Leprologists (DSB). He was elected to the post of the President of the Contact and Occupational Dermatoses Forum of India (CODFI) for the years 2008-2010; the post of Vice – President of the Pemphigus and Pulse Therapy Foundation of India for the years 2007-2009; and the post of Hon. Secretary - International Union against Sexually Transmitted Diseases – Asia Pacific (IUSTI-AP) for the years 2008-2010.

Dr. M. Ramam is the member of the editorial board of the Indian Journal of Dermatology, Venereology and Leprology and the Indian Association of IADVL Textbook of Dermatology, Venereology and Leprosy

Dr. Binod K Khaitan was awarded the Dr. B M Ambady Oration during the 36th National Conference of IADVL held at Chandigarh (25 January, 2008). He is a member of the Thesis Evaluation Committee of the IADVL (2006, 2007). He is a member of the Editorial Board of the Indian Journal of Dermatology, Venereology and Leprology, and a peer reviewer for the Indian Journal of Dermatology, Venereology and Leprology; National Medical Journal of India; Indian Journal of Pediatrics; Journal of Royal College of Physicians and Surgeons, Pakistan. He is a member of the Expert Committee, to formulate OSCE in Dermatology for the National Board of Examinations. He chaired the session on “Symposium on vitiligo-I” at the 2nd conference of the Asian Society for Pigment Cell Research in Singapore (6-8 July 2007). He was a faculty and a member of the organizing committee of the 4th International CME on Dermatopathology held at New Delhi (30 November - 2 December 2007). He was the examiner for MD examinations at RNT Medical College, Udaipur. He is the President of the Faculty Association of AIIMS. His biodata was invited for incorporation in the “Top 100 Health Professionals 2008” by the International Biographical Centre, Cambridge, England and was incorporated in Marquis Who’s Who in Asia 1st Edition 2007.

Dr. Sujay Khandpur is a member of the Therapeutic Guidelines Committee of IADVL. He was awarded the ILDS scholarships for World Congress of Dermatology at Buenos Aires, Argentina 2007 and the International Society of Dermatopathology Fellowship to Paris, France 2007. He is a peer reviewer for the Indian Pediatrics, the Indian Journal of Dermatology and the Dermatology.

Dr. G. Sethuraman was awarded a Fellowship in Pediatric Dermatology at the Children’s Memorial Hospital, Northwestern University Feinberg School of Medicine, Chicago, USA (April 9, 2007 to April 8, 2008). Dr. Sethuraman was awarded the Hargobind Medical Foundation Fellowship Award (2006-2007); the BOYSCAST Fellowship award (2007-2008) of the Department of Science & Technology, Government of India; and the ILDS scholarship 2007 for World Congress of Dermatology at Buenos Aires, Argentina. Dr. Sethuraman is the Associate Editor of the Indian Journal of Pediatric Dermatology (2007) and a peer reviewer for the British Journal of Dermatology, Clinical and Experimental Dermatology, and the Indian Journal of Dermatology Venereology & Leprology.

9.10 Endocrinology and Metabolism

Professor and Head

A.C. Ammini

Professor

N. 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. Postgraduate students from MD (Internal Medicine) comes for one month posting in the department of Endocrinology & Metabolism

Long & Short term Training

- Five candidates completed their DM and four new candidates joined the department for the DM course.
- One student joined the PhD (Endocrinology) course.
- Two students joined the Department for short term training of three months and eight students joined for six months training.

Continuing Medical Education (CME)

Lectures delivered by departmental faculty, residents and staff

The faculty and residents of the department participated in and delivered several lectures/ presented several papers in the continuing medical education programmes, workshops, seminars, and national and international meetings of Endocrinology and Diabetes mellitus.

Dr R. Khadgawat

- “Evaluation of a Case of Short Stature.” 1st Annual CME on Pediatric Endocrinology organized by Indian Academy of Pediatrics, Twin Cities Branch, Hyderabad, 22 July 2007.
- “Diagnosis of Osteoporosis” in CME on Osteoporosis and Osteoarthritis organized by Institute of Medical Sciences, Nagpur, 14 August 2007

National and International Conferences

Dr R. Goswami

- “Potential Significance of Vitamin D Deficiency in Indians.” International update on Bone and Mineral Disorders, Tirupati, 29 November 2007.

- “Clinical Disorders of the Calcium Sensing Receptor in Indians.” in the Annual Meeting of the Endocrine Society of India (ESICON 2007), Tirupati, 30 November – 1 December 2007.
- “Sporadic Idiopathic Hypoparathyroidism in India - New Concept.” Annual Meeting of the Endocrine Society of India (ESICON 2007), Tirupati, 30 November– 1 December 2007.
- “Postpartum Pituitary Dysfunction in India.” Annual Meeting of the Endocrine Society of India (ESICON 2007) Tirupati, 30 November – 1 December 2007.
- “Thyroid Autoimmunity and Polyglandular Endocrinopathies in India.” Annual Meeting of the Thyroid Association of India, Chandigarh, 9–10 February 2008.

Dr R. Khadgawat

- “Childhood Obesity in India.” 5th Annual Conference of the All India Association for Advancing Research in Obesity, Ahmedabad, 26–27 May 2007.
- “Hypophosphatemic Osteomalacia.” 3rd National Conference of Indian Society for Bone & Mineral Research (ISBMR) & 1st Conference of South Asian Society for Bone & Mineral Research (SASBMR), New Delhi, 29–30 September 2007.
- “Recovery Pattern in Bone Mineral Density after Treatment in Vitamin D Deficiency Patients” (Khadgawat R, Brar KS, Gupta N.). 14th Congress of the Asian Federation of Endocrine Societies, Kuala Lumpur (Malaysia), 30 November – 4 December 2007.
- “Diagnosis of Growth Hormone Deficiency.” Indian Academy of Pediatrics National Conference, Bhubneshwar, 17–20 January 2008.

RESEARCH

Funded Projects

Completed

- 1 Post-menopausal Evaluation and Risk Reduction and Lasorfoxifene: A Multicentric Trial (A. C. Ammini). Funded by Pfizer India. Funds: Rs. 50 lakhs; December 2007.
- 2 Immunogenetic and Humoral Profile of Diabetes Mellitus in Asian Indians (Nikhil Tandon). Funded by INSERM-ICMR programme of the Indian Council of Medical Research (ICMR). Funds: Rs. 29 lakhs; 2004-2007.
- 3 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). Funding agency – MSD Pharmaceuticals.
- 4 A Randomized, Double-Blind, Placebo-Controlled, Multicentric Clinical Study to Evaluate the Safety and Efficacy of Rimonabant Tablet in Obese Subjects (Rajesh Khadgawat). Funded by Torrent Pharmaceuticals. Funds: Rs. 50 thousand; 2007.
- 5 Vitamin D Status of Subjects Residing in Rural North India (R. Goswami). Funded by Dr Ramalingaswamy Foundation. Funds: Rs 3 lakhs; 2006-2007.

Ongoing

- 1 Demographic and Clinical Profile of Young Diabetics in a Tertiary Care Hospital in North India (A. C. Ammini). Funded by ICMR. Funds: Rs. 14,45,000; March 06- May 08.
- 2 Comparison of efficacy of management of metformin and spiranolactone in the management of polycystic ovarian disease (A. C. Ammini). Funded by ICMR. Funds: Rs.10,43,000; 2006-2009
- 3 A One-Year Multicentre, International, Randomized, Double Blind Study with Comparison of

- Benflurex versus Pioglitazone in Combination with Sulfonylurea Administration Orally for Treatment of Type 2 Diabetes (A. C. Ammini). Funded by Serdia Pharmaceuticals. Rs. 5 lakhs; 2007-2008.
- 4 Reboxitine versus Routine Care in Patients with Painful Diabetic Peripheral Neuropathy (A. C. Ammini). Funded by Pfizer global research. Funds: Rs. 5 lakhs; 2007-2008.
 - 5 Effects of Arzoxifene on Vertebral Fracture Incidence and Invasive Breast Carcinoma in Post Menopausal Women with Osteoporosis or Low Bone Mineral Density (A. C. Ammini). Funded by Quintiles Research. Funds: Rs. 80 Lakhs; till December 2009.
 - 6 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.
 - 7 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.
 - 8 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.
 - 9 Reduction in the Occurrence of Threatening Diabetic Macular Edema (B7A-MC-MBDL) (Nikhil Tandon). Funded by Eli Lilly Ltd. Funds: Rs. 5 lakhs; 2005–2008.
 - 10 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. Funds: Rs. 141 lakhs; 2005-2008.
 - 11 Role of Oral Vitamin D as an Adjunct Therapy in Category I Pulmonary Tuberculosis along with Assessment of Immunological Parameters (R. Goswami). Funded by Department of Biotechnology (DBT). Funds: Rs 91 lakhs; 2006–2009.
 - 12 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 (R. Goswami). Funded by Defence Research and Development Organisation. Funds: Rs 9.75 lakhs; 2006–2009.
 - 13 Prevalence and Significance of Celiac Disease in Patients with Type 1 Diabetes (R. Goswami). Funded by ICMR. Funds: 19.0 lakhs; 2008–2010.
 - 14 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 Sustained Daily Therapy with Genotropin in Treatment Naïve Children with Growth Failure due to Insufficient Secretion of Endogenous Growth Hormone (Rajesh Khadgawat). Funded by LG life Sciences. Rs. 5 lakhs; 2007–2009.
 - 15 Correlation between First Trimester Glucose Screening and Serum Insulin Levels with Development of Gestational Diabetes Mellitus in Pregnancy (Rajesh Khadgawat). Funded by ICMR. Funds: Rs 9 lakhs; 2007–2009.
 - 16 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 (Viveka P. Jyotsna). Funded by ICMR. Funds: Rs. 25 lakhs; for 3 years.
 - 17 Bone Health in Patients of Hyperthyroid Graves Disease in Relation to Duration of Thyrotoxicosis and Improvement after Patient becomes Euthyroid (Viveka P. Jyotsna). Funded by AIIMS. Funds: Rs. 1 lakh; 2007–2008.

PUBLICATIONS

Journals

1. Desai A, Tandon N. Management of type 2 diabetes mellitus with oral antihyperglycaemic therapy. *Nat Med J India* 2007; 20:192–8.
2. Eunice M, Philibert P, Kulshreshtha B, Audran F, Paris F, Khurana ML, Pulikkanath PE, Kucheria K, Sultan C, Ammini AC. Molecular diagnosis of 5 alpha-reductase-2 gene mutation in two Indian families with male pseudohermaphroditism. *Asian J Androl* 2007; Epub (Ahead of Print).
3. Goswami R, Mishra SK, Kochupillai N. Prevalence and potential significance of vitamin D deficiency In Asian Indians. *Indian J Med Res* 2008; 127:221–30.
4. Goswami R, Gupta N, Ray D, Singh N, Tomar N. Pattern of 25-hydroxy vitamin D response at short (2 month) and long (1 year) interval after 8 weeks of oral supplementation with cholecalciferol in Asian Indians with chronic hypovitaminosis D. *Br J Nutr* 2008; 6:1–4.
5. 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 (Oxf)* 2008; 68:258–63.
6. Kandpal H, Seith A, Philip J, Gupta R, Ammini AC. Partial duplication of the hypophysis in adult patients: report of 2 cases. *J Comput Assist Tomogr* 2007; 31:365–7.
7. Kumar R, Bhat A, Bamezai RN, Shamsi MB, Kumar R, Gupta NP, Ammini AC, *et al.* Necessity of nuclear and mitochondrial genome analysis prior to assisted reproductive techniques/ intracytoplasmic sperm injection. *Indian J Biochem Biophys* 2007; 44:437–42.
8. Kumar R, Goswami R, Agarwal S, Israni N, Singh SK, Rani R. Association and interaction of the TNF-alpha gene with other pro- and anti-inflammatory cytokine genes and HLA genes in patients with type 1 diabetes from North India. *Tissue Antigens* 2007; 69:557–67.
9. Makharia GK, Baba CS, Khadgawat R, Lal S, Tevatia MS, Madan K, Dattagupta S. Celiac disease: variations of presentations in adults. *Indian J Gastroenterol* 2007; 26:162-6.
10. Makharia GK, Tandon N, Stephen Nde J, Gupta SD, Tandon RK. Primary intestinal lymphangiectasia as a component of autoimmune polyglandular syndrome type I: a report of 2 cases. *Indian J Gastroenterol* 2007; 26:293–5.
11. Marwaha RK, Tandon N, Desai A, Kanwar R, Grewal K, Aggarwal R, Sastry A, Singh S, Ganguly SK, Mani K. Reference range of thyroid hormones in normal Indian school-age children. *Clin Endocrinol (Oxf)* 2008; 68:369–74.
12. Mishra SK, Gupta N, Goswami R. Plasma adrenocorticotropin (ACTH) values and cortisol response to 250 and 1 microg ACTH stimulation in patients with hyperthyroidism before and after carbimazole therapy: case-control comparative study. *J Clin Endocrinol Metab* 2007; 92: 1693-6.
13. Nayak B, Guleria S, Varma M, Tandon N, Aggarwal S, Bhowmick D, *et al.* Effect of bisphosphonates on bone mineral density after renal transplantation as assessed by bone mineral densitometry. *Transplant Proc* 2007; 39:750–2.
14. Prasad P, Kumar KM, Ammini AC, Gupta A, Gupta R, Thelma BK. Association of dopaminergic pathway gene polymorphisms with chronic renal insufficiency among Asian Indians with type-2 diabetes. *BMC Genet* 2008; 22:9-26.
15. Prasad P, Tiwari AK, Kumar KM, Ammini AC, Gupta A, Gupta R, Thelma BK. Association of TGFbeta1, TNFalpha, CCR2 and CCR5 gene polymorphisms in type-2 diabetes and renal insufficiency among Asian Indians. *BMC Med Genet* 2007; 12:8-20.

16. Praveen EP, Desai AK, Khurana ML, Philip J, Eunice M, Khadgawat R, Kulshreshtha B, Kucheria K, Gupta DK, Seith A, Ammini AC. Gender identity of children and young adults with 5 alpha-reductase deficiency. *J Pediatr Endocrinol Metab* 2008; 21:173–9.
17. Priya G, Jyotsna VP, Gupta N, Chumber S, Bal CS, Karak AK, Seth A, Ammini AC. Clinical and laboratory profile of primary hyperparathyroidism in India. *Postgrad Med J* 2008; 84:34–9.
18. Puri S, Marwaha RK, Agarwal N, Tandon N, Agarwal R, Grewal K, Reddy DH, Singh S. Vitamin D status of apparently healthy schoolgirls from two different socioeconomic strata in Delhi: relation to nutrition and lifestyle. *Br J Nutr* 2008; 99:876–82.
19. Ray D, Goswami R, Dadhwal V, Goswami D, Banerjee U, Kochupillai N. Prolonged (3-month) mycological cure rate after boric acid suppositories in diabetic women with vulvovaginal candidiasis. *J Infect* 2007; 55:374–7.
20. Sethuraman G, Khaitan BK, Dash SS, Chandramohan K, Sharma VK, Kabra M, Verma KK, Goswami R, Thulkar S. Ichthyosiform erythroderma with rickets: report of five cases. *Br J Dermatol* 2008; 158:603–6.
21. Tiwari AK, Prasad P, B K T, Kumar KM, Ammini AC, Gupta A, Gupta R. Oxidative stress pathway genes and chronic renal insufficiency in Asian Indians with Type 2 diabetes. *J Diabetes Complications* 2008; Epub (Ahead of print). PMID: 18413200

Chapters in Book

1. Goswami R. Calcium sensing Receptor. In: Teotia SPS, Teotia M (Eds.). *Nutritional and Metabolic Bone and Stone Disease: An Asian Perspective*. Delhi: CBS Publishers, pp 120–7
2. Goswami R. Magnesium homeostasis. . In: Teotia SPS, Teotia M (Eds.). *Nutritional and Metabolic Bone and Stone Disease: An Asian Perspective*. Delhi: CBS Publishers, pp 140–8.
3. Goswami R. Hypoparathyroidism. In: Teotia SPS, Teotia M (Eds.). *Nutritional and Metabolic Bone and Stone Disease: An Asian Perspective*. Delhi: CBS Publishers, pp 530–43.

PATIENT CARE

OPD activity

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

General Endocrine OPD

New cases	8820
Old cases	21,168
Diabetes of Young Clinic (DOY)	1536

Pediatric & Adolescent Endocrinology Clinic (PAEC)

New cases	250
Old cases	800

Total number of Dual Energy X-Ray Absorptiometry scans done: 1705

LABORATORY INVESTIGATIONS

The total number of hormone assays done during this period was 37,849 while metabolic laboratory of the department did 20,427 investigations. The break-up of these is given below:

Hormone	Number of Samples Assayed
1. T4	6552
2. TSH	9998
3. TPO	3217
4. LH	1233
5. FSH	1357
6. PRL	1300
7. Testosterone	1268
8. Cortisol	2643
9. 17 - OH Progesterone	286
10. DHEAS	433
11. ACTH	875
12. 25 - OH Vitamin. D	2069
13. PTH	2043
14. Insulin	2731
15. C – Peptide	1266
16. GAD Antibody	260
17. Growth hormone	330
18. Free T4	771
19. Free T3	15
20. Estradiol	39
21. Osteocalcin	63
TOTAL	37,849

Investigation done in the Metabolic Lab	Number of Samples Assayed
1. Blood glucose	11,075
2. Glycosylated Hemoglobin	5839
3. Urinary Creatinine	1451
4. Urinary Albumin	1451
5. Urine PH	160
6. Osmolality	301
7. Calcium	50
8. Phosphorus	50
9. Alkaline Phosphatase	50
Total	20,737

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Dr R Goswami was elected as a fellow of the Indian Academy of Sciences (Bangalore). He is a peer reviewer for Clinical Endocrinology (Oxford), Diabetes Care, Journal of Postgraduate Medicine, Indian Journal of Medical and Pediatric Oncology, Mycoses and Immunology.

9.11 Forensic Medicine

Professor and Head

T.D. Dogra

Additional Professor

R.K. Sharma

O.P. Murty

D.N. Bhardwaj

Associate Professor

S.K. Gupta

Assistant Professors

Millo Tabin

Sanjeev Lalwani (JPNATC)

Adarsh Kumar (JPNATC)

Scientist II

Anupuma Raina

Chemist

A.K. Jaiswal

EDUCATION

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

Continuing Medical Education

A symposium was organized on “Awareness, Preparedness & Mitigation in Exposure to Domestic & Industrial Chemicals (APMEDIC-2007)” in collaboration with department of Pharmacology, AIIMS.

Lectures

The departmental faculty/officers participated in training programmes organized by the Academy of Central Bureau of Investigation (CBI), National Institute of Criminology & Forensic Sciences (NICFS), Amity Institute, Delhi Judicial Academy, Delhi Medical Association (DMA) and National Institute of Public Cooperation & Child Development (NIPCCD). Lectures and demonstrations were held for CBI officials, police officers, judicial officers, medical officers and forensic science experts from all over country.

Departmental Projects

Ongoing

1. Inferring genetic diversity and molecular relatedness among the Indian Saraswat community at various short tandem repeat (STR) loci.
2. A comprehensive autopsy study of sudden natural deaths in South Delhi.
3. Comprehensive study of unnatural deaths in children and women.
4. Comprehensive study of skeletal injuries in fatal road traffic accidents.
5. Auditing of asphyxial deaths.

6. Comprehensive study of fatal poisonings in South Delhi.

PUBLICATIONS

Journals

1. Behra C, Rautji R, Dogra TD. An unusual suicide with parenteral copper sulphate poisoning: a case report. *Med Sci Law* 2007; 47:357–8.
2. Behra C, Rautji R, Lalwani S, Dogra TD. Elderly homicide in South Delhi (1996–2005). *Indian J Gerontology* 2007; 21:362–7.
3. Behra C, Rautji R, Lalwani S, Dogra TD. Retrospective study of homicide in South Delhi (1996–2005). *Indian Internet J Forensic Med Toxicol* 2007; 5:39–42. [www.icfmt.org/index 2 htm](http://www.icfmt.org/index2.htm)
4. Behra C, Rautji R, Lalwani S, Millo T. Accidental asphyxial deaths (1996-2005): A study from South Delhi. *J Forensic Med Toxicol* 2007; 24:15-8
5. Behra C, Rautji R, Dogra TD. Full term normal delivery following suicidal hanging: A case report. *Forensic Sci Int* 2007; 169:1–2
6. Behra C, Rautji R, Dogra TD. Decapitation along with egg shelling of skull in road traffic accident: A case report. *Med Sci Law* 2008; 48:87–8
7. Behra C, Rautji R, Sharma RK. Suicide in elderly: A study from South Delhi (1996–2005) *Ind J Forensic Med Toxicol* 2007; 1:13–8
8. Behra C, Rautji R, Singh S, Dogra TD. Fatal pyogenic liver abscess in children: a case report. *Indian Internet J Forensic Med Toxicol* 2007; 5:31-3 [www. icfmt. Org/index 2 htm](http://www.icfmt.Org/index2.htm)
9. Dogra TD, Leenars A, Rautji R, Lalwani S, Girdhar S. Menstruation and suicides: an exploratory study. *Psychol Rep* 2007; 101:430–4
10. Gupta M, Moon DV, Mohrana M, Lal N, Jaiswal AK. Determination of antimony in forensic samples by AAS. *Int J Forensic Med Legal Med* 2007; 9:1–2
11. Jaiswal AK, Millo T, Murty OP. Toxicology Manual Series – Article II; Extraction, isolation & clean up methods for barbiturates & tranquilizers from biological material. *Int J Med Toxicol Legal Med* 2007; 9:17–21
12. Jaiswal AK, Millo T, Behra C. Do's & Don'ts for different personnel involved in crime investigation of poisoning deaths in India. *J Forensic Med Toxicol* 2007; 24:55–9
13. Jaiswal AK, Millo T, Murty OP. Toxicology Manual Series; Article III: Extraction/isolation methods of metallic, volatile and cyanide poisons from biological samples. *Int J Med Toxicol and Legal Med* 2007; 10:30–2
14. Jaiswal AK, Millo T, Mishra S, Rai A, Murty OP. Planning and designing of modern forensic toxicology laboratory. *J Forensic Med Toxicol* 2007; 24:40–57
15. Jaiswal AK, Khanna M, Millo T, Gupta M, Gupta RN. Analysis of Finit in blood sample using thin layer chromatography. *Amity J Behav Forensic Sci* 2007; 3:61–6
16. Kumath M, Kumar A. Bee sting induced fatal anaphylaxis – a case report. *Int J Med Toxicol Legal Med* 2007; 9:40–3
17. Millo T, Jaiswal AK, Behra C, Bhardwaj DN, Murty OP. Medico-legal aspects of alcohol intoxication in India – a review. *Amity J Behav Forensic Sci* 2007; 3:61–7
18. Millo T, Behra C, Singh SR, Murty OP. Suicidal hanging with face masks and bound limbs: three case reports. *J Forensic Med Toxicol* 2007; 24:36–8

19. Millo T, Sharma RK, Murty OP, Bhardwaj DN, Murmu LR, Aggarwal P. Study of incidence of alcohol use in road traffic accidents in South Delhi in fatal cases. *Ind J Forensic Med Toxicol* 2008; 2:29–32
20. Millo T, et al. Incidence of alcohol related non fatal road traffic accidents in South Delhi, India. *Mal J Forensic Path Sci* 2007; 2:40–51
21. Mittal S, Garg S, Mittal MS, Adarsh K. Medico-legal knowledge amongst medical fraternity. *Int J Med Toxicol Legal Med* 2007; 9:3–5
22. Mittal S, Mittal S, Mittal MS, Adarsh K. The myths of Hippocratic Oath. *Medico-legal Update* 2008; 8:1–2
23. Patro BK, Behra C, Sharma RK. Workmen's Compensation Act- some reflections. *Indian J Forensic Med Toxicol* 2007; 1:31–6
24. Patro BK, Behra C, Millo T, Murty OP. Management of human remains – a public health approach. *J Forensic Med Toxicol* 2007; 24:20–3
25. Singh S, Parsaik AK, Nagraj C, Joshi AK, Kumath M, Kumar A. Comparison of body region prevalence of injury between medico-legal and non medico-legal cases. *Int J Med Toxicol Legal Med* 2007; 10:41–4

Books

1. Sharma RK. Concise Text Book of Forensic Medicine & Toxicology. 2nd ed. New Delhi: Elsevier India Pvt. Ltd., 2007.
2. Sharma RK. Practical & Viva in Forensic Medicine & Toxicology. 1st ed. New Delhi: Vitasta Publishing Pvt. Ltd., 2007.
3. Sharma RK. Medico-legal aspects of patient care. 3rd edition. New Delhi: Peepee publishers & distributors Pvt. Ltd., 2007.

PATIENT RELATED SERVICES

Emergency Services: The department is providing round the clock coverage to the casualty for medico-legal cases e.g. injury, sexual offences, poisoning and other complicated medico-legal cases. The department is attending all the calls pertaining to medical examination in police and judicial custody.

Medico-legal Postmortem performed: 1597

The department provided consultation services to the CBI, crime branch and other central and state investigating agencies from all over the country in complicated medico-legal postmortem conducted at other centres. Faculty and residents also participated in board postmortems at other centres in Delhi. In addition 204 autopsies were conducted at trauma centre.

Court Attendance 1200

Doctors of the department also attended courts in CBI cases as experts. As per court directions on behalf of the Medical Superintendent, summons were attended for doctors who have left AIIMS.

Clinical Forensic Medicine

The department examined cases of age estimation, medical examination, marriage disputes, potency, DNA fingerprinting etc. referred by the court, Delhi Police and other investigating agencies. Fifty five such cases were dealt with in the year 2007–08.

DNA Fingerprinting

The department is providing training to the candidates sponsored by various universities. It is performing DNA fingerprinting test in selected medico-legal cases. Fifty six students were trained in DNA fingerprinting & toxicology and 73 samples were processed for DNA fingerprinting in the year 2007–08

Medical Toxicology

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

Community services

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

AWARDS AND HONOURS

Dr. T. D. Dogra received the Dr Jagdish Chandra Oration “Genesis & Evolution of Ethics” in Annual National Conference of Indian Congress of Forensic Medicine & Toxicology, Jawahar Lal Nehru Medical College Belgaum, Karnatka.

Dr RK Sharma was elected as the Joint Secretary of the Indian Society of Toxicology; and selected as a fellow of the National Foundation of Clinical Forensic Medicine.

Dr Adarsh Kumar was elected as Joint Secretary of the Governing Council of the Indian Academy of Forensic Medicine 2008–10.

Dr AK Jaiswal was admitted as a fellow of Academy of Sciences for Animal Welfare and the Institution of Chemists.

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

Thirteen candidates underwent training during 2007–08 for a period of 3 months to 6 months. Thirteen DM candidates and seven PhD candidates underwent long-term training.

Continuing Medical Education

1. 'International Therapeutic Endoscopy Workshop' at AIIMS, 8–9 September 2007. This workshop was attended by more than 300 delegates.
2. 13th Annual Conference of Indian Society of Parenteral and Enteral Nutrition at AIIMS, 12–14 October 2007.

National and International Conferences

The department faculty delivered 33 lectures at international and national conferences/meetings.

RESEARCH

Funded projects

Completed

1. Randomised trial of interferon with glycyrrhizin and interferon with ribavirin among patients with chronic hepatitis-C (part of a nationwide multicentric study). S.K. Acharya. Funded by ICMR for 4 years. Funds: Rs 1 crore 20 lakhs.
2. Advanced Centre for Liver Diseases (institute and different projects in liver diseases). Projects include (i) hepatitis E virus super infection among patients with chronic liver disease, (ii) economic evaluation of a surveillance program of hepatocellular carcinoma (HCC) in India, (iii) evaluating patients with cirrhosis for hepatocellular carcinoma: Value of clinical symptomatology, imaging and alpha-foetoprotein, (iv) incidence of hepatocellular carcinoma among Indian patients with cirrhosis of liver: experience from a tertiary care centre in northern India, and (vi) neutrophilic dysfunction in acute liver failure. S.K. Acharya. Funded by ICMR. Funds: Rs 2 crore.
3. Role of MCP-I gene polymorphism in acute pancreatitis. Pramod Garg. Funded by AIIMS for 2 years. Funds: Rs 1.27 lakhs.
4. Molecular epidemiology of *Helicobacter pylori*—Its implications in failure of eradication, recurrence of infection after successful eradication and route of reinfection in patients of peptic

- ulcer disease. Vineet Ahuja. Funded by Department of Science and Technology (2002–07). Funds: Rs 8.10 lakhs.
5. Comparison of diagnostic efficacy of immunohistochemistry with histology (Warthin Starry stain) and urease based tests (rapid urease test, C14 urea breath test) before and after eradication of *Helicobacter pylori* in peptic ulcer disease. Vineet Ahuja. Funded by ICMR (2003–07). Funds: Rs 4.10 lakhs.
 6. Efficacy of curcumin and its effect on cytokine profile in rectal biopsies of patients with ulcerative colitis. Vineet Ahuja. Funded by Himalaya Drug Co Ltd (2004–06). Funds: Rs 4.20 lakhs.
 7. Double blind randomized placebo-controlled study of a probiotic preparation VSL#3 for the treatment of mild to moderate ulcerative colitis. Govind Makharia. Funded by CD Pharma Ltd (2005–07). Funds: Rs 10 lakhs.

Ongoing

1. Randomised trial of pegylated interferon vs. lamivudine followed by PEG-I for 1 year among patients with chronic hepatitis B. S. K. Acharya. Funded by Fulford, India for 4 years. Funds: Rs 24 lakhs.
2. 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).
3. 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) etiology, clinical presentation and therapy among Indian patients with primary liver cancer, (iii) hepatic venous outflow tract obstruction: etiology and results of angioplasty, and (iv) probiotics for spontaneous bacterial peritonitis. S. K. Acharya. Funded by ICMR. Funds: Rs 2 crore.
4. 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 lakhs.
5. Is idiopathic chronic pancreatitis a pre-malignant disease? Pramod Garg. Funded by ICMR for 3 years. Funds: Rs 14 lakhs.
6. Comparison of single dose SPD 476 with mesalamine. Vineet Ahuja. Funded by Shire Pharma Ltd, Multicenter International trial (2005–09). Funds: Rs 8 lakhs.
7. Efficacy and tolerability of probiotics in microscopic colitis. Vineet Ahuja. Funded by CD Pharma Ltd (2006–08). Funds: Rs 7 lakhs.
8. 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 lakhs.
9. Detection of mycobacterial pathogens in patients with Crohn's disease. Govind Makharia. Funded by DBT (2007–10). Funds: Rs 35.4 lakhs
10. Screening of patients with functional bowel disease short stature, metabolic bone disease, amenorrhea and infertility for celiac disease. Govind Makharia. Funded by AIIMS (2007–08). Funds: Rs 94,000.
11. 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 (2007–10). Funds: Rs 5 lakhs.

12. A phase 2/3 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 (2007–10). Funds: Rs 5 lakhs.

Departmental projects

Completed

1. Aetiology, clinical presentation and therapy among Indian patients with primary liver cancer.
2. Role of arterial ammonia among patients with acute liver failure.
3. HBV genotype among Indian patients with HBV induced chronic liver disease.
4. Cirrhosis is reversible.
5. NASH: Indian scenario
6. Hepatitis E virus (HEV) infection in patients with cirrhosis is associated with rapid decompensation and death
7. A randomized study of biliary drainage versus conservative therapy for hilar malignant biliary obstruction due to cancer of the gallbladder.
8. Prevalence of bactobilia in patients with malignant biliary obstruction and its influence on endoscopic biliary drainage.
9. Evaluation of double balloon enteroscopy and MR enteroclysis in defining the aetiology of ulcero-constrictive diseases of small intestine.
10. A study of assessment of dietary fibre intake in patients with irritable bowel syndrome and healthy individuals.
11. Nutritional and biochemical assessment of patients with inflammatory bowel disease.

Ongoing

1. Hepatic venous outflow tract obstruction: aetiology and results of angioplasty.
2. A study of the risk factors for cancer of the pancreas.
3. Characterization, natural course and outcome of patients with organized pancreatic necrosis.
4. A study of the risk factors for cancer of the gallbladder.
5. Endoscopic biliary drainage versus conservative treatment for patients with inoperable cancer of the gallbladder with obstructive jaundice: A randomized controlled trial.
6. Dose ranging study of steroid (oral and intravenous) in patients with moderate to severe ulcerative colitis.
7. Confocal microscopy and its correlation with narrow band imaging in patients with inflammatory bowel disease and intestinal tuberculosis.
8. Prevalence of CMV as a superimposed infection in patients with ulcerative colitis.
9. Genomic diversity of *E. histolytica* isolates and identification of genotype–clinical phenotype correlations.
10. Dynamics of differential T regulatory cell expression in inflammatory bowel disease and intestinal tuberculosis.
11. Role of leukocytapheresis in steroid dependent/refractory patients with ulcerative colitis
12. Natural history of proctosigmoiditis in ulcerative colitis

13. Natural history of steroid resistant and steroid responsive patients with ulcerative colitis
14. Fox p3 mRNA expression in patients with Crohn's disease and intestinal tuberculosis
15. Prevalence of GERD in a rural and urban community in Ladakh
16. Identification and molecular characterization of bacterial flora in inflammatory bowel disease
17. Studies on metronidazole resistance in laboratory grown and patient-derived *Entamoeba histolytica*.
18. Quality of life assessment following palliative oesophageal stenting
19. A prospective study to evaluate the role of *Helicobacter pylori* in benign and malignant hepatobiliary disease
20. Differentiation of intestinal tuberculosis from Crohn's disease.
21. Characterization of tight junction proteins in patients with Crohn's disease and coeliac disease.
22. Effect of glutamine on structure and function of intestine in patients with inflammatory bowel disease.
23. Intestinal permeability in patients with cirrhosis of liver.
24. Prevalence of bacterial overgrowth and methane producers using lactulose hydrogen breath test in patients with irritable bowel disease.
25. Prevalence of coeliac disease in irritable bowel syndrome and dyspepsia.

Collaborative Projects

Completed

1. Role of endosonography in the evaluation of patients with obscure biliary obstruction (with Gastrointestinal Surgery).
2. Genetic of inflammatory bowel disease in Indian and Asian migrated to Canada (with University of Toronto, Canada).
3. Differences in the metabolites in the normal mucosa and mucosa involved in patients with inflammatory bowel disease using magnetic resonance spectroscopy (with Nuclear Magnetic Resonance).
4. Functional magnetic resonance imaging and magnetic resonance imaging in patients with achalasia cardia (with Nuclear Magnetic Resonance).
5. Short and long term outcome after cardiomyotomy in patients with achalasia cardia (with Surgery).
6. Autonomic and immune functions in inflammatory bowel disease: Effect of yogic intervention (with Physiology).
7. NOD2 and DC sign in patients with inflammatory bowel disease and tuberculosis (with Biotechnology).
8. A study of emerging parasitic agents, intestinal coccidian and microsporidia, in aetiology of malabsorption syndrome (with Microbiology).
9. PET-CT enteroclysis for evaluation of inflammatory diseases of intestine (with Nuclear Medicine).
10. Structural and functional changes in lungs in patients with achalasia cardia (with Medicine and Radiodiagnosis).

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 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. Role of diffusion MRI, MDCT and EUS in the evaluation of patients with pancreatic head mass (with Radiology).
7. Comparative evaluation of PET-CT scan and EUS in patients with suspected pancreatic malignancy (with Nuclear Medicine).
8. Randomized trial of endoscopic stenting versus cholecystojejunostomy in patients with periampullary cancer with obstructive jaundice (with Gastrointestinal Surgery).
9. Derivation of a risk score to predict risk of advanced colorectal neoplasm in Asia Pacific region. (Collaborative project involving 15 Asian countries).
10. Prevalence of osteoporosis and osteopenia in patients with celiac disease (with Endocrinology).
11. Brain activation pattern in response to visual and auditory cues in patients with irritable bowel syndrome using functional magnetic resonance imaging (with Nuclear Magnetic Resonance).
12. Detection, identification and molecular typing of intestinal coccidia and microsporidia in patients with chronic diarrhoea (with Microbiology).
13. Reintroduction of anti-tubercular drugs in ATT-induced hepatitis: A randomized controlled trial (with Medicine).
14. A comparison of CT-PET colonography and colonoscopy for evaluation of extent of involvement in patients with ulcerative colitis (with Nuclear Medicine).
15. A comparison between CT-PET enteroclysis and double balloon enteroscopy for evaluation of small intestinal involvement in patients with tuberculosis and Crohn's disease (with Nuclear Medicine).
16. Prevalence of coeliac disease in patients with seizures (with Neurology).
17. Prevalence of coeliac disease in short stature (with Endocrinology).
18. Prevalence of coeliac disease in infertility and primary amenorrhoea (with Obstetrics and Gynaecology).
19. Brain activation in response to visual and auditory cues in patients with irritable bowel syndrome (with Nuclear Magnetic Resonance).
20. A study of bacterial microflora in patients with inflammatory bowel disease in irritable bowel syndrome using routine aerobic, anaerobic cultures on DDGE (with Microbiology).
21. A study of laroscopic intestinal resection in patients with intestinal tuberculosis (with Surgery).
22. Colorectal neoplasm in asymptomatic Asian: A prospective multinational multicenter colonoscopy survey. (Collaborative project involving 15 Asian countries).

PUBLICATIONS

Journals

1. Acharya SK, Sharma PK, Singh R, Mohanty SK, Madan K, Jha JK, *et al.* Hepatitis E virus (HEV) infection in patients with cirrhosis is associated with rapid decompensation and death. *J Hepatol* 2007;46:387-94.

2. Arachchi HS, Kalra V, Lal B, Bhatia V, Baba CS, Chakravarthy S, Rohatgi S, Sarma PM, Mishra V, Das B, Ahuja V. Prevalence of duodenal ulcer-promoting gene (dupA) of *Helicobacter pylori* in patients with duodenal ulcer in North Indian population. *Helicobacter* 2007;12:591–7.
3. Baba CS, Sharma PK, Deo V, Pal S, Sethuraman G, Gupta SD, Makharia GK. Association of Ehlers–Danlos syndrome and solitary rectal ulcer syndrome. *Indian J Gastroenterol* 2007;26:149–50.
4. Behera B, Mirdha BR, Makharia GK, Bhatnagar S, Dattagupta S, Samantaray JC. Parasites in patients with malabsorption syndrome: A clinical study in children and adults. *Dig Dis Sci* 2008;53:672–9.
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. Bhatia V, Garg PK, Agarwal V, Sharma M, Ray S. Inflammatory papillary stenosis due to *Giardia lamblia* in a patient with hyper-immunoglobulin M immunodeficiency syndrome. *Gastrointest Endosc* 2007;66:181–2; discussion 182.
7. Bhatt SP, Makharia GK. An unusual association between chronic pancreatitis and ulcerative colitis. *JOP* 2008;9:74–5.
8. Das CJ, Makharia G, Kumar R, Chawla M, Goswami P, Sharma R, *et al.* PET-CT enteroclysis: A new technique for evaluation of inflammatory diseases of the intestine. *Eur J Nucl Med Mol Imaging* 2007;34:2106–14.
9. Falodia S, Makharia GK, Sateesh J, Deo V, Tevatia MS, Gupta SD. Spectrum of microscopic colitis in a tertiary care centre in India. *Trop Gastroenterol* 2007;28:121–5.
10. Goyal R, Chalamalasetty SB, Madan K, Paul SB, Arora R, Safaya R, *et al.* Acral and palmo-plantar hyperpigmentation in a patient with disseminated hepatocellular carcinoma. *Indian J Gastroenterol* 2007;26:292–3.
11. Gupta S, Gupta R, Joshi YK, Singh S. Role of horizontal transmission in hepatitis B virus spread among household contacts in north India. *Intervirology* 2008;51:7–13.
12. Irshad M, Dhar I, Gupta S, Khushboo, Joshi YK. Correlation of serum HCV core concentration with blood level of lipid and antioxidants in various forms of liver diseases. *Hepatogastroenterology* 2007;54:898–902.
13. Irshad M, Dube R, Joshi YK. Impact of viral hepatitis on apo- and lipoprotein status in blood. *Med Princ Pract* 2007;16:310–14.
14. Javvaji S, Kumar A, Madan K, Garg PK, Acharya SK. Management of gastric variceal bleeding. *Trop Gastroenterol* 2007;28:51–7.
15. Kapil U, Sharma TD, Singh P. Iodine status and goiter prevalence after 40 years of salt iodisation in the Kangra District, India. *Indian J Pediatr* 2007;74:135–7.
16. Madan K, Chalamalsetty SB, Srivastava S, Gupta SD, Mirdha BR, Makharia GK, *et al.* Tropical mayhem: A chronic viral disease with superadded parasitic infection. *J Med Microbiol* 2008 Feb;57 (Pt 2):232–5.
17. Makharia GK, Baba CS, Khadgawat R, Lal S, Tevatia MS, Madan K, *et al.* Celiac disease: Variations of presentations in adults. *Indian J Gastroenterol* 2007;26:162–6.
18. Makharia GK, Tandon N, Stephen Nde J, Gupta SD, Tandon RK. Primary intestinal lymphangiectasia as a component of autoimmune polyglandular syndrome type I: A report of 2 cases. *Indian J Gastroenterol* 2007;26:293–5.

19. Midha S, Singh S, Sachdev V, Misra A, Garg PK. Leptin and its correlation with exocrine and endocrine pancreatic function in idiopathic chronic pancreatitis: Implications for pathophysiology. *Pancreas* 2007;35:262–6.
20. 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.
21. Pathak P, Kapil U, Yajnik CS, Kapoor SK, Dwivedi SN, Singh R. Iron, folate, and vitamin B12 stores among pregnant women in a rural area of Haryana State, India. *Food Nutr Bull* 2007;28:435–8.
22. Saluja S, Garg PK. Palliative therapy for gallbladder cancer. *Indian J Med Pediatr Oncol* 2007;27:50–9.
23. Paul SB, Gulati MS, Sreenivas V, Madan K, Gupta AK, Mukhopadhyay S, *et al.* Evaluating patients with cirrhosis for hepatocellular carcinoma: Value of clinical symptomatology, imaging and alpha-fetoprotein. *Oncology* 2007;72 Suppl 1:117–23.
24. Paul SB, Sreenivas V, Gulati MS, Madan K, Gupta AK, Mukhopadhyay S, *et al.* Incidence of hepatocellular carcinoma among Indian patients with cirrhosis of liver: An experience from a tertiary care center in northern India. *Indian J Gastroenterol* 2007;26:274–8.
25. Paul SB, Sreenivas V, Gulati MS, Madan K, Gupta AK, Mukhopadhyay S, Acharya SK. Economic evaluation of a surveillance program of hepatocellular carcinoma (HCC) in India. *Hepatol Int* 27 February 2008. (DOI: 10.1007/s 12072-008-9054-5.)
26. Sengupta S, Rehman S, Durgapal H, Acharya SK, Panda SK. Role of surface promoter mutations in hepatitis B surface antigen production and secretion in occult hepatitis B virus infection. *J Med Virol* 2007;79:220–8.
27. Sharma M, Banerjee D, Garg PK. Characterization of newer subgroups of fulminant and subfulminant pancreatitis associated with a high early mortality. *Am J Gastroenterol* 2007;102:2688–95.
28. Sharma M, Makharia GK. Carcinoma gallbladder: Clinical features and workup. *Indian J Med Pediatr Oncol* 2008;28 (Suppl 2):25–30.
29. Singh AV, Singh SV, Makharia GK, Singh PK, Sohal JS. Presence and characterization of *Mycobacterium avium* subspecies *paratuberculosis* from clinical and suspected cases of Crohn's disease and in the healthy human population in India. *Int J Infect Dis* 2008;12:190–7.
30. Singh N, Deb R, Kashyap PC, Bhatia V, Ahuja V, Sharma MP. Body mass index and per capita income influence duodenal ulcer healing and *H. pylori* eradication whilst dietary factors play no part. *Trop Gastroenterol* 2008;29:26–31.
31. Singh N, Makharia GK, Joshi YK. Dietary survey and total dietary fiber intake in patients with irritable bowel syndrome attending a tertiary referral hospital. *Indian J Gastroenterol* 2008;27:66–70.
32. Singh S, Midha S, Singh N, Joshi YK, Garg PK. Dietary counseling versus dietary supplements for malnutrition in chronic pancreatitis: A randomized controlled trial. *Clin Gastroenterol Hepatol* 2008;6:353–9.
33. Singh V, Pal HR, Mehta M, Dwivedi SN, Kapil U. Pattern of tobacco use among school children in National Capital Territory (NCT). *Indian J Pediatr* 2007;74:1013–20.

34. Singh V, Pal HR, Mehta M, Kapil U. Tobacco consumption and awareness of their health hazards amongst lower income group school children in National Capital Territory of Delhi. *Indian Pediatr* 2007;44:293–5.

Abstracts

35. Chalamalsetty SB, Madan K, Batra Y, Paul SB, Gulati M, Sreenivas V, Datta Gupta S, Panda SK, Acharya SK. Clinical profile and therapy in hepatocellular carcinoma: Experience from a tertiary centre in India. *Hepatol Int* 2007;1:57.
36. Das CJ, Makharia GK, Kumar R, Chawla M, Goswami P, Sharma R, *et al.* PET-CT enteroclysis: A new technique for evaluation of inflammatory diseases of intestine. *J Gastroenterol Hepatol* 2007;22:A231.
37. Kumaran SS, Makharia GK, Jagannath NR. Brain activation pattern in patients with achalasia cardia using functional magnetic resonance imaging. *J Gastroenterol Hepatol* 2007;22:A141.
38. Madan K, Batra Y, Sreenivas V, Mizokami M, Tanaka Y, Chalamalsetty SB, Panda SK, Acharya SK. Hepatitis B virus (HBV) genotype D is associated with more progressive liver damage than genotype A. *Hepatol Int* 2007;1:4.
39. Madan K, Prakash S, Chalamalsetty SB, Batra Y, Datta Gupta S, Panda SK, Acharya SK. Adipokines and cytokines among patients with non-alcoholic fatty liver disease (NAFLD). *Hepatol Int* 2007;1:223.
40. Makharia GK, Seith A, Sinha A, Sharma SK. Pulmonary function abnormalities in patients with achalasia cardia. *J Gastroenterol Hepatol* 2007;22:A140.
41. Sharma P, Makharia GK, Ahuja V, Deepak KK. Comparative study of cardiovascular autonomic functions in patients with ulcerative colitis and Crohn's disease. *J Gastroenterol Hepatol* 2007;22:A178.
42. Yeoh KG, Ho KU, Chiu HM, Zhu F, Leung WK, Sung JJY, Lau J, Byeon SK, Lee SK, Makharia GK, *et al.* Derivation of a risk score to predict risk of advanced colorectal neoplasm. *J Gastroenterol Hepatol* 2007;22:A186.

Chapters in Books

1. Acharya SK, Bhatia V. Acute liver failure. In: Tandon BN (ed). *Gastroenterology in tropics*. New Delhi:Elsevier; 2008:425–44.
2. Acharya SK, Bhatia V. Benign liver tumors. In: Tandon BN (ed). *Gastroenterology in tropics*. New Delhi:Elsevier; 2008:450–66.
3. Madan K, Acharya SK. Schistosomiasis. In: Tandon BN (ed). *Gastroenterology in tropics*. New Delhi:Elsevier; 2008:641–9.
4. Makharia GK. A young man with severe malnutrition. In: Strachan MWJ, Sharma SK, Hunter JAA. *Davidson's clinical cases*. Edinburgh:Churchill Livingstone; 2008:7–10.
5. Makharia GK. A boy with long standing diarrhea. In: Strachan MWJ, Sharma SK, Hunter JAA. *Davidson's clinical cases*. Edinburgh:Churchill Livingstone; 2008:210–12.
6. Saraya A, Makharia GK. Management of ulcerative colitis. In: Tandon BN (Ed). *Gastroenterology in tropics*. New Delhi:Elsevier; 2008:197–212.

PATIENT CARE

Special clinics

Name of the clinic	New cases	Old cases
Liver	721	6269
Gallstone and pancreas	443	622
Ulcer clinic	90	370
IBD clinic	205	975
Interventional clinic	375	652

Routine clinic

New cases	16,981
Old cases	32,407

Procedures

Endoscopy	7000
Colonoscopy	1000
Endoscopic sclerotherapy and variceal ligation	2000
Sigmoidoscopy	250
Side viewing endoscopy	100
Endoscopic cholangiopancreatography	800
Endoscopic ultrasound	200
Ultrasound	4000

Tests done in the department

1. Serum ceruloplasmin	450
2. Serum copper	440
3. 24 hour urinary copper	450
4. TNF- α	86
5. IL-6 and IL-1 α	86 each
6. Adeponectin	86
7. Leptin	86
8. Insulin	86
9. Lipid peroxidation	340
10. Total antioxidant capacity	100
11. Vitamin C	345
12. Vitamin A	100
13. Superoxide dismutase	100
14. Human anti-transglutaminase IgA autoantibodies	503
15. Catalase activity	100
16. Nitric oxide	100
17. Alpha foetoprotein	100
18. Neutrophil function test	100
19. D-xylose	832

20. Faecal chymotrypsin	140
21. Faecal fat	133
22. Hydrogen breath test	134
23. MCP-1 ELISA	214
24. Anti-Sacchromyces cervical antibody A	80
25. Anti-Sacchromyces cervical antibody G	80
26. Anti-endotoxin antibody IgG	90
27. Anti-endotoxin antibody IgM	90
28. Plasma glutamine (HPLC)	50
29. Bile acids (HPLC)	25
30. MCP-1 (PCR)	241
31. IL-6 (PCR)	241
32. Blood ammonia	150

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Professor S. K. Acharya was awarded 'Ranbaxy Research Award for the year 2006' in the field of Medical Sciences–Clinical Research.

Dr Pramod Garg was elected Member, Editorial board, *Indian Journal of Gastroenterology* and Member, International editorial board, *Journal of Gastroenterology and Hepatology*. He was awarded the international fellowship for 6 months by the Department of Biotechnology.

Dr Vineet Ahuja was awarded ICMR International Fellowship for Young Biomedical Scientists at Harvard Medical School, USA for 6 months; has set up leukocytapheresis—a novel treatment modality for severe inflammatory bowel disease. The first case in Asia (outside Japan) was done successfully in September 2007.

Dr Govind Makharia was nominated, Adjunct Faculty, Clinical Epidemiology Unit, AIIMS; Invited member, Asia Pacific Consensus on the Screening for colorectal cancer in average risk individuals in Asia Pacific region (Consensus guidelines are under publication); invited to be a member of Asian Neurogastroenterology and Motility Association; nominated secretary of one of the sections of the drafting committee and consensus committee for developing recommendations on Irritable Bowel Syndrome in Asia Pacific region; received Paper award, Indian Society of Gastroenterology, 2008

VISITING SCIENTISTS

1. Professor Gyongi Szabo, Director of Hepatology and Liver Centre, Massachusetts Medical School, USA, 20 August 2007.
2. Dr Smriti Mohanty, Assistant Professor, Department of Medicine, University of Chicago, USA, 3 September 2007.
3. Dr Paul J. Thuluvath, Director, Hepatology and Medical Director, Liver Transplantation, The Johns Hopkins Hospital and School of Medicine, USA, 19 November 2007.
4. Professor Selwyn Vickers, Professor and Chairman, Department of Surgery, University of Minnesota, USA, 27 February 2008.

9.13 Gastrointestinal Surgery

Professor and Head

Tushar K. Chattopadhyay

Additional 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 post doctoral trainees. The department offers 3 year super specialty training in gastrointestinal surgery leading to an award of MCh degree in Gastrointestinal surgery.

Continuing Medical Education

1. IASGCON 2007: 17th Annual Conference of the Indian Association of Surgical Gastroenterology at AIIMS, September 2007.
2. Pre-conference symposia: Oesophageal diseases and Liver transplantation at AIIMS, September 2007
3. Post-conference live operative workshop on liver resection and minimally invasive upper gastrointestinal and colorectal surgery at AIIMS, September 2007.
4. Indo-US Workshop for Editors of Indian Biomedical Journals at AIIMS, 8–10 February 2008.

Lectures

The faculty delivered 14 lectures at various regional medical fora in 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 lakhs.
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, GOI for 36 months. Funds: Rs 73.26 lakhs.

Departmental projects

Completed

1. Quality of life after transhiatal oesophagectomy for carcinoma oesophagus: An early prospective and late retrospective study.
2. CT cholangiography for evaluation of hilar biliary obstruction.
3. The role of endoscopic ultrasound for evaluation of periampullary tumours.

4. A prospective study of a new stapled technique of oesophagogastric anastomosis following transhiatal oesophagectomy.
5. The influence of perioperative famotidine on tumour infiltrating lymphocytes in colon carcinoma and gastric carcinoma.
6. Thromboelastography to detect covert coagulation abnormalities in patients with portal hypertension.
7. A prospective study of quality of life following PTBD/stenting in patients with malignant hilar blocks deemed unresectable.
8. A prospective study to evaluate gastrograffin for treating postoperative adhesive intestinal obstruction.
9. A prospective randomized study comparing substernal and posterior mediastinal routes of gastric transposition following oesophagectomy.
10. A prospective evaluation of patients with extrahepatic portal venous obstruction and portal biliopathy.

Ongoing

1. Prospective evaluation of choledochoscopy for various biliary tract disorders.
2. Prospective evaluation of the role of intraoperative enteroscopy in the management of obscure gastrointestinal bleeding.
3. A prospective randomized study to compare hand sewn and stapled oesophagogastric anastomoses following transhiatal oesophagectomy.
4. Study of gastric emptying following classical Whipple's pancreatoduodenectomy and pylorus-preserving pancreatoduodenectomy using scintigraphic techniques after randomizing them to antecolic or retrocolic gastro- or pylorojejunostomy.
5. A prospective study of the quality of life following endoscopic oesophageal stenting for inoperable patients with oesophageal carcinoma.
6. A prospective randomized trial comparing preoperative radiotherapy and transhiatal oesophagectomy v. transhiatal oesophagectomy alone for squamous cell cancer of the lower third of oesophagus.
7. A prospective pilot study to evaluate the efficacy of neoadjuvant chemoradiotherapy in patients with locally advanced but resectable gall bladder cancer.
8. A prospective and retrospective evaluation of the long term outcomes of patients with incidental gall bladder cancer.

Collaborative Projects

Ongoing

1. A randomized controlled trial of proximal lienorenal shunt v. sequential endoscopic variceal ligation and endoscopic sclerotherapy for patients with extrahepatic portal venous obstruction (with Gastroenterology).
2. Role of neoadjuvant chemoradiotherapy in adenocarcinoma of the gastro-oesophageal junction (with Radiotherapy).
3. Prospective study of the effect of lienorenal shunt on pericholedochal collaterals causing portal hypertensive biliopathy (with Gastroenterology).
4. A randomized controlled clinical trial of preoperative cholecystojejunostomy v. endoscopic stenting in surgical obstructive jaundice due to periampullary carcinoma (with Gastroenterology).

5. The role of endoscopic ultrasound for evaluation of periampullary tumours (with Gastroenterology).

PUBLICATIONS

Journals

1. Baba CS, Sharma PK, Deo V, Pal S, Sethuraman G, Gupta SD, Makharia GK. Association of Ehlers-Danlos syndrome and solitary rectal ulcer syndrome. *Indian J Gastroenterol* 2007;26: 149–50.
2. 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* 19 February 2008;
3. Das CJ, Srivastava DN, Debnath J, Ramchandran V, Pal S, Sahni P. Endovascular management of hepatic hemorrhage and subcapsular hematoma in HELLP syndrome. *Indian J Gastroenterol* 2007;26:244–5.
4. 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 hemorrhage (with video). *Gastrointest Endosc* 26 February 2008.
5. Gupta G, Sharma R, Chattopadhyay TK, Gupta SD, Ralhan R. Clinical significance of sperm protein 17 expression and immunogenicity in esophageal cancer. *Int J Cancer* 2007;120: 1739–47.
6. Kandpal H, Sharma R, Das CJ, Sahni P, Das AK, Neyaz Z. Solid pseudopapillary tumor of the pancreas with portal vein compression presenting as portal hypertension. *Australas Radiol* 2007;51 Suppl:B287–91.
7. Kandpal H, Sharma R, Srivastava DN, Sahni P, Vashisht S. Diffuse cavernous haemangioma of colon: Magnetic resonance imaging features. Report of two cases. *Australas Radiol* 2007; 51 Suppl:B147–51.
8. Laine C, Horton R, DeAngelis CD, Drazen JM, Frizelle FA, Godlee F, Haug C, Hébert PC, Kotzin S, Marusic A, Sahni P, Schroeder TV, Sox HC, Van der Weyden MB, Verheugt FW. Clinical trial registration—looking back and moving ahead. *N Engl J Med* 2007; 356:2734–6. (The above article has been published simultaneously in the following journals: *Lancet* 2007;369:1909–11; *Ann Intern Med* 2007;147:275–7; *JAMA* 2007;298:93–4; *BMJ* 2007;334: 1177–8; *Croat Med J* 2007;48:289–91; *CMAJ* 2007;177:57–8; *N Z Med J* 2007;120:U2586; *Med J Aust* 2007;186:612–13.)
9. Ray S, Saluja SS, Gupta R, Chattopadhyay TK. Esophageal leiomyomatosis—an unusual cause of pseudoachalasia. *Can J Gastroenterol* 2008;22:187–9.
10. Saluja SS, Ray S, Pal S, Kukeraja M, Srivastava DN, Sahni P, Chattopadhyay TK. Hepatobiliary and pancreatic tuberculosis: A two decade experience. *BMC Surg* 2007;7:10.
11. 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 Med Res* 2008;127:104–5.
12. Singh RK, Kapoor S, Sahni P, Chattopadhyay TK. Giant haemangioma of the liver: Is enucleation better than resection? *Ann R Coll Surg Engl* 2007;89:490–3.

Books

1. Chattopadhyay TK, Sahni P, Pal S (eds). *GI Surgery Annual, Volume 14*. New Delhi:Indian Association of Surgical Gastroenterology; 2007:1–239.

- Chattopadhyay TK, Sahni P, Pal S (eds.). *Biliary surgery. Supplement to GI Surgery Annual, Volume 14*. New Delhi:Indian Association of Surgical Gastroenterology; 2007.

Chapters in Books

- Chattopadhyay TK. Advances in Gastrointestinal surgery. In: Chattopadhyay TK, Sahni P, Pal S (eds). *GI Surgery Annual, Volume 14*. New Delhi:Indian Association of Surgical Gastroenterology; 2007:192–239.
- 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.
- Pal S, Singh RK, Chattopadhyay TK. Cancer of oesophagus. In: Haribhakti S (ed). *Clinical GI Surgery*. Ahmedabad:Haribhakti Educational Foundation; 2008:238–63.
- 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

Total number of new patients seen	1759
Total number of old patients seen	5036

Special laboratory facilities

Anal manometry
 Oesophageal manometry
 24-hour ambulatory oesophageal pH monitoring

Inpatients

Total number of inpatient admissions (Jan 2007–Dec 2007)	584
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Surgical procedures

Total number of operations performed	491
Elective operations	374
Emergency operations	117

Number of operations performed (Special interest areas)

Surgical jaundice	86
Portal hypertension	61
Oesophageal cancer	62
Carcinoma gall bladder	32
Ulcerative colitis	30
Upper GI haemorrhage	14
Lower GI haemorrhage	7
Acute pancreatitis	8
Chronic pancreatitis	6
Liver resections	24
Cadaveric liver retrievals	1

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Professor T. K. Chattopadhyay delivered the 'Dr R. L. Gupta Memorial Oration' on Gall bladder cancer at Lala Lajpat Rai Medical College, Meerut, UP.

Dr Peush Sahni holds the office of Past President, World Association of Medical Editors and is also Editor, *The National Medical Journal of India*.

Dr Sujoy Pal was awarded the ICMR International Fellowship for the year 2007.

VISITING SCIENTISTS

1. Dr J. R. Siewert, Professor of Surgery, University of Munich and President, University of Heidelberg, Germany.
2. Mr Mohamed Rela, Consultant Liver Transplant and HPB Surgeon, King's College Hospital, London.
3. Dr S. T. Fan, Sun CY Chair Professor of Hepatobiliary Surgery, Chief of Liver Transplantation and Hepatobiliary Surgery, Department of Surgery, Queen Mary Hospital, University of Hong Kong, Hong Kong.
4. Dr Shin Hwang, Consultant Liver Transplant Surgeon, Asan Medical Centre, Seoul, South Korea.
5. Dr John Windsor, Professor of Surgery, Auckland, New Zealand.
6. Dr G. K. Pande, Consultant Hepatobiliary Surgeon, Launceston, Tasmania, Australia.
7. Dr Sumit Mittal, Department of Surgery, Creighton University Medical Center, Omaha, Nebraska, USA.
8. Mr Tan Arulampalam, Consultant Surgeon (Minimally Invasive Colorectal Surgery), Colchester, UK.
9. Dr Selwyn M. Vickers, Jay Phillips Professor and Chairman, Department of Surgery, University of Minnesota, USA.
10. Dr Ashok Saluja, Professor, Vice Chair of Research, Department of Surgery, University of Minnesota, USA.

9.14 Haematology

Professor and Head

R. Saxena

Professors

H.P. Pati

Rajat Kumar

Associate Professors

S. Tyagi

M. Mahapatra
(Away on 1yr fellowship)

Associate Professors

Tulika Seth

P. Mishra

Scientist

S. Sazawal

EDUCATION

The Department has DM courses in Clinical Hematology and in Hemato-pathology. This year, two candidates passed DM Clinical Hematology and two passed the DM Hemato-pathology examination. Eight residents are undergoing training for Clinical Hematology and six for hemato-pathology during this current academic year. Five students were registered for PhD in Hematology, which is ongoing.

The faculty continues to take undergraduate classes for Hematology and trained the MD Pathology students in Hematology.

Short and Long Term Training

The department has provided training in the field of clinical and laboratory hematology to six doctors from other institutions for periods varying from 1 to 6 months. Forty eight MSc students also undertook short-term training in molecular hematology for periods varying from 1 to 6 months during this year.

CME

“Conferences Seminars, Workshops” Organized by Department

1. National Hematology Update VII 2008 held on 23–24 February 2008 at JL Auditorium AIIMS- Organizing Secretary – Dr Seema Tyagi.
2. SHC-AIIMS Hemophilia conference held on 13–14 March 2008 at AIIMS
3. Wet workshop on Quality control on 25 February 2008 at Department of hematology, AIIMS, New Delhi.
4. Course on scientific writing conducted by INCTR on September 2007 at AIIMS, New Delhi.
5. 3rd Hands-on Training Programme for Scientists (Medical/Non-medical) on “Diagnosis of Genetic Disorders using Cytogenetics and Molecular Genetics Methods” (Sponsored by Department of Biotechnology, Govt. of India), 26–27 March 2007 organized by Departments of Pediatrics & Hematology, AIIMS, New Delhi – 110 029.

6. CME on “Current Perspectives on the Management of Venous Thrombosis” on 13 October 2007 at AIIMS, New Delhi.
7. Wet workshop on Lab diagnosis of Hemophilia on 14 March 2008 at AIIMS, New Delhi. Lectures in CME delivered by departmental faculty, residents and staff:

Dr R. Saxena

1. Carrier Detection and prenatal diagnosis in Hemophilia A. Hemophilia Conference held in March 2008 at AIIMS.
2. Panelist for management issues in acute promyelocytic leukemia in “Leukemias: Molecular Insights to Treatment Paradigms” on 7–9 March 2008 organized by The European School of Oncology in partnership with the International network for Cancer treatment and Research (INCTR) and in collaboration with the European school of Hematology; jointly with Indian Society of Medical and Pediatric Oncology, Indian co-operative Oncology Network and Mumbai Hematology Group, Mumbai.
3. Quality Assessment of Haemogram. Workshop on QC held in AIIMS, February 2008.
4. Thrombophilia: Indian Scenario in NHU-VII held at AIIMS, February 2008.
5. Normal blood and Approach to Anemia. Refresher biology course for lecturers / assistant professors in Indian Universities at JNU in January 2008.
6. Interpretation of 5 part automated cell counter parameter. XIVth National CME in Haematology held on 3–6 January 2008 at Bombay Hospital, Mumbai.
7. Glanzmann’s Thrombasthenia: Indian Scenario. XIVth National CME in Haematology held on 3rd - 6th January 2008 at Bombay Hospital, Mumbai.
8. Biology of Chronic Lymphocytic Leukemia. XIVth National CME in Haematology held on 3–6 January 2008 at Bombay Hospital, Mumbai.
9. Alpha Thalassemia: Indian Scenario. XIVth National CME in Haematology on held 3–6 January 2008 at Bombay Hospital, Mumbai.
10. Molecular genetics of Hematological Neoplasms. Dharamshila Hospital, December 2007.
11. Hemophilia: Management Issues in Medicine Update organized by MAMC in December 2007.
12. Thrombophilia: Pathogenesis and Lab approach to diagnosis. CME on “Current Perspectives on the Management of Venous Thrombosis” at AIIMS, New Delhi on 13 October 2007.

Dr H.P. Pati

1. Quality Management in Flow cytometry. Pre-natal & post-natal diagnosis of Genetic disorders using molecular methods workshop, sponsored by Dept of Biotechnology, at AIIMS, New Delhi. 26-27 March 2008.
2. Peripheral blood smear and quality control. At workshop on Quality control in Hemogram, at Dept Hematology, AIIMS, New Delhi, 25 February 2008.
3. Interesting cases discussion, National Hematology Update VII, AIIMS, New Delhi 2008, 23–24 February 2008.
4. Myelofibrosis, autoimmunity and autoimmune myelofibrosis at National Hematology CME at Bombay Hospital, Mumbai, 3–6 January 2008.
5. Refractory iron deficiency anemia, at National Hematology CME, Bombay Hospital, Mumbai, 3–6 January 2008.
6. Flow cytometry: clinical aspects, at Advanced techniques in Hematological Malignancies. Bombay Hospital, Mumbai, 14 October 2007.

7. PCR, clinical aspects. Advanced techniques in Hematological Malignancies. Bombay Hospital, Mumbai, 14 October 2007.

Dr Seema Tyagi

1. Myelofibrosis: Pathobiology and Prognostic Factors. In National Hematology Update held on 23–24 February 2008 at AIIMS.
2. External Quality Assessment in Hematology: Wet Workshop on Quality Control in Haemogram. NHU- VII, 23 February 2008, AIIMS.

Dr Tulika Seth

1. Panel discussion on ‘Safety of factor concentrates in India’ in Hemophilia Conference panel discussion”, 13–14 March 2008, held at the AIIMS.
2. Conducted Hematology Quiz, National Hematology Update VII, New Delhi, 23 February 2008
3. ‘Fanconi’s anemia’, National Hematology Update VII, New Delhi, 23 February 2008.
4. Palliative care in pediatric patients’, 7th Annual Foundation course in Palliative care. New Delhi. 17 February 2008.

Dr Pravas Misra

1. Panel discussion on ‘Safety of factor concentrates in India’ in Hemophilia Conference panel discussion”, 13–14 March 2008, held at the AIIMS.
2. Speaker in the National Hematology Update VII, February 23–24 2008 on “Current management in Chronic Myeloid Leukemia, National Hematology Update VII, New Delhi, 23 February 2008.

National and International Conferences

Lectures delivered

Dr R. Saxena

1. Rare Coagulation and bleeding disorders. International Conference on Medical & Community Genetics from February 15-17, 2008 at PGI Chandigarh.
2. Flowcytometric methods for platelet dysfunction at Cytometry Conference held in Dept. of Immunology, SGPGI, Lucknow December 2007.
3. Interpretation of automated cell counter parameter. APCON Chandigarh in November 2007.
4. Differentiating among LMWHs. International Conference on “Generic Anti-thrombotic Drugs” Sponsored by SASAT, International Union of Angiology (IUA), North American Thrombosis Forum (NATF) and International Academy of Clinical and Applied Thrombosis and Hemostasis (IACATH) and All India Institute of Medical Sciences, 12 October 2007.
5. Quality Assessment of Haemocytometry. Annual Meet, ISHTM, Lucknow, October 2007.

Dr H.P. Pati

1. Dr Gaya Prasad Memorial Symposium: Lymphoproliferative Disorders at 56th Annual Conference, APCON 2007 Annual IAPM Conference, PGI Chandigarh, 25 November 2007.
2. Quality control of Laboratory Investigation of Hemostasis, at 48th Annual conference ISHTM, Lucknow November 2007.
3. Effect of imatinib mesylate on platelet aggregation abnormalities in BCR-ABL+ve CML patients. At 4TH International Congress on Myeloproliferative disaeaes & Myelodysplastic syndromes. 8–10 November 2007, New York. P-0033.

Dr Rajat Kumar

1. 'Aplastic Anemia' during 63rd Annual Conference of Association of Physicians of India, Kochi, January 2008
2. 'Adult Stem Cell Plasticity- Hope and Hype' during 63rd Annual Conference of Association of Physicians of India, Kochi, January 2008.
3. 'Hypereosinophilic Syndrome' during Annual Conference of Indian Society of Hematology and Transfusion Medicine at Lucknow, October 2007.

Dr Tulika Seth

1. 'Bone marrow transplant for thalassemia major'. Pre-Conference workshop. 45th National Conference of Indian Academy of Pediatrics (PEDICON 2008), Bhubaneswar, 16 January 2008.
2. 'Pediatric Bone marrow Transplant'. Pre-Conference workshop. 45th National Conference of Indian Academy of Pediatrics (PEDICON 2008), Bhubaneswar, 16 January 2008.

RESEARCH

Funded Projects

Ongoing

1. Elucidation of molecular genetics of acute leukemia. Dr R. Saxena Funded by ICMR (2005 onwards). Funds: Rs. 5.5 lakhs.
2. Characterization of mutations underlying Haemophilia A and B. Dr R. Saxena. Funded by DBT (2004–2007). Funds: Rs 21.46 lakhs.
3. Molecular characterization and treatment of acute lymphoid leukemia on protocol modified MCP 841. International Network for Cancer Treatment and Research. Dr R. Saxena. Funded by INCTR (2001–2009). Funds: Rs. 4.5 lakhs per year.
4. Quality assessment in Hemogram. Dr R. Saxena. Funded by NABL DST (2003–2008). Funds: Rs. 1.5 lakhs/ year.

Completed

1. Molecular cytogenetic study in acute leukemia and myelodysplastic syndromes: Diagnosis and prognostic implications. Dr Seema Tyagi. Funded by AIIMS (2005–2007). Funds: Rs 1.6lakhs.
2. Molecular characterization of Fanconi's anemia. Dr Tulika Seth. Funded by AIIMS (2006–2007). Funds: Rs 1 lakh.
3. Evaluation of efficacy of Haemoglobin Colour Scale with Sahli's Method for Haemoglobin estimation. Dr R. Saxena. Funded by World Health Organisation (Nov 2006–April 2007). Funds: Rs.2.14 lakhs.
4. Sub characterization of vWD in Indians. Dr R. Saxena. Funded by DST (2003–2007). Funds: Rs. 17 lakhs.
5. Development of Hemoglobin color scale. Dr R. Saxena. Funded by WHO (June–October 2007). Funds: Rs. 2.14 lakhs.
6. Role of TAFI in Pathogenesis of young Indian stroke. Dr R. Saxena. Funded by ICMR-INSERM (2004–2008). Funds: Rs 5 lakhs
7. Hereditary Spherocytosis: diagnosis with flow cytometric eosin 5' malemide staining. (completed)

Departmental Projects

Completed

1. Genotypic and phenotypic characterization of Indian patients with Glanzmann Thrombasthenia 2003–2007.
2. Role of Hemostatic and Molecular factors in the development of acute thrombotic stroke in young Indians 2004–2008.
3. JAKSTAT in MDS and PVERA (Haemat) 2006–2008.
4. Homocysteine in DVT (Haemat) 2006–2007.
5. Role of CD38 and ZAP 70 in CLL (Haemat) 2006–2008.

Ongoing

1. Platelet aggregation in CML. (Haemat) 2005–2008.
2. Molecular genetics of Acute myeloid leukemia 2004–2009.
3. Molecular defects in von Willebrand's disease and their correlation with phenotype 2006–2009.
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. A Quantitative D-Dimer Assay for Diagnosis and Prediction of Outcome in DIC 2007–2008.
8. Role of PG3 antibody in detection of PML Rara in APL 2007–2009.
9. Detection of mutations underlying Gleevec resistance in CML 2006–2009.
10. Role of Molecular studies in pathogenesis of (MDS) in Indian patients 2005–2008.
11. Utility of combined modified DCIP & modified osmotic fragility as a cost effective screening tool in Hb E and thalassemia.
12. Lymphoid infiltrate in bone marrow characterization by immuno-histochemistry.
13. Study of CD 38 immunohistochemistry in bone marrow biopsy in Chronic lymphocytic leukemia & prognostic significance.
14. Iron deficiency anemia: Prevalence of refractory IDA and response to iron in IDA.
15. Flow cytometric study of granulocyte and red cells in PNH (ongoing)

Collaborative Research

Completed

1. Efficacy of Intramuscular vitamin K1 versus intramuscular vitamin K3 in prevention of sub clinical classic Vitamin K deficiency. Collaboration with Dept of Paediatrics, 2005.
2. To study subset of antiphospholipid syndrome defined by anti b2 GP1 antibody. Collaboration with Dept of Medicine, 2005.
3. Haematological changes in HIV, Collaboration with Dept of Medicine, 2005

Ongoing

1. Role of ART in HIV positive patients (Dept of Medicine) Since 2006.
2. Evaluation of Platelet Receptor Polymorphism and Thrombogenic Mutation in Patients with Coronary Artery Disease. (Dept. of Cardiology).

3. Determination of the prevalence of Clopidogrel Resistance in CAD and evaluation of the role of P2Y12 Gene Polymorphism in its pathogenesis (Dept. of Cardiology).
4. Development of new fluorescent biosensor for evaluation of Iron profiles in hematological disorders. (Collaboration with Department of Biomedical Engineering, IIT, Delhi, 2004 onwards).
5. GPIIb/IIIa and platelet neutrophil conjugates: NO+ Iloprost (Cardiothorax) 2006.
6. Prevalence of DVT/ Pulmonary embolism in critically ill medical patients (Medicine, since 2006).
7. Evaluation of anemia in patients with solid tumors (Oncology, since 2006).

PUBLICATIONS

Journals including abstracts

1. AB. Rashid Mir, Hema Anand, Sumoon Jeelani, K.Ghosh, Utpal Choudhry, Charan Singh Diwedi, et al. Rapid diagnosis of anaemia: assessing the potential of the haemoglobin colour scale an effective tool to detect anaemia. A multicentric study. *IJHTM* 2007.
2. Agrawal N, Naithani R, Mahapatra M, Panigrahi I, Kumar R, Pati HP, et al. Chronic lymphocytic leukemia in India—a clinico-hematological profile. *Hematology*. June 2007;12(3):229–33.
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*. 10 September 2007. [Epub ahead of print].
4. Anand H; Tyagi S. Granular ALL in an adult patient-a case report. *Indian J. of Pathol Microbiol* Vol 51; 1 March 2008.
5. Bhargav R, Mahapatra M, Mishra P, Kumar R. Overdose with 6400 mg of imatinib: is it safe? *Ann Oncol*. October 2007; 18(10):1750–1.
6. Bhattacharyya M, Kannan M, Choudhry VP, Mahapatra M, Pati H, Saxena R. Hypercoagulable state in five thalassemia intermedia patients. *Clin Appl Thromb Hemost*. October 2007;13(4):422–7.
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Book/ Monograms/Manuals Edited

- Manual of Hematopathology. Jaypee Brothers 2007.
- Manual on quality assurance in hemograms. 2008

PATIENT CARE

In Patient Treatment

The department has treated an increasing number of patients of leukemias, aplastic anemia, idiopathic thrombocytopenic purpura, lymphomas, myelodysplastic syndrome, hemophilia, multiple myeloma and other hematological disorders as indoor patients. In the past year, 14 allogeneic transplants were done successfully. The department also has a day-care centre for chemotherapy, procedures and blood product transfusions for patients.

Hematology Day Care Centre: Census of April 2007 to March 2008

Month	Blood Transfusions	Procedures	Bone biopsy & Bone marrow aspirates	Chemo-therapy	IT	Others	Total admissions
April	289	190	90	86	12	2	479
May	335	254	91	135	17	11	589
June	299	191	80	95	10	6	490
July	285	266	101	150	10	5	551
August	276	265	120	121	16	8	541
September	305	180	83	87	8	2	485
October	295	249	124	108	18	9	544
November	290	214	85	95	19	15	504
December	281	164	69	74	16	5	445
January	282	169	71	70	22	6	451
February	326	135	70	32	26	13	461
March	199	202	75	107	13	7	401
TOTAL	3522	2479	1049	1150	187	82	5951

Clinical Apheresis Procedures

Single Donor Platelets (SDP)	651
Peripheral blood stem cell (PBSC) collection	11
Plasma pheresis	2

OPD

The department runs its out patient department on the third floor of the main Amrit Kaur OPD block. Regular Hematology OPD is on Monday/Wednesday/Friday from 9:30 am to 6.00 pm. Oncology patients are seen in the Monday Hematooncology clinic (HO). The department conducts specialty care clinics e.g. Hematopoietic Stem Cell Transplant clinic on Tuesday morning, Hemostasis Clinic (HC) on Thursday morning and a Long Term Leukemia survivor Clinic on Saturday morning.

Census of OPD: April 2007 to March 2008

	Male	Female	Total
Old cases	13954	4651	18605
New Cases	2377	792	3169

HO Hemato-oncology	HCHemostasis clinic
5400	2051
375	280

Laboratory

The department has full-fledged hematology laboratory

Tests for anemia

Test	No.
HPLC	1506
Sickling	63
Hb Electrophoresis	20
G6PD	683
S Iron	1739
Coombs	517
CD55/CD59	202
PNH (Ham's test)	57
Sucrose lysis	57
Plasma Hemoglobin	107
Urine hemosiderin	130
Osmotic Fragility/Incubated osmotic fragility	310
Heinz bodies	17
Methemoglobin	01

Cold agglutinins	01
Autohemolysis	NIL
Cryoglobulins	09
Iron stain	193
Molecular Tests for α thalassemia	22

Hemogram and Biopsy

Hemogram	34500
Reticulocyte count	2460
Bone marrow aspirate	2110
Biopsy	1541
Reticulin special stain	117

Tests for Hemostasis

Short screening coagulogram	5300
Factor assay	670
Inhibitors screening	370
Factor inhibitors assay	15
INR	5200
Lupus anticoagulant	2500
Platelet Function Test	1800
D. Dimer	1500
Fibrinogen	870
Proglob C	526
Protein C	95
Protein S	95
APCR	95
AT-III	166
P2GP	187
S. Homocysteine	235
VWD	88
DNA Parental detection	12
DNA: Carrier detection	41

Tests for Leukemia

Immunophenotyping by flow cytometry	
Acute Leukemia	134
Chronic Leukemia	35
Bone marrow transplant (CD34 count)	18
Hereditary spherocytosis	118

Glanzmann thromboasthenia	14
Molecular studies for leukemias (BCRABL, 315 mut, t15;17,t8;21,Inv16,FIT3)	593
Cytochemistry	398
LAP	185

External Haematology Proficiency Testing Programme

External Quality Assurance Programme in complete blood counts, red cell indices and peripheral blood smear is being conducted in the department fulfilling the much needed requirement of monitoring performance of the participating laboratories in respect of the above mentioned parameters. There are about 550 participating labs at present availing services of our programme. The EQAP programme is conducted on the basis of ISO-IEC guide- 43 and W.H.O. guidelines. All the specimens are prepared in the department and sent for analysis to the participating labs. Their results are evaluated by us and communicated to the participating labs so that they could take corrective steps in case their performance is out of acceptable range. There is overwhelming response and appreciation for the programme from all over India commending our effort to have offered them a platform to gauge their performance.

COMMUNITY SERVICES

The department of hematology provided consultative services to patients of thalassemia, in coordination with National Thalassemia Welfare Society. Care to hemophilia was provided in coordination with Hemophilia Federation of India.

AWARDS AND HONOURS

The following papers conducted under Dr R Saxena's direct supervision received best paper award

1. ASO-PCR based detection of T315I mutation in CML patients treated with Imatinib mesylate Rashid Mir, Sudha Sazawal, Rekha Chobey, Bharti, Anita Chopra (DM), Bijender Bohra, Pravas Mishra, Alpana Saxena*, Renu Saxena. Conference of Molecular Medicine, MAMC March 2008 (Best Poster).
2. ASO-PCR is a rapid, sensitive and an inexpensive method for detecting clinically significant mutations in Imatinib resistant CML patients. AB. Rashid Mir, Sudha Sazawal, Bijender Bohra, Rekha Chobey, Pravas Mishra, Anita, Renu Saxena LEUKAEMIAS: MOLECULAR INSIGHTS TO TREATMENT PARADIGMS. 7-9 March 2008, Mumbai, India.
3. Genotypic and phenotypic characterization of Indian patients with Glanzmann Thrombasthenia. M. Kannan, R Kumar, Saxena R. 1st Prize (Best paper in annual meet of ISHTM, October 2007, Lucknow).
4. Prevalence of JAK2 V617F mutation in Chronic Myeloproliferative disorders: AIIMS Experience. Jyoti Bajaj, Sudha Sazawal, Bharti Sharma, Manorajan Mahapatra, Renu Saxena, Delhi Society of Hematology, Annual Meet August 2007.
5. Prognostic implications of FLT3 internal tandem duplication and chromosomal translocations in Acute Myeloid Leukemia: AIIMS study. Authors:- Bijender Kumar, Syed Khizer Hasan, Sudha Sazawal, Pankhi Dutta, Rekha Chaubey, Rashid Mir, Bhushan Asthana, Prasant Sharma, Hema Anand, Rajat Kumar and Renu Saxena (Best paper in annual meet of ISHTM, October 2007, Lucknow).

SIGNIFICANT EVENTS

Professor Renu Saxena

- Executive member Indian society of Hematology and Transfusion medicine 2006-2008
- President, Delhi Society of Hematology 2005–2007
- Member, Medical Advisory Board, HFI, 2005
- Member, ICMR project review committee for Genetics, hematology, 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

Professor H.P. Pati

- Current Honorary Secretary, Indian society of Hematology & Transfusion Medicine (2005–08)
- Qualified as a Technical Assessor, for NABL (National Accreditation Board Laboratories), New Delhi (for accreditation evaluation for medical laboratories).

Professor Rajat Kumar

- Continued to be Joint Secretary of Indian College of Physicians till January 2008.
- Elected as Member, Executive Council, Indian College of Physicians, Association of Physicians of India for the term 2008–2010.
- Elected as Vice President, Indian Society of Hematology and Transfusion Medicine for the term 2007–2008.
- Appointed Vice-Chairman of the Governing body, Association of Physicians of India – Delhi State Chapter, for the year 2007–2008.
- Appointed as Member, Expert Committee appointed by Medical Council of India to revise the curriculum of the super-specialty of Clinical Hematology

Dr Tulika Seth

- Selected to join the clinical epidemiology unit (CEU), AIIMS.

Dr Pravas Misra

- Elected as executive member of Delhi Hematology society
- Awarded Royal college of physicians London scholarship September 2007

9.15 Hospital Administration

Head

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

D.K. Sharma
(Medical Superintendent, Main Hospital)

Additional Professor

Sidhartha Satpathy
(Dr BRAIRCH & 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 viz. MHA (Masters in Hospital Administration)

The Department of Hospital Administration, AIIMS has introduced 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 to 9.00 am and 4.30 pm everyday. Each faculty member is assigned “Moderator” for a specific period. Various guest lectures were organised in the Department.

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

Training to Students from Different Institutes has also been Carried Out Throughout the Year 2007-2008

- Five Medical Officers from Govt. Medical College, Jammu were given training on functioning and running of Control Room, AIIMS on 2–7 July 2007
- 30 Medical Officers from Himachal Pradesh Government Hospital were given training on Blood Bank, Emergency Services and Hospital Support Services in August 2007
- Fourteen students of MD (Community Health Administration)/ Diploma in Health Administration from National Institute of Health and Family Welfare, New Delhi received training in the Department for one month in September, 2007
- Thirty nursing personnel from Govt. Medical College, Jammu visited the Department for refresher course in December 2007 and January 2008
- Seventeen senior medical officers from Border Security Force were trained in administrative and management issues related to the functioning of hospital in February, 2008
- A student from Deccan School of Management, Hyderabad underwent a short term training for a period of three months in April–July 2007

CONTINUING MEDICAL EDUCATION

The department has conducted several “in service” CME programmes in the form of training in “Behavioural sciences and communication in hospitals” to all categories of staff. CME on “STERRICON-2008”, Recent Advances in Disinfection and Sterilisation Practices was organised by Department of Hospital Administration, AIIMS New Delhi on 16 February 2008.

LECTURES DELIVERED

Dr Shakti Kumar Gupta

- “Leadership in Mountains” in the High Altitude & Mountain Medicine Course at High Altitude Medical Research Centre at Leh organised by Indian Mountaineering Foundation, New Delhi, August, 2007
- “Networking in Disaster Management” in the Symposium on Disaster Management organised by National Academy of Medical Sciences at Guru Nanak Dev University, Amritsar, October 2007
- “An Overview of Health Services Disaster Plan” in the workshop on “Integrated Earthquake Mitigation Initiative” organised by Geohazard International, at Delhi Secretariate, New Delhi, 5 March 2008

Dr D.K. Sharma

- Actively involved in teaching and training hospital administration residents and delivering lectures in various training programmes/workshops organised by the department sponsored by Ministry of Health, HRD, personnel etc.
- Delivered lecture on “Services Rules & Disciplinary Procedures”, “Office Procedures and Communication” & “RTI Act in Hospitals” during the training programme on “Hospital Management and Administration” for Medical Superintendents, GDMOs, Non-Specialists of Coal India Ltd. held from 7–31 January 2008 at IICM, Ranchi and have also been invited by various govt. and public sector organizations and professional associations to deliver lectures on various topics in the speciality of Hospital Administration.

Dr Sidhartha Satpathy

- “Quality Aspects in Hospital Infrastructure Planning” and “Quality Assurance in Human Resource Planning and Management” during 1st contact – cum – training programme for Post Graduate Certificate Course in Quality Management and Accreditation of Health Care Organisation at Academy of Hospital Administration, 3 April 2007
- “Introduction, Structures and Principles of Classification, importance and use of ICD-10” during training programme on “ICD-10 coding course” for non- medical/ para-medical personnel organised by CBHI, Jaipur, 8 October 2007
- “Health Services in Disasters – Hospital Perspective” at NIMHANS, Bangalore, 26 November 2007
- “Hospital Infection Control and Hospital Waste Management” during 78th Training Course in Hospital Administration for senior hospital administrator at National Institute of Health and Family Welfare, 27 November, 2007
- Delivered lectures on various hospital administration topics and conducted organization behaviour lab during special training programme on Hospital Management and Administration

for Medical Superintendents, GDMO's and Non-specialists of Coal India Ltd. at Indian Institute of Coal Management, Ranchi, 7–10 January 2008 and 25–30 January 2008

- “Quality Issues in Emergency Services, ICU and OT” and “Human Resource Management – Training Development and Utilisation” during terminal training cum contact programme for Post-Graduate Certificate Course for Accreditation on 14 March 2008 in Quality Management and Accreditation of Health Care Organisation at Academy of Hospital Administration, Noida, UP

Dr Sanjay Arya

- Delivered lectures on 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 2008

Dr Aarti Vij

- Key Note Address on “Issues of National Importance – Organ Donation”, Ram Manohar Lohia Hospital, New Delhi, 19 March 2008
- “Role of Nurses in Brain Death and Organ Donation” in the Neuronursing Updates organised by College of Nursing, AIIMS, 16 October 2007
- “Nurses Role in Organ Donation” in the Critical Care Nursing Update organised by College of Nursing, AIIMS, 28 February 2008

CONFERENCES, SEMINARS, WORKSHOPS

Dr Shakti Kumar Gupta

- Programme Director, “Healthcare Executive Management Development Programme” for senior Healthcare Executive Professionals, organised by Department of Hospital Administration, at Goa, 27–31 August 2007
- Programme Director, Training Programme on Hospital Administration for Medical Superintendents, GDMOs, non-specialists of Coal India Ltd. held at IICM, Ranchi from 7–30 January 2008
- Chairman, CME “STERRICON-2008”, Recent Advances in Disinfection and Sterilisation Practices for doctors, residents and nurses of AIIMS, organised by Department of Hospital Administration, AIIMS, New Delhi, 16 February 2008.
- Organised a Seminar on “Medical Records, Medical Audit and Consumer Protection Act and its implication” for Medical Record Officers, Medical Record Technicians, Nursing Officers of AIIMS, April 2007
- Organised a public lecture on “Role of Information Technology in Healthcare – Merits and Limits”, at AIIMS, November 2007
- Organised a workshop on “Attitudinal Change and Communication Change” for residents, doctors and nurses of AIIMS, 6 October 2007
- Delivered lecture on “Quality Dimensions in Hospital Infection Control” during the 56th Annual Conference of Association of Pathologists and Microbiologist of India, PGIMER, Chandigarh, October 2007
- Delivered lecture on “Health Status in India – Issues, Challenges & Strategies” during Jammu & Kashmir State Science Congress organised by University of Jammu at Jammu, 26 February 2008

- Delivered lecture on “Medical Equipment Management – Issues, Challenges, Strategies” during China Medical Equipment Procurement and Management Summit, 2007 on 28–29 June 2007 at Wang Fu Jing, Grand Hotel, Beijing, China
- Delivered lecture on “Planning and Designing of Trauma Care Centre” during the Conference/Seminar organised by Department of Hospital Administration, Armed Forces Medical College, Pune; 12–13 January 2008
- Delivered lecture on “Laboratory Equipment Management Issues, Challenges and Strategies” in the 56th Annual Conference Association of Pathologists and Microbiologist of India at PGIMER, Chandigarh, October 2007

Dr Sidhartha Satpathy

- Delivered a lecture on “Hospital Waste Management in ICU – staff safety issues “ during 6th International Neonatal Nursing Conference organised by National Neonatology Forum, New Delhi from 15–18 September 2007 at New Delhi
- Delivered a lecture on “Bio-Medical Waste Incineration – recent advances” during the 7th Annual Indian Society for Hospital Waste Management (ISHWM) conference on 21–22 September 2007 at New Delhi
- Presented a paper entitled “Women with critical health needs in emergencies – a field operational model to reduce psychological distress” during the International Congress on Women’s Mental Health (ICWMH) at Melbourne, Australia from 16–20 March 2008

Dr I.B. Singh

Invited for peer review meeting on “Standard Treatment Guideline” project sponsored by WHO and Ministry of Health & Family Welfare, Govt. of India at Armed Forces Medical College, Pune, 26 August 2007

Dr Aarti Vij

Organised Training Programme for faculty and senior residents of Neurosurgery Department of AIIMS regarding Organ Donation and Transplantation

Organised Poster Competition on Organ Donation at AIIMS for MBBS students from all over the country, September 2007.

RESEARCH

Departmental Projects

Completed

1. To study and evaluate universal precautions practices being followed in high-risk areas of main hospitals of AIIMS

Ongoing

1. Role and Scope of Pharmaco-vigilance in Hospitals
2. Level of satisfaction amongst employees of AIIMS
3. Role, Scope and Economics of Robotic Surgery at AIIMS
4. Costing of training of undergraduate medical (MBBS) at AIIMS
5. Role, Scope and Economics of Minimal Invasive Surgery at AIIMS

6. Costing of In-patient care at AIIMS
7. The economics of hospital acquired infection at AIIMS
8. System of Empanelment of Private hospitals on CGHS panel
9. Costing of Neuro-Surgery ICU at AIIMS
10. Cost Analysis of Bone Marrow Transplant (allogenic) at AIIMS

PUBLICATIONS

Journals

1. Gupta SK. Networking in Disaster Management Annals, National Academy of Medical Sciences 2008;44(1):19–29.
2. Kant Sunil, Gupta SK, Nuclear. Biological and Chemical Warfare/Medical Preparedness for effective planning, Annals, National Academy of Medical Sciences, 2008;44(1):31–45.
3. Sanger KS, Singh PK, Prakash Jai, Singh Archana, Chaudhury S, Sharma D K et al. Aging and Sexuality – A Study of Sexual Behaviour of Elderly Males, Journal of Industrial Psychiatry, vol. 16 (1):42–44.
4. Pathni RK, Satpathy S, Chaubey PC, Kailash S. Practice of Telemedicine at a Quaternary Super-Speciality referral hospital in India”, Journal of Academy of Hospital Administration, 2007;19 (1 & 2):35–40.
5. Anand RT, Satpathy S, Prasad JP. Delhi Serial Blasts; A Hospital’s response to the Mass Casualty Incident”, Disaster and Development, 2007;1(2):119–28.
6. Kaushal V, Arya S, Singh S, Nagarajan S, Sharma DK. Hospital Risk Management – A Strategy to Enhance Safety; International Journal of Medical Toxicology and Legal Medicine, 2007;10:21–26.
7. Ramachandran K, Husain N, Maikhuri R, Seth S, Vij A, Kumar M, Srivastava N, et al. Impact of a comprehensive telephone based disease management programme on quality of life in patients with heart failure”, National Medical Journal of India, 20(2).

PATIENT CARE

The Department of Hospital Administration, AIIMS 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.

The Department of Hospital Administration has been actively involved in improving the patient care services by revamping the support services to aid in provision of a quality clinical service. Extensive renovations and upgradation of support services has been done. An advanced, new laundry is being also installed.

AWARDS AND HONOURS

Dr Shakti Kumar Gupta Selected as an expert for the Bid Evaluation Committee meeting for selection of EPC Developer for construction of residential complex for six AIIMS like institutions, under PMSSY, 27–29 August 2007; Member of the Academic Council of Jammu University for the triennial period (2006–2009) vide notification no. 08/January/Gen/03 issued from the office of Registrar, University of Jammu; Expert for expansion programme of Nizam’s Institute of Medical Sciences, Hyderabad – University Campus under Pradhan Mantri Swasthya Suraksha Yojna

(PMSSY); Expert for upgradation of Nizam Institute of Medical Sciences under Pradhan Mantri Swasthya Suraksha Yojna (PMSSY); Member, Staff Council, AIIMS for the year 2007–08 vide letter no. F.7-3/86-Acad.II dt. 28 February 2008; Member of the Health Review Committee of Punjab Health Systems Corporation constituted by Planning Board, Govt. of Punjab; Member, Project Monitoring Committee for six AIIMS like Institutions and upgradation of Medical College in India; Appointed as External Member for revision of syllabus for PG diploma in Hospital Management, RGSC, Barkachha under Banaras Hindu University; Member, working group on clinical establishments, professional services regulations and accreditation of health care infrastructure, constituted by the Planning Commission of India for the 11th five year plan (2007–2012); Member of the selection committee for the post of Assistant Professor, Hospital Administration, PGIMER, Chandigarh, October 2007

Dr D.K. Sharma elected 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, Govt. of NCT of Delhi etc., Invited as Chief Guest/Guest of Honour/ Guest Faculty etc. in various National and International Symposia, workshops and conferences; served as subject expert and member of selection committees of various organizations including State Public Service Commissions, Public Sector Undertakings, Medical Institutions, IIT etc. for the interview/ selections of various positions like Medical Superintendent, Dy. Director (Admn.), Faculty of Hospital Administration, Medical Officers, Nursing and other categories of Group “A” and “B” staff, 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, nominated as Honorary Health Advisory member of Mother Teresa Mission an NGO for the service of poorest of the poor; permanent special invitee member of the Pradhan Mantri Swasthya Suraksha Yojna (PMSSY) of Ministry of Health and Family Welfare to establish six AIIMS like institutions

Dr Sidhartha Satpathy continued as Editor, Journal of Academy of Hospital Administration (JAHA); Member of Technical Committee, National Accreditation Board for Hospitals and Healthcare providers (NABH), under aegis of Quality Council of India (QCI); Member of Bureau of India Standards (MHR-14) involved in preparation/review of Indian Standards on Health Care Facilities; Expert member of National Accreditation Board for Certification Bodies (NABCB) under aegis of QCI; Expert member of National Accreditation Board for Personnel and Training (NRBPT) under aegis of QCI; awarded WHO fellowship on “Health Care Financing” at Chulalongkorn University, Bangkok, Thailand, August, 2007; External examiner for MD (Medical Administration), Post Graduate Institute of Medicine (PGIM), University of Colombo, February 2008; Member of Technical Committee for evaluation of Master Plan/Block Plans of six AIIMS like institutions under PMSSY at Ministry of Health and Family Welfare, Govt. of India

Dr Sanjay Arya invited as Expert for selection of DNB student at Sir Ganga Ram Hospital; Nominated as alternative member for Medical Equipment and Hospital Planning Council (BIS)

Dr Aarti Vij invited as Guest of Honour and received the Scroll of Honour for Pioneering work done in the field of organ donation conferred by Dadhichi Deh Dan Samiti, New Delhi, 25 May 2007; Invited as expert in the National Consultation on the Transplantation of Human Organ Act for amending the law (making transplantation of Human Organs Act more donor and recipient

friendly) at Rajiv Gandhi Foundation and Ministry of Health and Family Welfare, Govt. of India, New Delhi

Organ Retrieval Banking Organisation (ORBO) coordinates Organ & Tissue donations and transplantation. In addition, 16 whole bodies were also donated through ORBO to facilitate medical education in last one year. 2318 persons pledged for organ donation on motivation of ORBO. Awareness activities with various NGO's, School, and Colleges etc were conducted. Three workshops/ training programmes were held to increase awareness among medical professional on organ donation. Collaboration with Dadhichi Deh Dan Samiti with ORBO to promote the noble cause of organ & tissue donation. Training was imparted to Grief counselors. Orientation Programme on Organ Donation & Transplant Coordination was imparted to MSc Nursing students.

Visiting Scientist

1. Maj. Gen. N.K. Parmar, AVSM, Vrc, VSM, Additional DGAFMS, Office of DGAFMS, Ministry of Defence, M-Block, New Delhi
2. Dr Peter Cox, Managing Director, Padghams, Australia and Expert Hospital Consultant, Australia
3. Ms Denise Burley, Senior Lecturer/International Coordinator (Health), Thames Valley University, London
4. Dr Lawrie Walker, Thames Valley University, London
5. Dr Swapna Naskar Williams, Thames Valley University, London

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. Arulsevi

Scientists

A.K. Srivastava S-IV

Vandita Vasudev S-III

EDUCATION

Short Term Training

Fifteen trainees, 6 from CCS University, Meerut; 1 from Bundelkhand University, Jhansi ; 1 from Rai Foundation (Deemed University) Delhi; 1 from EFLS, Bhopal University; 1 from JRN-RVP University, Udaipur; 1 from Jaypee Institute of Information Technology University, Noida; 1 from I.P. College, Bulandshahr, 1 SBSPGI, Dehradun, 1 HRD, New Delhi and 1 foreign student Dr Rajani Malla from Tribhuvan University, Kathmandu, Nepal underwent short term training in Laboratory Medicine, Clinical Microbiology and Molecular Biology.

CME

Workshops organized by the Deptt.; 2

Dr Sarman Singh

Workshop I: CD4 & CD8 cell count and HIV viral load estimation and their role in AIDS Monitoring
25 January 2008

Workshop II: Molecular Diagnosis of AIDS associated Mycobacteriosis, 25 January 2008.

Conference organized by the Department

International Conference

Dr Sarman Singh

1. The second International Conference on Opportunistic Pathogens in AIDS (ICOPA 2008) was organized by the Department of Laboratory Medicine, All India Institute of Medical Sciences, New Delhi, India. The conference, held at the All India Institute of Medical Sciences, New Delhi from 27–29 January 2008.

National and International conferences

Lectures delivered

Dr AK Mukhopadhyay

1. Expert panel of The First Coulter Series of Workshop in Haematology 2008 in CMC, Vellore, 14–15 February 2008.
2. Three Consciousness, Mind and Information, International Conference on All India Student's Conference on Science and Spiritual Quest in Tirupati, 22–23 December 2007. Also chaired two scientific sessions on 23 December 2007
3. "Consciousness Research: Challenges in Philosophy and Science". National Seminar on Holistic Approach in Healing in LNIPE, Gwalior on 25 October 2007. Also chaired scientific session on 26 October 2007
4. "Future of Laboratory Medicine". Meeting of Association of Practicing Pathologists (APP), New Delhi on 07 October 2007.

Dr M. Irshad

1. Optimal Use of Laboratory and Support Services. Interns Orientation Programme in AIIMS, 5–6 January 2008.

Dr Sarman Singh

1. Delivered lecture on Molecular Epidemiology of Mycobacterium Paratuberculosis. National Seminar & Workshop on Johne's disease. Indian Veterinary Research Institute, Izatnagar. 8 August 2007.
2. Delivered guest lecture on indigenous developments in the leishmania diagnostics. National Conference of Indian Academy of Tropical Parasitology (Tropacon), Chennai, 6–7 October 2007.
3. Delivered guest lecture on HIV-Leishmania co-infection during the International Conference on Opportunistic Pathogens in AIDS, New Delhi, 27–29 January 2007.
4. Delivered lecture on "Need of networking diagnostic laboratories" during International Workshop on "Laboratory Diagnosis of Enteric Parasites" Calcutta from 17–20 February 2008.
5. Delivered guest lecture in UP-MICROCON on "Emerging Viral Infections" at Lucknow on 16 February 2008.
6. Delivered guest lecture on "Toxoplasmosis" during a national workshop on "Veterinary and Medical Perspectives on Emerging and Important Zoonotic Diseases in India" IVRI, Bareilly on 29 March 2008.
7. Chaired and deliver a invited lecture on Leishmaniasis and its diagnosis at Span Diagnostics Pvt. Ltd., Surat (Gujarat) on 28 April 2007.
8. Chaired a Scientific Session and headed the jury to adjudge the best oral presentation during the National Conference of Indian Academy of Tropical Prasiology (Tropacon), Chennai, 6–7 October 2007.
9. Co-Chaired a scientific session during the International workshop on "Laboratory diagnosis of Enteric Parasites" Calcutta from 17–20 February 2008.
10. Chaired a scientific session during the Satellite Meeting of Society for Free Research- India, at AIIMS, New Delhi, 12 February 2008.

Dr AK. Srivastava

1. “Point of care testing: Preventing Error with effective Policies and procedure” 34th Annual conference of Clinical Biochemists of India, New Delhi; 18–20 December 2007

RESEARCH

Funded Projects

Completed

1. Optimization of carbohydrate protein conjugates as vaccine for prevention of enteric fever. Dr M. Irshad, DBT, 2004–07.
2. Development of rapid diagnostic test for detection of autoantibodies in Myasthenia Gravis by plate and Dot blot ELISA. Dr M. Irshad, ICMR, 2004–07.
3. Comparative evaluation of various methods for diagnosis of pulmonary and extra pulmonary tuberculosis. Dr Sarman Singh. Funded by Bio Merieux India Ltd., 2004–2007. Rs 3.2 lakhs.
4. Expression, Characterization and purification of recombinant kinesin like protein of VL and PKDL causing Indian strains of *Leishmania donovani* and developing ELISA and other rapid test methods using the above antigen. Dr Sarman Singh. Funded by DBT for 4 years, 2003–2006. Rs 13 lakhs.
5. Genetic Heterogeneity amongst the *Leishmania donovani* isolated from Eastern India. Dr Sarman Singh. Funded by AIIMS for 3 years, 2003–2006. Rs 1.35 lacs.
6. Evaluation of the toxicity and anti-leishmanial efficacy of liposomal amphotericin B (KALSOME) in mouse model. Dr Sarman Singh. Funded by DST for 2 years, 2005–2007. Rs 41.09 lakhs.
7. Rapid and accurate diagnosis of tuberculosis using a novel set of primers directly from clinical sample. Dr Sarman Singh. Funded by ICMR for 3 years, 2004–2007.

Ongoing

1. Assessment of risk factor associated with Alzheimer’s disease and Vascular dementia. Dr AK Mukhopadhyay, ICMR, 2007–10.
2. Prevalence and significance of transfusion transmitted virus (TTV) and association of lipoprotein (a) with apoprotein A and B in various forms of liver diseases. Dr M. Irshad, ICMR, 2005–08.
3. Cloning, sequencing and expression of different genomic regions of transfusion transmitted virus (TTV) prevalent in Indian populations. Dr M. Irshad, ICMR, 2008–10.
4. Role of Hepatitis C virus (HCV) core protein in diagnosis and pathogenesis of HCV infection. Dr M. Irshad, ICMR, 2008–10.
5. Reference, diagnostic range for serum free light chains in Indian subjects: comparison with multiple myeloma. Dr M. Irshad, ICMR, 2007–10.
6. Correlation between first trimester glucose screening & serum insulin levels with development of gestational diabetes mellitus in pregnancy. Dr M. Irshad, ICMR, 2007–10.
7. Detection of HCV-core antigen for diagnostic screening of HCV infection in patients on maintenance haemodialysis. Dr M. Irshad, ICMR, 2007–10.
8. Genotypic characterization of *Mycobacterium tuberculosis* in clinical isolates from Pulmonary tuberculosis by using spoligotyping and IS 6110 RFLP analysis. Dr Sarman Singh. Funded by UGC for 3 years (2004–2008)

9. Proteomic analysis of *M. tuberculosis* during the stage of acquisition of resistance to Isoniazid and Rifampicin. Dr Sarman Singh. Funded by DBT for 3 years, 2006–2009.
10. Transmission of Drug Resistant Hepatitis B Virus in Close Family Contacts of HBV-Related Chronic Liver Disease Patients. Dr Sarman Singh. Funded by DST for 3 years, 2006–2009.
11. Isolation and Purification of Herbal Compound (s) having anti-leishmanial activity. Dr Sarman Singh. Funded by ICMR (Fellowship) for 4 years (2004–2008), Rs 6 lakhs.
12. Detection of hepatitis A, E, Salmonella, *E. histolytica* and *Giardia lamblia* from drinking water samples using novel multiplex PCR. Dr Sarman Singh. Funded by DBT for 3 years, 2007–2010.
13. To study the molecular mechanism (s) of miltefosine induced drug resistance in *Leishmania donovani*. Dr Sarman Singh. Funded by CSIR, 2007–2009.
14. The role of TNF- α and IFN- γ and the success of anti-tubercular therapy in Immune Restoration Disease in HIV/MTB co-infected patients responding to ART. Dr Sarman Singh. Funded by Australia-India Council, 2006–2008.
15. Developing a novel Multiplex PCR assay for simultaneous detection and Differentiation of hepatitis A & E salmonella Supplementary. *Entamoeba histolytica* and *giardia famblia* directly from drinking water samples. Dr Sarman Singh. Funded by DBT, 2007–2010.
16. A novel multiplex PCR assay for simultaneous detection and differentiation of *Mycobacterium tuberculosis*, *Mycobacterium avium* complex and other *Mycobacterium* species directly from clinical samples of suspected tuberculosis cases. Dr Sarman Singh Funded by DBT, 2007–2010.

Departmental Projects

Dr A.K. Mukhopadhyay

1. Book Project: The new Science for Consciousness. The Mandate and the Agenda.
2. Role of Interleukin - 1, 6 & 10 and TNF-a along with NFK- b and isoprostane in acute pancreatitis
3. Preparation and characterization of Vi-Polysaccharide-Protein conjugate for immunization against *Salmonellae*.
4. Recovery and stability of various analytes, enzymes and DNA from whole blood/serum spotted on filter paper.

Dr M. Irshad

1. To assess the impact of viral hepatitis on steatosis of liver.
2. Role of TTV in renal failure patients.
3. Epidemiological studies on CRF in Indian Communities.
4. Cloning, sequencing and expression of TTV related polypeptides.
5. Genotyping of TTV in Indian population.
6. Effect of HCV core expression on oxidative status.

Dr Sarman Singh

1. Transmission rate of HBV and HCV in family members of dually infected patient (with Deptt. of Gastro).
2. Hepatitis B viral load monitoring in patients undergoing Anti-HBV therapy using Quantitative Real-Time PCR (with Deptt. of Gastro).

3. Comparative evaluation of various PCR primers for the rapid and sensitive diagnosis of tuberculosis.
4. Standardization and evaluation of Multiplex PCR for the species specific diagnosis of various Mycobacterial infections.
5. Prevalence and treatment response of coccidian parasitic infections in HIV positive patients at AIIMS (with Deptt. of Medicine).
6. To study reintroduction of anti-tuberculosis drugs and risk factors for anti-tuberculosis treatment induced hepatotoxicity (with Deptt. of Medicine).
7. Study of Mycobacteremia in Patients with milliary and extrapulmonary and tuberculosis (with Deptt. of Medicine).
8. To study the prevalence of ESBL of urinary pathogens using disk diffusion method and e-Test.
9. To study the immune response in acute Toxoplasmosis using Western Blot Method.
10. Comparative evaluation of Smear, LJ Culture, MGIT-960 Bactec Culture and Bactericophage tests for the diagnosis of Tuberculosis
11. Comparative evaluation of various TORCH test kits
12. Blood borne infections after needle prick injury in Health Care workers of AIIMS
13. Toxoplasma gondii IgG avidity assays in pregnant women attending AIIMS.
14. Sequence based diagnosis of Mycobacterial isolates from HIV positive and HIV negative patients.
15. Nested polymerase chain reaction for the diagnosis of congenital CMV infection.
16. Opportunistic infections in AIDS patients attending AIIMS.

PUBLICATIONS

1. Qurashi R, Lakshmy R, Prabhakaran D, Irshad M, Mukhopadhyay AK, Jaikhanani B. Effect of storage temperature on cholesterol measurement from dried blood. *Indian J Med Res* 2007;126: 228–9.
2. Gupta NL, Sharma S, Saraya A, Mukhopadhyay AK. Coagulation factor V—Major survival predictor in patient of viral hepatitis induced acute liver failure. *Blood* 2007;110:50B.
3. Mukhopadhyay AK. Sixth sense and the Garden of Five senses. *Indian J Clin Biochem* 2007; 22 (Suppl.):179.
4. Mukhopadhyay AK. Of sex, sexuality, nature and spirit. *India in the Times of Quantum Physics, Neuroscience and Science of Information. The India Habitat Center's Art Journal.* 2007;7:16–23.
5. Irshad M, Dube R, Joshi YK. Impact of viral hepatitis on apo- and lipoprotein status in blood. *Medical Principles and Practice* 2007;16(4):310–314.
6. Irshad M, Dhar I, Gupta S, Khushboo, Joshi YK. Correlation of hepatitis C virus (HCV) core protein expression with blood level of lipid and antioxidants in various forms of liver diseases. *Hepatogastroenterology* 2007;54:898–902.
7. Rasool S, Jaikhanani BL, Irshad M, Behari M, Goel V. Alpha-bungarotoxin (α -Bgtx) and beta-bungarotoxin (β -Bgtx) binding activities in human cadaver brain. *Arch Med Sci* 2007;3:93–101.
8. Rasool S, Jaikhanani BL, Behari M, Suhail S, Shabirul H, Irshad M. Purification of beta bungarotoxin (β -Bgtx) binding protein from human cadaver skeletal muscle. *J Med Science* 2007;7(2):195–202.

9. Mishra J, Saxena A, Singh S. Chemotherapy of leishmaniasis: Past, present and future. *Current Medicinal Chemistry* 2007;14 (10):1153–69.
10. Dey A, Sharma U, Singh S. First case of indigenous visceral leishmaniasis from central India. *Am J Trop Med Hyg* 2007;77: 95–8.
11. Gopinath K, Kumar S, Manisankar M, Singh S. A novel method for clearing the red blood cell debris from the BacT/ALERT™ blood culture medium for improved microscopic and anti-mycobacterial drug susceptibility test results. *J Clin Lab Analys* 2007; 21:220–6.
12. Sharma U, Redhu NS, Mathur P, Singh S. Re-emergence of visceral leishmaniasis in Gujarat, India. *J Vect Borne Dis* 2007;44:230–232.
13. Gupta S, Mathur P, Wig N, Singh S. Immune Restoration Syndrome with Atypical manifestation of disseminated *Penicillium marneffeii* and Cytomegalo Virus co- infections in an AIDS patient. *AIDS Res Therapy* 2007; 21: 8th October
14. Singh S, Sanker MM, Gopinath K. High rate of extensively drug resistant tuberculosis in Indian AIDS patients. *AIDS* 2007; 21: 2345–47.
15. Gupta S, Gupta R, Singh S. Seroprevalence of HIV in pregnant women in North India: A tertiary care hospital based study. *BMC Infect Dis* 2007; 7:133.
16. Gupta S, Gupta R, Singh S. Role of Horizontal Transmission in Hepatitis B Virus Spread among Household Contacts in North India. *Intervirolgy* 2008; 51 (1): 7–13
17. Pathy BM, Srivastava AK, Kumar VL., Calotropis procera latex affords protection against carbon tetrachloride induced hepatotoxicity in rats. *J Ethnopharmacol* 2007;113:498–50

Chapter in Books

1. Mukhopadhyay, A.K. (2007). Three Consciousness , Mind and Information. In, *Science and Spiritual Quest*. Ed. Subhash C. Mishra, Sri Kant Nagulapalli, Sudipto Ghosh. Published jointly by Bhakti Vedanta Institute, Calcutta and Tirumala Tirupati Devasthanams, Tirupati, pp. 65–81.
2. Singh S. and Gupta S. Laboratory investigation in Emergency. *Manual of Medical Emergencies*. 3rd edition Pushpanjali Medical Publication Pvt Ltd., Delhi, 2007 pp 846–860.

PATIENT CARE

Total Tests Performed: 67,84,151

Centralised Collection Centres

BLOOD COLLECTION

For the Dept. of	No. of Specimens
Laboratory Medicine	: 1,96,286
Blood Bank	: 2,658
Microbiology	: 12,891
Miscellaneous	: 17,099
(Samples collected from other clinics)	
Total	: 2,28,934
Grand Total:	4,05,669

FLUID & SECRETIONS COLLECTIONS

Specimen	Numbers
Urine	: 1,18,578
Fecal samples	: 9,464
Sputum	: 17,989
Semen	: 11,459
Other fluids	: 145
Blood For Viral Marker/HIV Investigation	: 19,100
Total	: 1,76,735

Emergency Laboratory Service (Round The Clock)

CLINICAL BIOCHEMISTRY

Test	Number
Blood Sugar	15,825
Blood Urea	78,972
Bilirubin	24,778

Sodium	79,646
Potassium	79,646
Amylase	7,462
CSF Sugar	6,125
CSF protein	6125

Arterial Blood Gas	13,266
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Total : 3,11,845

Grand Total: 10,65,469

HEMOGRAM & BODY FLUID

Test	Number
Hb	85,711
TLC	85,711
Platelets	85,711

Proth Time	27,302
M.P.	3,089
CSF	7,709
Urine	957
Micro. Blood Culture	7,322

Micro. CSF	3,640
Gram Stain	2,632
Slide Stain Giemsa	3,089
Stool Hanging Drop	986
MCV	85,711
MCH	85,711
MCHC	85,711
PCV	85,711
RBC	85,711
Others*	11,210

Total : 7,53,624

* Repeat test, trial test, Quality Control Sample, Internal Q.C. etc.

Note: Arterial blood gas includes, pH, pCO₂, pO₂, BE, BE_{ecf}, 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

Test	Blood	Urine	Fluid
Sugar	1,17,231	900	3,103
Urea	1,99,316	463	—
T. Protein	1,89,871	—	3,103
Albumin	1,89,871	—	3,103
24h Albumin	—	8,058	—
Bilirubin			
i) Total	1,89,346	—	—
ii) Conj.	1,89,346	—	—
Alk. Phosphatase	1,98,748	—	—
Cholesterol	52,800	—	—
Na	1,63,174	3,784	—
K	1,63,174	3,784	—

Calcium	:	1,42,132	5,782	—
Phosphate	:	1,35,371	5,210	—
Uric Acid	:	1,32,711	5,226	—
Amylase	:	11,303	—	210
Creatinine	:	1,96,873	8,792	—
SGOT	:	2,02,585	—	—
SGPT	:	2,02,585	—	—
ABG	:	9,051	—	—
pCO ₂	:	9,051	—	—
pH	:	9,051	—	—
pO ₂	:	9,051	—	—
HCO ₃	:	9,051	—	—
CO ₂	:	9,051	—	—
AsDO ₂	:	9,051	—	—
O ₂ sat.	:	9,051	—	—
BE	:	9,051	—	—
Total	:	27,57,896	41,999	9,519

Other Investigations (Done on request, Not as routine service)

Test	Number
HBsAg	650
Anti HBs	300
HBeAg	100
IgM anti HBc	400
Anti HCV	700
Anti HEV	100
IgM Anti HAV	200
HCV- RNA	50
TTV-DNA	300
Superoxide dismutase	100
T. Antioxidant	100
Apoprotein A	200
Apoprotein B	200
Lp(a)	100
CK	100
LDH	100
GGT	—
TG	200
LDLC	200
HDLC	200
TOTAL	4,300
Grand Total	28,13,713

Service from Room no. 18

Adenosine Deaminase Assay (ADA)	:	940
ELISA IgG-Ab Neuro Cysticercosis	:	139
TOTAL	:	1,079

HEMATOLOGY SECTION

Test		OPD	Ward
Hb	:	80,638	72,051
TLC	:	80,638	72,051
PCV	:	80,638	72,051
DLC	:	75,246	72,051
ESR	:	74,146	36,916
D/Morphology	:	69,953	18,350
Platelet	:	80,638	72,051
Retic Count	:	11,461	10,076
Ab. Eosinophil Count	:	25,802	7,420
Malaria Parasite	:	49,386	6,524
Thick Smear	:	—	—
MCV	:	80,638	72,051
MCH	:	80,638	72,051
MCHC	:	80,638	72,051
RBC	:	80,638	72,051
BT	:	1,150	—
CT	:	1,150	—
PT	:	6,607	10,537
Blood Clotted	:	1,274	936
Others*		11,866	8,590
TOTAL	:	9,73,145	7,47,808
Grand Total		17,20,953	

*Repeat test, trial test, Quality Control Sample, Internal Q.C. etc.

Note: Hb, TLC, PCV, DLC, Platelet, MCV, MCHC, RBC are measured by single reagent, within the same time frame

MICROBIOLOGY SECTION

Pre- and post-test counseling (total)	485
TORCH patients	138
HIV/AIDS	347

Workload of the Tests done in Clinical Microbiology Section during April 2007 to March 2008.

The clinical microbiology section caters two types of patient care services i.e. (A) Routine investigations & (B), Specialised investigations, mostly are on payment basis.

A. Routine Investigations

Urine

Test	OPD	Ward	Total
Medical board			11420
Routine	61192	45966	107158
Microscopic	92988	68949	161937
PH	30996	22983	53979
Specific gravity	30996	22983	53979
Acetone	30996	22983	53979
Bile pigment/salt	30996	22983	53979
Urobilinogen	30996	22983	53979
Blood	30996	22983	53979
Bence Jones Protein	202	275	477
Chyluria	110	190	300
Porphobilinogen	40	36	76
Myoglobinuria	4	5	9
Hemosiderin	-	-	-
Microalbumin	3	-	3
Urine Cultures	12735	-	12735
Strain identifications tests	10102	-	10102
Antibiotic Sensitivity	2170	-	2170
E-test for ESBL Testing	-	-	-
Subtotal	3,65,522	2,53,319	6,30,261

Stool Investigations

Wet mount saline	7091	2373	9464
Wet Iodine stain	7091	2373	9464
Occult blood in stool	2177	835	3012
Fat globules	279	412	691
Special stains for HIV Positive Patients	1186	1640	2826
Subtotal	17,824	7,633	25,457

Semen analysis

Routine	11459	—	11459
Morphology	434	—	434
Fructose	3418	—	3418
Subtotal	15,311	—	15,311

Sputum analysis

Z-N Staining for AFB	—	—	17989
Concentration/Decontami-nation	—	—	17441
AR Staining	—	—	—
LJ Culture & subculture	—	—	2323
BECTEC Culture	—	—	2775
BECTEC Drug Sensitivity	—	—	112
Mycobacterial strains maintained	—	—	2012

LJ Proportional method I st Line II nd Line	—	—	11270
Non tubercular mycobacterium isolate maintained	—	—	50
Biochemical tests for culture identification	—	—	281
MB BacT Blood Culture for TB	—	—	253
MB BacT Culture	—	—	253
Drug Sensitivity	—	—	112
Clinical Samples Stored at -70°C/LN	—	—	2450
Accuprobe			110
Geneprobe	—	—	65
Subtotal	—	—	46,408

Miscellaneous Investigations

Bone Marrow examination			
<ul style="list-style-type: none"> • CSF Latex agglutination for Cryptococcosis, • CSF Latex agglutination for Pyogenic meningitis, • Blood for Malaria Parasite • Blood for Microfilaria, • Malaria Antigen detection, • Urine Microalbumin, • Pus Culture and sensitivity, • Water sample testing 			142
Laboratory Animals (Mice, Rabbits & Hemsters) used for diagnosis of infectious diseases			520
Leishmania strains maintained			1440
Bacterial strains maintained			4000
Subtotal			6102
Total of A			7,23,539

B. Specialised Investigations on payment basis. The service is provided to all patients of AIIMS and outside AIIMS. For patients holding BPL (Below Poverty Line) cards, all tests are done free.

Serology and Molecular biology

Test	Total
TORCH	11422
Toxoplasma gondii IgG	954
Toxoplasma gondii IgM	1013
Rubella IgG	1027
Rubella IgM	1138
Cytomegalo virus IgG	1731
Cytomegalo virus IgM	1895
Herpes Simplex virus IgG	860
Herpes Simplex virus 2 IgG	860
Herpes Simplex virus (1+2) IgM	880
Toxoplasma gondii IgG avidity	156
Rubella IgG avidity	444

Cytomegalo virus IgG avidity	148
Parvo virus B19 IgG	158
Parvo virus B19 IgM	158
Viral Marker & HIV	40711
Anti HAV IgM	1446
HBsAg	14172
Anti HBcIgM	767
Anti HBc Total	192
HBeAg	1598
Anti HBe	317
Anti HBs	1469
Anti HCV antibody	8790
HEV IgM	1788
HIV (1+2) ELISA	9176
HIV Spot	490
HIV Westernblot	06
HBsAg (spot)	500
Others Serology	1468
TB IgG *(R.No.18)	300+147*
TB IgA	300
TB IgM	300
Measles IgG	53
Mumps IgG	53
Varicella IgG	106
Varicella IgM	106
Anti Leishmania antibodies	250
PCR Tests	2577
Toxoplasma gondii PCR	40
Cytomegalo virus PCR	110
Leishmania PCR	150
TB PCR	2130
Sub Total of B	56178
Grand Total (A + B)	7,79,717

AWARDS AND HONOURS

Dr A.K. Mukhopadhyay: Honorary Member of Editorial Board of *International Journal of BioSciences and Technology*. Reviewer of Manuscript of *Current Science*, and *Indian Journal of Clinical Biochemistry*, Reviewer of Manuscripts of Indian Council of Philosophical Research (ICPR) and Center for study of History of Civilization (CHC), New Delhi.

Dr M. Irshad was nominated as the reviewer for the articles of Blackwell Publishers & Elsevier Publishers.

Dr Sarman Singh was awarded the fellowship of the Royal Society of Tropical Medicine and Hygiene (FRSTMH), London; nominated for the Donald Mackay Medal of the American Society for Tropical Medicine and Hygiene (ASTMH), USA; Awarded by Council of Science and

Technology, Govt. of Uttar Pradesh by their highly prestigious “Vigyan Ratna Samman”; Awarded Professor B.P. Pandey Memorial Oration Award by Indian Society of Parasitology as best teacher in Parasitology; Nominated member of board of faculty of life sciences (RDC) of CSJM University, Kanpur; Member of the task force of SERC division of DST; Member of the abstract review committee for the World AIDS Conference to be held at Mexico City, Mexico in August 2008; Nominated member of the “Scientific Expert Committee on QA/QC implementation” of National Institute of Biologicals, Government. of India and also member of the Joint Monitoring Mission of WHO & National Vector Borne Disease Control Programme, Government of India; Editor-in-Chief of Journal of Laboratory Physicians, INDIA; Elected member of the editorial board of “Recent Patent Reviews on Anti-infective Drug Discovery; USA; The Open AIDS Journal, USA; Journal of Infections in Developing Countries, Italy; and the Clinical Medicine: Dermatology, Australia; Nominated as Editorial board member of the Indian Journal of Medical Microbiology, Journal of Parasitic Disease (India), and Journal of Immunology & Immunopathology (India).

SIGNIFICANT EVENTS

1. Inauguration of NASBA Laboratory in the Department on 24 January 2008
2. Second International Conference on Opportunistic Pathogens in AIDS (ICOPA) from 27–29 January 2008

VISITING SCIENTIST

1. Representatives from 23 countries visited AIIMS, during the ICOPA.

9.17 Medicine

Professor & Head

S.K. Sharma

Professor

Rita Sood

Ashok Kumar

Randeep Guleria

A. B. Dey

Rohini Handa

G. C. Khilnani

Associate Professors

Naveet Wig
Rajiva Gupta

Ashutosh Biswas

Uma Kumar

Assistant Professors

Sanjeev Sinha

Naval K. Vikram

Anant Mohan

Scientists

A.K. Srivastava S-IV

Vandita Vasudev S-III

EDUCATION

Professor Rita Sood the coordinator and faculty for an 'Orientation Program for Interns' held on 5–6 January 08, for the new batch of interns.

Short and long term training

13 postgraduate and undergraduate students from Bangladesh, USA, U.A.E., U.K., Singapore and Germany received training in the Department of Medicine during the current year. Dr Kripasindhu Gantait worked as a Short-Term Trainee in Rheumatology from 2 January 2008 till 31 March 2008.

Continuing Medical Education

Professor S. K. Sharma organized the following CME programmes:

- Organizing Chairperson for the Medicine Update 2007 in association with Association of Physicians of India (API) Delhi State Chapter at All India Institute of Medical Sciences on 5 August 2007
- Organizing Chairperson for the CME on Training Programme for Prevention, Control & Management of HIV/AIDS for Nurses with Delhi State AIDS Control Society (DSACS) at All India Institute of Medical Sciences from 29–30 September 2007
- Jointly organized the workshop on Sleep Apnea Syndrome with Association of Physicians of India (Saharanpur branch) at Mussoorie from 29–30 September 2007
- Jointly organized the workshop on Good Clinical Practices (GCP) with Pfizer Education And Research League (PEARL) at All India Institute of Medical Sciences from 29–30 March 2008

Dr Rita Sood was the Organizing Chairperson/ Course Faculty for the following:

1. National Conference on Medical Education – 'Building Capacity in Medical Education: A National Perspective' from 15–17 November 2007. Organized in Collaboration with the Foundation for Advancement of International Medical Education and Research, Philadelphia, USA.

2. In–House workshops on ‘Assessment in Medical Education’ for AIIMS faculty in November 2007 and February 2008.
3. Was Course faculty for the following:
 - Ist PSG-FAIMER regional institute faculty development program in medical education at Coimbatore, Tamil Nadu from 15–20 April 2007.
 - Third GSMC-FAIMER regional Institute Course in Medical Education from 15–19 June 2007 at KEM hospital and GSMC, Mumbai

Conducted following sessions during above courses:

- Project management
- Student assessment
- Mentoring-learning web and virtual curriculum
- Qualitative research
- Educational scholarship

Dr Biswas organized the National Conference on Best Medical Practices in HIV/AIDS Care. Apollo Hospital, New Delhi, 18 November 2007.

Dr Uma Kumar organized monthly Delhi Rheumatology Association meeting in December 2006.

Dr Rajiva Gupta organized the second workshop on Clinical Methods in Medicine for post graduates in March 2006 at AIIMS.

Lectures at CMEs

Dr Rita Sood

- Approach to arthritis. 6 July 2007 at PMCH, Patna
- Management of Rheumatoid arthritis. 6 July 2007 at PMCH, Patna
- Recent trends in the treatment of Osteoporosis. Bihar Orthopaedic Association Meeting, 9 July 2007
- OSCEs: In-house workshop on Assessment Strategies organized by CMET AIIMS, 2 August 2007
- Clinical Puzzle for Physicians, Delhi API–CME organized by Department of Medicine AIIMS, 5 August 2007
- Examination in Rheumatology: Clinical Skill workshop at MAMC CME, 9 December 2007
- CPC coordinator at MAMC CME, 13 December 2007
- Diagnostic Dilemma in inflammatory Polyarthritits, CME 2007 by EDPA at New Delhi, 16 December 2007

Dr Anant Mohan

- Guest speaker at panel discussion on Management of an unconscious patient, IMA East Delhi branch, 26 August 2007.

NATIONAL AND INTERNATIONAL CONFERENCES

Lectures delivered

Professor S. K. Sharma

- Treatment and Management of HIV-TB Co-infections in Indo-US Workshop on the “Clinical

and Translational Research for Prevention, Care and Treatment of HIV-related Co-Morbidities” organized by Indian Council of Medical Research (ICMR) at India Habitat Center, Lodhi Road from 24–25 September 2007

- “Obstructive Sleep Apnea” in North India Clinics organized by Association of Physician of India (Saharanpur branch) at Mussoorie from 29–30 September 2007
- “Sleep Apnea is not an independent risk factor for metabolic syndrome” in Sleepcon 2007 organized by Indian Sleep Disorders Association (ISDA), Department of Pulmonary, Critical Care & Sleep Medicine Vardhaman Mahavir Medical College & Safdarjung Hosiptal, New Delhi at India Habitat Center from 07–09 December 2007

Dr Rita Sood

- Sri Ramachandra University Harvard Medical International Conference on ‘Bridging Healthcare Education Gap’ at Ramachandra University, Chennai on 27–28 July 2007.
- Seminar for Directors and faculty of FAIMER regional institutes at FAIMER, Philadelphia, USA from 18–22 August 2007.
- API Gujarat chapter annual conference from 23–24 December 2007 at Karamsad, Gujarat. Coordinated workshop on “Assessment in Medical Education”.
- College of Nursing workshop on “Teaching & Learning for nurses” at AIIMS on 14 January 2008.
- Regional workshop on “Role - relevance and effective utilization of medical education units for faculty development in medical education” at Nagpur (organized by Datta Meghe University as part of platinum jubilee celebrations of MCI) on 3 February 2008.

Professor Ashok Kumar

- ‘Individualising methotrexate therapy in rheumatoid arthritis: the promise of pharmacogenetics’ during the Annual Conference of Indian Rheumatology Association held at Khajuraho from 26–29 October 2007.
- ‘Role of autoantibodies in the diagnosis of systemic rheumatic disorders’ on 1 April 2007 during the National Laboratory Symposium of Sohar Hospital, Oman
- ‘Haemophagocytic syndrome: an unusual cause of PUO’ during Monday CME on 18 September 2007 at Sohar Regional Hospital, Oman
- Discussed a CPC on ‘LA myxoma with embolism to multiple organs’ 24 September 2007 in Sohar Regional Hospital, Oman
- Panelist for the session on ‘Biological agents for the treatment of rheumatic disorders in India’ during an international conference organized in Mumbai on 16 October 2007
- ‘SLE: Beyond cyclophosphamide’ during the Rheumatology Update organized by the Delhi Rheumatology Association on 17 February 2008 at New Delhi.

Professor Randeep Guleria

- Delivered a talk and chair a session in the Respiratory Update, Goa from 13–14 July 2007.
- Delivered a lecture on Community Acquired Pneumonia in the CME on 4 August 2007 at the API, Dehradun.
- Attended the European Respiratory Society (ERS) Conference at Stockholm, Sweden w.e.f. 15–19 September 2007 and presented two posters.
- Delivered lecture and chaired a session at the Joint National Conference of the Indian Chest

Society and the National College of Chest Physicians (NAPCON – 2007) at Chandigarh from 22–25 November 2007.

- Attended the Asia Pacific Anti Infectives Summit Forum held at Shanghai, China on 20–21 October 2007.
- Resource person in the four days Refresher Training Course for the Rapid Response Teams of the States of Western Region at Panjim, Goa from 11–15 November 2007.
- Delivered a lecture in the symposium on Community Acquired Pneumonia on 23 December 2007 at PGIMER, Chandigarh.
- Attended and presented a poster at the International Conference on Emerging Infectious Diseases (ICEID) from 16–19 March 2008 at Atlanta, USA.

Professor Rohini Handa

- Sixth Scientific Conference of Bangladesh Rheumatology Society, Dhaka, Bangladesh. 30–31 October 2007 on “Serology in the diagnosis and management of SLE”
- VII National Conference of the Indonesian Rheumatology Association, Makassar, Indonesia. 15–18 November 2007 on 1. “SLE- The challenge of atherosclerosis” and 2. “Lupus Nephritis”
- South Delhi Orthopedics, Delhi. 4 April 2007 on “Rational Management of RA”
- Rheumatology Update, SP Medical College, Bikaner. 8 April 2007 on “Approach to Arthritis & Connective Tissue Diseases” and “Approach to Vasculitis”.
- Internal Medicine CME-2007, PGI Chandigarh. 15 April 2007 on “Life threatening lupus”
- Aligarh Orthopedics Club, Aligarh. 22 April 2007 on “How to diagnose and manage Rheumatoid Arthritis?”
- Association of Physicians of India- Delhi State Chapter Mid term CME, Delhi. 22 July 2007 on “Biologics in Early RA”
- Mid Term Rheumatology Meet, IRA West Bengal Chapter, Kolkata. 29 July 2007 on “Osteoporosis in India: Challenges & Opportunities”
- Symposium on Osteoarthritis and Osteoporosis, Academy of Medical Sciences, Nagpur. 12 August 2007 on “Emerging therapies for Osteoarthritis and assessment of treatment efficacy in OA”
- Symposium on Rheumatic Diseases, Jaipur Hospital, Jaipur. 2 September 2007 on “Clinical Case Discussion: Vasculitis & Pregnancy in Rheumatic Diseases”
- Ninth Postgraduate Instructional Course in Orthopedics, Maulana Azad Medical College, New Delhi. 3–6 October 2007 on “Osteoporosis- Investigations & treatment”
- 15th Annual Conference of Indian Association of Clinical Medicine, Amritsar. 12–14 October 2007 on “Rheumatoid Arthritis- Current treatment paradigm”
- Association of Physicians of India, Jalandhar Chapter, Jalandhar. 13 October 2007 on “Challenges in management of pain in rheumatic diseases & Update on treatment of RA”
- 23rd Annual Conference of Indian Rheumatology Association- IRACON 2007, Khajuraho. 26–29 October 2007 on “Should corticosteroids be offered to all patients with RA”
- Annual Conference of Association of Physicians of India-Delhi State Chapter, New Delhi. 3–4 November 2007 on “Choosing a NSAID- Which drug for whom?”
- 29th Annual Conference of Association of Physicians of India, UP Chapter-UPICON- 2007, Varanasi. 24–25 November 2007 on “DMARDs and Biologics in Rheumatoid Arthritis”
- Indian Medical Association, East Delhi Branch- Pulmonary and Critical Care Update. 29 November 2007 on “Pulmonary Vasculitis”

- Medicine Update 2007. Maulana Azad Medical College, New Delhi. 9–13 December 2007 on “Role of Biologics in Rheumatology” Art of Medical Sciences CME, Mumbai. 16 December 2007 panel discussion on “Corticosteroids in Rheumatology”
- 63rd Annual Conference of the Association of Physicians of India, Kochi. 10–13 January 2008 on “Tight control in RA-What, why and how?” Chaired Ratnavelu Subramanian Oration by Dr V Shantaram on ‘Vasculitis’
- Rheumatology Update, Delhi Rheumatology Association, New Delhi. 17 February 2008 on “Biologics in established/resistant Rheumatoid Arthritis”
- 60th Year Celebrations of SMS Medical College, Jaipur. 25 February 2008 on “Vasculitis-The inimitable mimic”
- 13th Annual Conference of Indian Menopause Society, Jammu. 14–16 March 2008 on “Osteoporosis-Dimensions & Diagnosis”

Professor G.C. Khilnani

- Fluid resuscitation in ICU (Critical care symposium): During Medicine Update 2007: Organized by Maulana Azad Medical College Delhi from 9–13 December 2007
- Community Acquired pneumonia During RAJCON -2008, organized by MS Medical college Jaipur under aegis of National college of Chest Physicians (Rajasthan Chapter) held at Jaipur on 24–25 February 2008
- Noninvasive ventilation: During National Level workshop on mechanical ventilation organized by Dept of Pulmonary and Critical care Medicine at PGIMS Rohtak on 6 May 2007
- NIPPV: When and when not: during Annual conference on Critical Care Medicine organized by Indian Society of Critical Care Medicine held at Jaipur from 5–8 April 2007
- Debate: Who should call the shots in ICU-The intensivist or the primary physician during Annual conference on Critical Care Medicine organized by Indian Society of Critical Care Medicine held at Jaipur from 5–8 April 2007
- Antibiotic Choice for Community Acquired Pneumonia During the conference held on 25–26 August 2007 at Delhi
- VAP: Use of ATS guidelines in Indian setting: During Asia Pacific Conference on Critical care held at Delhi
- Health Effects of Outdoor Air pollution: Indian Scenario during the conference IASTA 2007 held at National Physical Laboratory (NPL), Pusa Road New Delhi on 14 January 2007
- Served as Course coordinator on Work shop on Non-invasive ventilation during the National Conference on Pulmonary Medicine (NAPCON 2007) held at PGIMER Chandigarh from 22–25 November 2007
- What is NIV: During work shop on Non-invasive ventilation during the National Conference on Pulmonary Medicine (NAPCON 2007) held at PGIMER Chandigarh from 22–25 November 2007
- Respiratory Rehabilitation: delivered lecture during National Conference on Pulmonary Medicine (NAPCON 2007) held at PGIMER Chandigarh from 22–25 November 2007
- Guest Lecture: Health Effects of Air Pollution. During International conference on Air Pollution control: Challenges and Techno. Solutions organized by National Environment Engineering Research Institute at Nagpur on 24–25 January 2008

- Chairperson for a panel discussion on Management of asthma in ICU during Annual conference of Indian College of Allergy and Applied Immunology held at VP Chest Institute from 9–12 December 2007
- Course Director for work shop on mechanical ventilation during Joint conference of Association of Physicians of India (APICON 2008) held at Cochin 10–13 January 2008
- Modes of Mechanical ventilation in work shop on mechanical ventilation during Joint conference of Association of Physicians of India (APICON 2008) held at Cochin 10–13 January 2008
- Guest lecture: Noninvasive mechanical ventilation in chronic obstructive pulmonary disease during Joint conference of Association of Physicians of India (APICON 2008) held at Cochin 10–13 January 2008
- Pneumonia in organ transplant patients: During NAMS symposium on Advances in Community Acquired Pneumonia held at PGIMER at Chandigarh on 23 December 2007
- Management of VAP: in Workshop on mechanical ventilation: during 14th annual National conference of Indian Society of Critical Care Medicine (Criticare 2008) held at Bhopal from 13–17 February 2008
- ‘VAP on CAP: Pathogenic changes, Early diagnosis and modification in antimicrobial therapy’: Thematic Lecture during 14th annual National conference of Indian Society of Critical Care Medicine (Criticare 2008) held at Bhopal from 13–17 February 2008
- My strategy for selecting empiric antibiotics in ICU during 14th annual National conference of Indian Society of Critical Care Medicine (Criticare 2008) held at Bhopal from 13–17 February 2008
- Nosocomial Infections: from dynamics to surveillance and control: During CME on Antibiotic resistant microorganisms: A threat and challenge’ Organized by Indian Society of Critical Care Medicine at Mumbai on 2.9.074.

Dr Ashutosh Biswas

- Medinfo 2007, 12th World Congress on Health (Medical) Informatics, Brisbane, Australia, 20–24 August 2007.
- Clinical features of DF/DHF/DSS, Department of microbiology, AIIMS, 29 05 07.
- Management of HIV/AIDS with ART. Jharkhand Association of Physicians of India Conference (JAPICON-2008), 23 February, Dhanbad, 2008.
- Best practices in management of HIV-TB co-infection, Conference on “Best Medical Practices in HIV/AIDS Care’ Apollo Hospital, New Delhi, and 17–18 November, 2007.
- Antiretroviral Therapy for HIV infection. MEDCON-2008, Maharaja Agrasen Hospital, Panjabi Bagh, New Delhi, 30 March 2008.

Dr Uma Kumar

- “Neuropsychiatric lupus-Indian Scenario in IRACON 2007, at Khajuraho, India
- “Scleroderma- Present and future” in annual meeting of IACM 2007 at Amritsar, India.
- Prevalence of pulmonary artery hypertension and its predictors in systemic sclerosis in APICON 2008 at Kochi, India.

Dr Rajiva Gupta

- PET CT in Aortoarteritis, Indian Rheumatology Association Conference 2007, Khajuraho.
- “Pregnancy Outcomes in SLE in Indian Patients” – Annual Meeting of British Society of Rheumatology 2007 at Birmingham.

- “Role of F18-FDG PET-CT scan in diagnosis and assessment of disease activity of Takayasu’s arteritis–Preliminary results” – Annual Meeting of British Society of Rheumatology 2007 at Birmingham.
- “Prevalence and clinical significance of anti-cyclic citrullinated peptide antibodies in juvenile idiopathic arthritis” – Annual Meeting of British Society of Rheumatology 2007 at Birmingham.
- “Prevalence and clinical significance of antiphospholipid antibodies in systemic sclerosis”- Prof EC LeRoy Memorial International Workshop on Scleroderma – Tokyo May 2007.
- “Scleroderma overlap syndrome – Single center experience from north India” - Prof EC LeRoy Memorial International Workshop on Scleroderma, May 2007.
- “Pregnancy outcome in Indian systemic sclerosis” - Prof EC LeRoy Memorial International Workshop on Scleroderma – May 2007.

Dr Anant Mohan

- “Clinical Skills in Medicine” at the Golden Jubilee Medicine Update 2007 at Maulana Azad Medical College, 9–13 December 2007.
- “Arterial Blood Gas Analysis” at Golden Jubilee Medicine Update 2007 at Maulana Azad Medical College, 9–13 December 2007.
- “Role of Inflammatory Mediators as Markers of Severity and Outcome in Acute Exacerbation of COPD” and “Impact of symptoms, respiratory status, nutritional profile and quality of life in patients with advanced non small cell lung cancer” at CHEST conference in Chicago, 20–25 October 2007.
- Delivered guest lecture “Influenza Virus in Respiratory Diseases in India” at International Conference on Emerging Viral Infections in the Tropics and Sub-Tropics”, 14 December 2007, New Delhi.

RESEARCH

Funded Projects

Completed

1. Genomic and Molecular studies in patients bronchial asthma: Collaborative project; Department of Medicine, AIIMS New Delhi and Institute of Genomics and Integrated Biology, New Delhi, Dr S.K. Sharma, Department of Biotechnology, Ministry of Science and Technology, Govt. of India, 41,74,000, 3 years, 2004–2007
2. A double-blind, placebo-controlled, parallel, multicenter study on extended VTE prophylaxis in acutely ill medical patients with prolonged immobilization, Dr S.K. Sharma, Aventis Pharmaceuticals Inc., USA, 4,00,000, 1 year, 2006–2007
3. Effect of feeding pectin on antioxidant status in patients with type 2 diabetes. Dr Anant Mohan. Funded by AIIMS for two years (2005–2007). Funds: Rs. 1.65 lakhs.

Ongoing

1. Comparison of tuberculin skin test (TST) and interferon-release assay in latent TB infection and tuberculosis disease, Dr S.K. Sharma, Revised National TB Control Programme NCT of Delhi, 4,99,937, 3 years, 2008–2011
2. Sustaining research momentum over the coming decades: mentoring the next generation of researchers for tuberculosis, Dr S.K. Sharma, European Union Frame Programme 7 Work, 67,84,000, 3years, 2008–2011

3. 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), Dr S.K. Sharma, Department of Biotechnology, Ministry of Science & Technology, Government of India and Cadila Pharmaceuticals Ltd.: Principal Investigator & National Coordinator, 1,31,32,000, 6 years, 2004–2010
4. Evaluation of management strategy for pulmonary embolism (Multicountry international project), Dr S.K. Sharma, International Atomic Energy Agency (IAEA), Vienna Austria, 1,80,268, 4 years, 2004–2008
5. Antiretroviral Treatment (ART) Center for free treatment of HIV/AIDS patients (National AIDS Control Organization (NACO); Ministry of Health and Family Welfare; Govt. of India), Dr S.K. Sharma, Delhi State AIDS Control Society, 4,50,000, Initially one year likely to get extended indefinitely, 2005-ongoing till date
6. Nodal Center for free treatment of TB, Dr S.K. Sharma, Revised National TB Control Programme NCT of Delhi through the area District TB Centre; Ministry of Health & Family Welfare, Govt. of India, 4,32,000, Initially one year likely to get extended indefinitely, 2005-ongoing till date
7. Treatment outcome and drug resistance among CAT II pulmonary tuberculosis under Revised National TB Control Programme (RNTCP), Dr S.K. Sharma, RNTCP NCT of Delhi, 8,01,731, 3 years, 2005–2008
8. Efficacy of thrice weekly intermittent short course anti-tuberculosis chemotherapy in tuberculosis patients with and without HIV infection, Dr S.K. Sharma, National AIDS Control Organization (NACO); Ministry of Health and Family Welfare; Govt. of India, 45,42,000, 3 years, 2006–2009
9. 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), Dr S.K. Sharma, Pfizer India Ltd., 5,70,000, 3 years, 2006–2008
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), Dr S.K. Sharma, Department of Biotechnology, Ministry of Science and Technology, Govt. of India, 90,90,000, 3 years, 2006–2009
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, Multicenter Clinical Trial), Dr S.K. Sharma, Department of Biotechnology, Ministry of Science and Technology, Govt. of India, 63,38,000, 3 years, 2006–2009
12. Evaluation of the efficacy of thrice weekly DOTS regimen in TB pleural effusion at six months (multicenter project), Dr S.K. Sharma, Revised National TB Control Programme NCT of Delhi, 14,36,615, 3 years, 2006–2009
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), Dr S.K. Sharma, Department of Biotechnology, Ministry of Science and Technology, Govt. of India, 76,81,000, 3 years, 2006–2009

14. Programme support for immuno-proteomics based diagnosis of infectious diseases, Dr S.K Sharma, Department of Biotechnology, Ministry of Science and Technology, Govt. of India, 1,73, 488, 3 years, 2006–2009
15. A population based study of prevalence and risk factors in sleep disordered breathing in south Delhi [Designated as South Delhi Sleep Study Cohort (SDSSC)], Dr S.K. Sharma, Pfizer India Ltd., 5,00,002, 2 years, 2006–2008
16. Impact of HIV infection on latent TB among patients with HIV-TB co-infection (Facility has been designated as National Facility), Dr S.K. Sharma, Department of Biotechnology, Ministry of Science and Technology, Govt. of India, 219,96,000, 3 Years, 2007–2010
17. Methotrexate in rheumatoid arthritis: Pharmacogenetics and clinico-immunological correlates. Prof Ashok Kumar. Funding agency: DBT. Duration: 3 years, extended to 4 years presently. Total amount: Rs 91.72 lakhs (multicentric project)
18. “Design and development of Personal use respiratory devices for patients with respiratory failure” Dr Randeep Guleria. Funding Agency: Ministry of Communication & Information Technology. Total Grant Rs.22.85 lakh & Duration of project: Till June 2008.
19. Assessment of nutritional and antioxidant enzyme status in mechanically ventilated critically ill patients. Effects on mortality and strategies for improving nutritional support”. Funding Agency: Department of Science & Technology. Dr Randeep Guleria. Total Grant of Rs. 22 lakh. Duration of project: Till July 2009.
20. “Double blind randomized placebo controlled trial of herbal compound MA-364 in patients with mild to moderate bronchial asthma” Dr Randeep Guleria; Funded by Maharishi Ayurveda. Duration of project: Till September 2008.
21. Serum leptin nutritional status and inflammatory markers in chronic obstructive pulmonary disease. Relationship with dyspnea and severity of disease” Dr Randeep Guleria. Funding Agency, ICMR. Total Grant of Rs. 19 Lac. Duration of project, till February 2010.
22. Influenza awareness preparedness and response (IAPR an Inclen AIIMS NIHFV) Principle Investigator: Dr Randeep Guleria. Total Grant of Rs. 10 Lakh. Funding Agency Inclen India and CDC Atlanta. Duration of project December 2008.
23. Clinical implications of circulating DNA and protein markers in lung cancer” Principle Investigator: Dr Randeep Guleria. Total Grant of Rs.19,93,214/- lakh Funding Agency: ICMR. Duration of project Till December 2010.
24. An Interventional Nutritional study in subject with newly Diagnosed active Tuberculosis (TB). Funding agency: GSK. Duration of project July 2009, Total Grant Rs.12.8 lakh. Principle Investigator: Dr Randeep Guleria.
25. Genetic Metabolic and Hormonal Profile in Obstructive Sleep Apnea Syndrome” Dr Randeep Guleria. Funding agency Department of Science and Technology, Total Grant of Rs.24 lakh. Duration of project- Till April 2011.
26. “Prevalence of Rheumatic Disorders in Ballabgarh Tehsil, District Faridabad, NCR Delhi”. Professor R. Handa. Funding Agency: Bone & Joint Decade India. Amount: Rs 1.75 Lakhs.
27. A Randomized, Open-Label Study in the Asia-Pacific Region Comparing the Safety and Efficacy of Etanercept with Usual DMARD Therapy in Subjects with Rheumatoid Arthritis. Dr R. Handa. Funding Agency: Wyeth. Amount: Rs 16.80 Lakhs.

28. Effect of outdoor and indoor air pollution on children's health in Delhi. A controlled study. Prof G.C. Khilnani. Funded by Ministry of Environment and Forest. Duration: 2½ years, start year: 15 December 2005 to 15 June 2008). Funds: Rs 5.59 lakhs per year for two and half years.
28. Pharmaco-genetics of Methotrexate in Rheumatoid arthritis. Dr R. Gupta. Funding agency-DST.
29. Study the effect of statin on lipid profile and disease activity in rheumatoid arthritis. Dr R. Gupta. Funding agency-AIIMS. 2.0 lacs
30. Cutaneous vasculitis – etiological & pathological pathological study (co investigator). Dr R. Gupta. – 2 lacs.
31. 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. Dr Anant Mohan. Funded by the Indian Council for Medical Research for 3 years (2007–2010). Funds: Rs. 12.64 lakhs.
32. Prognostic utility of various acute phase reactants in acute exacerbation of chronic obstructive pulmonary disease. Funded by AIIMS for one year (2007–2008). Funds: Rs. 1.00 lakh.

Departmental Projects

Completed

- 1 To 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 Endothelial Dysfunction in Rheumatoid Arthritis (Depts. of Medicine & Radiology)
- 6 Hospitalization for Systemic Rheumatic Diseases (Depts. of Medicine, Dermatology, Gastroenterology and Hospital Administration)
- 7 Treatment outcome and drug resistance among category II pulmonary tuberculosis patients under RNTCP.
- 8 Diagnosis of visceral Leishmaniasis by use of PCR on patient blood (Microbiology).
- 9 Critical Appraisal of Assessment in Key Clinical Disciplines in Undergraduate Course at AIIMS (CMET).
- 10 Prevalence and Treatment Response of Coccidian Parasite Infection in HIV Positive Patients at AIIMS (Laboratory Medicine).
- 11 A Study of Hematological Abnormalities in HIV/AIDS (Hematology).
- 12 Hospitalization for rheumatic diseases- A prospective study.
- 13 Efficacy of oral Sildenafil in pulmonary artery hypertension in Scleroderma- A hospital based study.
- 14 Screening for catastrophic antiphospholipid antibody syndrome.
- 15 Effect of IFN- δ and immune complex on neutrophil-CR1 transcript and its relationship with CR1 density polymorphism. (collaboration with Biochemistry)
- 16 Assessment of nutritional profile and CRP levels in patients with respiratory failure who are on mechanical ventilation.
17. Evaluation of 18- FDG PET-CT and comparison with CT findings in patients with mediastinal lymphadenopathy due to tuberculosis and sarcoidosis
18. Dynamics of commensal flora & development of nosocomial infections in the critically ill

19. Microbial patterns in severe exacerbations of COPD requiring mechanical ventilation
20. Study of Clinical and microbiological profile of community acquired pneumonia(CAP)
21. A case control study of ventilator associated pneumonia and comparative analysis of early and late onset disease

Ongoing

1. To study the clinical and laboratory correlations of hand abnormalities in scleroderma
2. To 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 & development of nosocomial infections in the critically ill.
8. To 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. Existing status of Faculty Development in Medical Education in India (CMET).
11. Study of Mycobacteremia in Disseminated Tuberculosis (Laboratory Medicine)
12. Clinical profile of frail elderly patients in hospital setting.
13. Reference diagnostic range for serum free light chains in Indian Subjects. Comparison with multiple myeloma (Collaboration with Hematology)
14. Endothelial dysfunction in systemic sclerosis.
15. Modulation of neutrophil CR1 expression by IFN- γ and immune complexes, its relationship with CR1 density polymorphism and significance in SLE. (Collaboration with Biochemistry)
16. Role of complement regulatory protein DAF, MCP and CD59 in pathophysiology of SLE(Collaboration with Biochemistry)
17. Utility of PET scan in assessing extent of disease and response to treatment in Sarcoidosis.

Collaborative Projects

Completed

1. Study of etiological risk factor profile in pediatric strokes (Pediatrics)
2. Role of 18-FDG PET-CT scan in diagnosis and assessment of disease activity in primary systemic necrotizing vasculitis (Nuclear Medicine and Cardiac Radiology)
3. To study the pregnancy outcomes in patients with SLE with special reference to cyclophosphamide therapy (Obs & Gynae)
4. Holmium radiosynovectomy in refractory arthritis (Nuclear Medicine)
5. Role of 18 FDG PET Scan in the diagnosis and evaluation of pulmonary nodules (Dept of Surgery)
6. Evaluation of the role of MDCT, CT angiography and bronchial artery embolization in the management of hemoptysis (with Dept. of Radiodiagnosis)

Ongoing

Complement regulatory proteins and their significance in the pathophysiology of systemic lupus erythematosus (Dept of Biochemistry)

PUBLICATIONS

Journals

1. Arora V, Mondala AM, Grover R, Kumar A, Chattopadhyay P, Das N. Modulation of CR1 transcript in systemic lupus erythematosus (SLE) by IFN-g and immune complex. *Molecular Immunology* 2007; 44: 1722–1728.
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Chapters in Books

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PATIENT CARE

Chest Clinic (Friday 2:00 pm)

- New Cases: 1885
- Old Cases: 4101
- Total: 5986

Rheumatology Clinic (Wednesday 2:00 pm)

- New cases registered: 442
- Number of follow up visits: 7730
- Total: 8172

Rheumatology Procedures

- Intravenous pulses of steroids and cyclophosphamide: 492
- Joint and soft tissue injections: 1905
- Synovial fluid aspirations: 80

Adult Hematology Clinic (Thursday 2:00 pm)

- New patients — 86
- Old patients — 423

Infectious Diseases Clinic (Monday 2:00 pm)

The Infectious disease clinic operates on Monday afternoon and is run by the consultants of Medicine. In 2007–2008, 556 new and 347 old patients attended this clinic. An antiretroviral center was started in this clinic on 9 July 2005 with the purpose of free antiretroviral drug distribution to registered patients. 918 patients have been registered at this center, out of which 530 are on regular

treatment. A Voluntary Counseling and testing center (VCTC) has been established that provides free HIV counseling daily. 1632 persons have utilized this facility since its inception.

Laboratories

(A) Respiratory laboratory:	Number
• Spirometry procedures:	3195
• Diffusion capacity estimation:	281
(B) Bronchoscopy Laboratory:	
• Total Fiberoptic bronchoscopy procedures:	564
(C) Sleep laboratory:	
• Sleep studies:	254
(D) ADA/ACE laboratory:	
• Adenosine deaminase tests:	940
• ACE tests:	101
(E) Clinical Immunology Laboratory	
• Number of blood samples received:	9484
• Number of tests done:	22415
Test	Number
RF	4885
ANA	6207
Anti-dsDNA	1487
C3	1467
Serum IgG, IgA and IgM	1697
Cryoglobulins	107
ANCA	1803
aCL	3114
Anti-LKM-1	852
ASMA	796
Synovial fluid examination	80
(Including polarizing light microscopy)	

AWARDS AND HONOURS

Professor SK Sharma has edited first edition of Davidson's Clinical Cases published in 2008. He continues to be the editor of Indian Journal of Chest Diseases & Allied Sciences. He is the Section Editor of Pulmonology Section of the API Textbook of Medicine 8th edition published in 2008. He continues to be the Associate Editor of Indian Journal of Tuberculosis. He is a member of the International Advisory Board of "Davidson's of Principles and Practice of Medicine" (20th and 21st editions) and "Textbook and Clinical Medicine: by Kumar and Clark (6th edition). He has been nominated as the member of the Advisory Board of Davidson's for the 21st edition. He is a Fellow of American College of Chest Physicians, National College of Chest Physicians (India), Indian College of Physicians, and the American College of Physicians. He is a member of World Association of Sarcoidosis and other Granulomatous Diseases (WASOG), Indian Chest Society, American Thoracic Society, National Academy of Medical Sciences of India, Association of Physicians of India, International Union against Tuberculosis and Lung Diseases, and the Indian

Society of Critical Care Medicine. He is one of the Editors of “The Indian Journal of Chest Diseases and Allied Sciences. He continues to be an Editorial Board Member of the Chest (American College of Chest Physicians), Chest (India edition), Journal of the Association of Physicians of India (JAPI), Journal of Indian Academy of Clinical Medicine & Indian Journal of Sleep Medicine. He continues to a reviewer for the following reputed International and National journals: The Lancet, American Journal of Respiratory and Critical Care Medicine (Blue Journal), Journal of Applied Physiology, Chest, The Lancet Infectious Diseases, Respiratory Medicine, Respiriology, Journal of Molecular and Cellular Proteomics, Clinical Chimica Acta; Infection, Genetics and Evolution, Pharmacological Research, Journal of Laboratory and Clinical Medicine, Cytokine and Journal of Pharmacy Practice and Research. He was Editor of the Pulmonology section in the “API Textbook of Medicine” (8th Edition) and Associate Editor of the “Indian Journal of Tuberculosis” since 2006.

Dr Rita Sood

- 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 of Association for the Study of Medical Education in Europe (ASME).
- Editorial Board of ‘South East Asian Journal of Medical Education’ (SEAJME), published from Chulalongkorn University, Bangkok, Thailand.
- On the editorial board of “Journal of Indian Academy of Clinical Medicine”.

Dr Ashok Kumar took over as President of the Indian Rheumatology Association on 29 October 2007. He was elected President-Elect of the Delhi Rheumatology Association on 17 February 2008, and continues to serve as the Editor-in-Chief of Indian Journal of Rheumatology.

Dr G. C. Khilani was nominated Course Director for work shop on Mechanical ventilation at the Joint National Conference of Association of Physicians of India (APICON 2008) held at Cochin from 10–13 January 2008.

Dr Rajiva Gupta is member of International Advisory Board of Davidson’s - Principles and Practice of Medicine – 20th Edition, Member of International Advisory Board of Kumar & Clark – Clinical Medicine – 6th Edition, and Adjunct member – CMET, from department of Medicine.

SIGNIFICANT EVENTS

Professor S. K. Sharma continues to be the Chief Scientific Advisor of the International Multi-country project sponsored by International Atomic Energy Agency (IAEA), Vienna, Austria on “Evaluation of Management Strategy for Acute Pulmonary Embolism”; Chairperson of the National Task Force on Involvement of Medical Colleges in TB Control Programme of India, Ministry of Health and Family Welfare, Govt. of India; Chairperson of the Central Standing Committee for Operational Research on RNTCP related project, Ministry of Health & Family Welfare, Govt. of India. He continues to be a member of Scientific Advisory Committee (SAC), Infectious Diseases, Indian Council of Medical Research; World Lung Health [initiative of International Union Against Tuberculosis and Lung Diseases (IUATLD)]; Joint Steering Committee for collaboration between the two institutions: All India Institute of Medical Sciences, and University of Minnesota. He was a member of “Brain Storming meeting to discuss important project entitled “Bioinformatics in TB”

for involving strategies for considering their implementation at the Department of Biotechnology, Ministry of Science & Technology, Govt. of India. He has been appointed as a coordinator 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. He continues to be the expert member for reviewing research proposals from the Indian Council of Medical Research, New Delhi; Expert member for reviewing research proposals from the Department of Science and Technology, Expert and Task Force member of the Department of Biotechnology; Ministry of Science & Technology, Govt. of India; Expert member of the Third Task Force meeting of the Expert Group on Tuberculosis, Department of Biotechnology; Ministry of Science & Technology, Govt. of India. He participated in American Thoracic Society International conference, San Francisco, California 2007, The Cochrane Protocol Development workshop at Christian Medical College, Vellore, and in the "Consultative Meeting – India Response Plan for the Diagnosis and Management of MDR/XDR TB" organized by Central TB Division, Ministry of Health & Family Welfare, Govt. of India at Chennai in September 2007. He has been a member of the Selection Committee for the posts of Professors, Associate Professors and Assistant Professors in Medicine at Postgraduate Institute of Medical Education & Research (PGIMER), Chandigarh. He has been appointed as a member of the Scientific Committee for the APICON-2009 to be held at NOIDA in 2009. He continues to be the Chairperson of Medical Board and Drugs Purchase Selection Committee at the All India Institute of Medical Sciences.

Professor Rita Sood

- Nominated by Ministry of Health to be on the Curriculum Committee for Revision of undergraduate National curriculum.
- Invited as expert by Medical Council of India for undergraduate and postgraduate curriculum revision in Medicine.
- Commissioned to write a paper on "Medical Education in India" for the journal "Medical Teacher" series "Medical Education around the world".
- Reviewer for the journals – International journal of Medical Education, National Medical Journal of India, JIACM

Professor Randeep Guleria

- External Examiner for DM (Pulmonary Medicine) PGIMER, Chandigarh
- External Examiner for M.D. (Medicine) University of Kashmir.
- Member of the expert Committee/ Interview Board to select the Associate Professor (Chest & TB) in the department of Medical Education, H.P.
- Member of the Advisory Committee for the Central Workshop, AIIMS
- Adviser in the Board for the interview of candidates who have qualified in the Combined Medical Services, Examination 2007 by the UPSC.
- Member of the interview board to interview the candidates for the post of Civilian Medical Officer by the UPSC on 22 August 2007.
- Adviser in the Board for the interview candidates for Assistant Professor (TB & Chest Disease), UPSC
- Member of the Project Review Committee on "Leprosy, Tuberculosis and Other Chest Diseases" of the ICMR.

- Member of the Project advisory Committee on Nutritional profile of Assam, Manipur and Meghalaya of the ICMR
- Member of the Expert Committee constituted by the Ministry of Health & Family Welfare to visit Leptospirosis affected areas in Surat, Gujrat visited on 21–24 September 2007.
- Nominated Member of the Stores Purchase Committee, AIIMS
- Nominated Member of the Scientific Advisory Committee of National Institute of Virology, Pune.
- Member of the Joint Monitoring Committee on Avian Influenza Constituted by the Govt. of India, Ministry of Health & Family Welfare.
- Nominated as a resource person for the Refresher Training for the Rapid Response Teams on Avian Influenza held at Panjim, Goa 11–15 November 2007.
- 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 in Vienna from 10–14 December 2007.
- Invited by the Ministry of Health & Family Welfare, Govt. India to act as the training programmes on Avian Influenza on 4–6 December 2007.
- Certificate of Appreciation as Guest Faculty in the eight (8) hour workshop on Basic Flexible Bronchoscopy, organized by Bronchoscopy International on 27 November 2007.
- First Prize Award in Dr M. Vishwanathan Poster Session (II–E) on “Awareness and Attitude Towards Tuberculosis of Health Providers Outside the Ambit of DOTS Centres in the 62nd Annual Conference of Association of Physicians of India (APICON 2007)

Dr Rohini Handa was elected to the post of President Elect, India Rheumatology Association. He has been invited to Guest Edit an issue on “Musculoskeletal Conditions in the Developing World” by the journal Best Practice & Research Clinical Rheumatology. He continues to serve as Secretary General Asia Pacific League of Associations for Rheumatology, Member Governing Body of Association of Physicians of India & Secretary, and Delhi Rheumatology Association.

Dr G. C. Khilani was Chairman of Expert group of Task force for Multicentric project on ‘Epidemiology of asthma and atopy in adults’ funded by ICMR, New Delhi; Member of Respiratory disease task force of Global Environment change and health (By ICMR); Member of Project Review Committee (PRC) for ICMR for reviewing the projects for funding by ICMR; Member of expert committee for phase III clinical trial with RISUG by ICMR, New Delhi; Member of Data safety and Monitoring Board for the project ‘Zinc as an immunomodulator for the treatment of possible serious bacterial infection in infants more than 7 days and up to 4 months of age’ funded by Department of Biotechnology, Government of India; Expert for selection of Assistant Professor of Medicine at Autonomous Medical Colleges at Bhopal on 7 September 2007; Member Expert for (Pulmonary Medicine) for Rajiv Gandhi Superspeciality Hospital under GNTC of Delhi

Dr Ashutosh Biswas was external examiner in General Medicine for B.D.S at I.T.S Centre for Dental studies and research, Delhi-Meerut Road, Murad Nagar, Ghaziabad November 2007. He was invited as external examiner in general medicine for MBBS examination, December, 2007, MAMC, Delhi University. Member of New York Academy of Sciences, (NYAS). Member of International AIDS Society (IAS). Member of the National Committee for Quality Assurance of anti TB drugs. Reviewer of International Journal “CHEST”. He is a member of National leprosy

eradication programme for workshop on facilitation skills for strategies planning through logical framework approach, Central leprosy division, Ministry of Health & Family Welfare, Govt. of India. He is 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 & Family Welfare.

Dr Uma Kumar was invited to deliver the Dr Sukumar Mukherjee Honor Lecture 2007 by Indian Association of Clinical Medicine at Amritsar, India. She was appointed as Associate Editor of Indian Journal of Rheumatology for year 2007–2009. She was awarded complete Travel Bursary to attend Annual Congress of European League against Rheumatism (EULAR) held at Barcelona in June 2007. And Japanese college of Rheumatology 2008 International scholarship by Japan college of Rheumatology in Sapporo, Japan.

Dr Naval K Vikram was awarded third prize for the abstract entitled “Investigation of Hepatic Gluconeogenesis Pathway in Asian Indians with Non-Alcoholic Fatty Liver Disease Using *In Vivo* ³¹P Phosphorus Magnetic Resonance Spectroscopy” in the 5th World Congress on Insulin Resistance Syndrome, held in Boston, USA from 10–13 October 2007.

Dr Anant Mohan was a co-author of an abstract awarded Vishwanathan best poster award in APICON 2007. He continues to be a member of the American College of Chest Physicians and the European Respiratory Society. He was an expert member on the Selection Committee of Medical Officers for Antarctica Expedition and member of project review committee of ICMR.

Visiting Scientists: Dr Pratap Saraf, Professor of Medicine, University of Southern California Los Angeles, CA, USA delivered a lecture on “Sleep Apneas and its relation to heart failure” and participated in clinical discussion in the general wards and intensive care unit of the department. Dr SN Pipavath, Assistant Professor, Department of Radiology University of Washington, Medical Center, and Seattle, WA delivered lectures on “Imaging in idiopathic interstitial pneumonias & pulmonary artery hypertension”. Dr Dinesh Khanna, Asstt Professor, Rheumatology Division, UCLA, California visited the department and delivered a lecture on ‘Safety of biological agents for the treatment of rheumatic disorders’ on 29 November 2007 at AIIMS.

Academic, Administration, Finance, Engineering, Library, Central Facilities etc

Professor S. K. Sharma is the Chairperson of the 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 is also Member of the Drug Selection Committee of National AIDS Control Organization, and of the Governing Body, L.R.S. Hospital, and New Delhi.

Dr Rajiva Gupta is member of Horticulture & Sanitation Advisory Committee of AIIMS.

Dr Anant Mohan is a member of the Institute Medical Board.

9.18 Microbiology

Professor and Head

J.C. Samantaray

Professor

S. Broor

R. Chaudhry

Additional Professors

A. Kapil

B.R. Mirdha

B.K. Das (on leave)

L. Dar

Associate Professors

B. Dhawan

M. Vajpayee (on long leave)

I. Xess

Assistant Professors

S. Sood

U.B. Singh

EDUCATION

Short-term summer training was provided to 7 and long-term training was provided to 1 student/s (M Sc) from various institutes/ universities.

Short-term summer training was provided to 1 MD student.

Continuing Medical Education (CME)

Organized a CME cum workshop sponsored by National Academy of Medical Sciences at S.N. Medical College, Agra on Mycoplasma Infections Economic Impacts & New Challenges on 5–6 October 2007 as president of Indian Association of Mycoplasma

National and International Conferences

Organized in collaboration with Department of Medicine, AIIMS & CTD “National Task Force for the Involvement of Medical Colleges in RNTCP” 29–31 October 2007.

21 papers were presented in various national and international conferences.

Lectures Delivered

Dr Shobha Broor

1. “Emerging and Re-emerging viral infections” MICROCON (NW)-2007 Dayanand Medical College Ludhiana, 6 October 2007.
2. “Laboratory diagnosis, specimen collection and biosafety issues” Influenza awareness, preparedness and response organized by INCLEN – AIIMS and NIHFWS at New Delhi, 27–28 October 2007.
3. Symposium on ‘Is Influenza a serious illness in children, adults and elderly’ “Influenza surveillance in India” New Delhi 28 July 2007.

Dr Rama Chaudhry

1. VIII Annual conference cum workshop Mycoplasma infections economic impacts & new challenges “Association of Mycoplasma pneumoniae in Asthma” Agra 5–6 October 2007.

2. Guest Lecture at School of Life Sciences, University of Tokyo on Probiotics on 2 December 2007.

Dr Arti Kapil

1. Indian Association of Medical Microbiologists-Delhi Chapter meeting “Judicious use of antibiotics and moving towards formulation of antibiotic policy” Vallabhbhai Patel Chest Institute, Delhi 21 April 2007
2. Hospital Infection Society-India-Delhi Chapter meeting, “Practices on Steam Sterilization” Indraprastha Apollo Hospital, New Delhi, 12 April 2007.
3. Hospital-associated infections- Prevention and Control “Sterilization disinfection and sterilization control programme” BP Koirala Institute of Health Sciences, Dharan Nepal 17–18 July 2007.
4. STERRICON-2008 – CME “Issues and Challenges in Disinfection and Sterilization Practices in Hospitals”, AIIMS, New Delhi, 16 February 2008
5. KL Wig CMET Workshop “Assessment Strategies in Medical Education” AIIMS New Delhi 21–23 February 2008

Dr Lalit Dar

1. Organised an interactive workshop session on “Multiple Choice Questions in Assessment” during the National Workshop on Advances in Medical Education at the All India Institute of Medical Sciences, New Delhi in 2008.
2. Public lecture on “Laboratory Diagnosis of Dengue” during the Golden Jubilee Year celebrations of the All India Institute of Medical Sciences, New Delhi in 2007.
3. Delivered a talk on “Influenza” during the physicians’ orientation and awareness activities of the Influenza Foundation of India at Delhi and Kolkata in 2007.
4. Invited lecture on “Avian Influenza” at the North East Chapter Conference of the Indian Association of Pathologists and Microbiologists at Tripura in 2007.
5. Invited lecture on “HIV Pathogenesis in the context of Vaccine Development” at the North East Chapter Conference of the Indian Association of Pathologists and Microbiologists at Tripura in 2007.

Dr Seema Sood

1. Hospital-associated infections- Prevention and Control “Prevention of Hospital-Associated infections” B.P. Koirala Institute of Health Sciences, Dharan, Nepal 17–18 July 2007.

Dr Urvashi B Singh

1. Tuberculosis symposium “Drug Resistance and its Detection in *M. tuberculosis*” Department of Pharmacology, AIIMS. 18 August 2007.
2. TB Workshop on Mycobacteriology Procedures; How to do things right “TB in India, an overview” organized by Becton and Dickinson, USA at IHC New Delhi 24–25 April 2007.
3. TB Workshop on Mycobacteriology Procedures; How to do things right “Role of Molecular Testing in TB” organized by Becton and Dickinson, USA at IHC New Delhi 24–25 April 2007.
4. National Task Force for the Involvement of Medical Colleges in RNTCP “RETOOLING: New Frontiers in Diagnostics for Drug Resistance in *M. tuberculosis*” AIIMS, 29 October 2007.
5. Research Presentation Faculty meeting “Rapid Rifampicin Resistance Detection and Molecular Typing of *Mycobacterium tuberculosis* Isolates from Different Geographical Regions of India” AIIMS, 20 November 2007.

6. UPMICROCON-2008 “Detection of drug resistant mycobacteria: newer methods” C.S.M. Medical University, Lucknow, 16 February 2008.
7. Lecture delivered by Telemedicine “New Diagnostics in Drug Resistance in *M. tuberculosis*” Shree Ram Chandra Bhanj Medical College Cuttack, 25 February 2008.

RESEARCH

Funded Projects

Completed

1. A multi centric study on detection and characterization of Human Caliciviruses (HuCVs) in acute gastroenteritis and Food borne diseases. Broor S, Dar L, Bhatnagar S. 2003–2007. Funded by: Indian Council of Medical Research (ICMR). Funds : Rs. 34.25 lacs
2. Diagnostic and prognostic evaluation of leishmaniasis by PCR and a newly developed Buffy Coat Assay using patient’s blood. Dr J.C. Samantaray. Funded by CSIR. Funds: Rs.7,50,000 lacs.
3. Development of a PCR test for the SARS virus. Broor S, Dar L. 2004–07. Funded by Department of Biotechnology (DBT). Funds: Rs. 29.66 lacs.
4. DNA amplification study by Polymerase Chain Reaction (PCR) to detect sub-clinical *Pneumocystis carinii* infections and colonisation in “at risk” patients with or without respiratory symptom. Dr B.R. Mirdha. 2004–2007. Funded by–DST. Fund: Rs 18 lakhs.
5. Metapneumovirus infections of children in India. Broor S, Kabra SK Fowler K and Sullender WM. 2005–2007. Funded by National Institute of Health, USA. Funds: Rs. 48.39 lacs
6. Congenital CMV infection in offspring of immune mothers; Dr Lalit Dar; funded by ICMR-NIH, 2004–2007, Rs. 35 lakhs
7. Optimisation and standardization of protocols to isolate *Bordetella pertussis* is from patients presenting with whooping cough. Dr. A Kapil; Funded by Department of Biotechnology, New Delhi.
8. Study of Haemophilus influenzae from invasive and non-invasive diseases Funded by Department of Science and Technology, New Delhi.
9. Optimization of carbohydrate – protein conjugates as vaccine for prevention of enteric fever. Dr Seema Sood. Funded by Min. of Science & Technology, Deptt. of Biotechnology, GOI for three years (2004–2007). Funds: Rs. 36.58 lacs.

Ongoing

1. Acute respiratory viral infections in rural India. Broor S, Sullender WM, Fowler K, Pandav CS. 2007–2009. Funded by NIH (MCHDR) and ICMR. Funds : Rs 16.38 lacs
2. An RNA interference based approach to study the simultaneous inhibition of RSV and hMPV. Broor S, Dar L. 2007–2009. Funded by Department of Biotechnology (DBT). Funds: Rs. 35.26 lacs
3. Multisite monitoring of human influenza in India –phase I. Broor S, Dar L, Kabra SK. 2004–2009. Funded by Department of Health human Services USA (DHHS) and Indian Council of Medical Research. Funds:
4. Cloning and expression of flagellin gene of Salmonella typhi: An Immunodiagnostic approach; Chaudhry R. 2007–2010. Funded by Indian Council of Medical Research.
5. Cloning and Expression of *Mycoplasma pneumoniae* P1 gene and its fragments to study their role in cytoadherence. Chaudhry, R. 2005–2008. Funded by Indian Council of Medical Research.
6. Development of multiplex real time quantitative PCR assay to detect *Chlamydia pneumoniae*, *Legionella pneumophilla* and *Mycoplasma pneumoniae* in community acquired pneumonia. Chaudhry R. 2005–2008. Funded by Department of Biotechnology.

7. Detection and Identification of Thermophilic *Campylobacter Spp.* (*C. jejuni*, *C. coli*, *C. upsaliensis* and *C. lari*) and Molecular Sub-Typing of *Campylobacter jejuni* in Fecal Samples of Diarrheic Patients and in Food samples Using PCR, PCR-RFLP and PFGE. Chaudhry R. 2007–2010. Funded by Indian Council of Medical Research.
8. To Study colonization and immunomodulatory effect of probiotic strain in Indian Children. Chaudhry R. 2006–2009. Funded by Department of Biotechnology.
9. Clinico- Epidemiologic and Molecular Characterization of Extended-Spectrum Beta Lactamase (ESBL) Producing *Klebsiella spp.*, *E. coli* & *Enterobacter spp* causing Nosocomial and Community Infections (2008–2011). Dr. A Kapil; Funded by Indian Council of Medical Research, New Delhi. Funds: Rs. 5.35 lacs
10. Pneumolysin DNA construct as a Vaccine candidate against streptococcus pneumoniae (2007–2010). Dr. B. Das; Funded by Department of Science and Technology, New Delhi. Funds: Rs 22 lacs
11. PsaP DNA construct as a vaccine candidate against streptococcus pneumoniae (2005–2008). Dr. B. Das; Funded by Department of Biotechnology, New Delhi. Funds: Rs 22lacs
12. Study of Carbapenemase production amongst nosocomial isolates of gram negative bacteria in a tertiary care hospital (2005–2007). Dr. A Kapil; Funded by Indian Council of Medical Research, New Delhi. Funds: Rs. 11 lacs
13. Detection, Identification and Molecular Characterization of Intestinal Coccidia and Microsporidia in patients with Chronic diarrhea and Malabsorption Syndrome Dr B.R. Mirdha Funded by ICMR. Fund: 8 lakhs
14. Prevalence of intestinal coccidiosis and other parasitosis in ‘at risk’ individuals.” Dr B.R. Mirdha. 2005–2006. Intramural Project. Fund: Rs 35,000
15. HIV National Reference Laboratory and EQAS programme; Dr Lalit Dar; funded by NACO; 2006-ongoing; Rs. 600,000 per year
16. HIV VCCTC Program; Dr Lalit Dar; funded by NACO/ DSACS; 2006-ongoing; Rs. 250,000 per year
17. HIV CD4 by flow cytometry for the ART programme; Dr Lalit Dar; funded by NACO; Reagent support
18. Detection of *Ureaplasma urealyticum* and *Mycoplasma hominis* in patients with lower genitourinary tract infection by PCR assay: Association of *U. urealyticum* biovars with clinical outcome. B. Dhawan. August 2006–2009. Funded by ICMR Funds: 10.88 lakhs.
19. Phenotypic and Genotypic Characterization of Methicillin and Mupirocin Resistant Staphylococci. B. Dhawan. November 2005–2008. Funded by DBT. Funds: 28.18 lakhs.
20. Development of a DNA Biosensor for detection of *Neisseria gonorrhoeae* in clinical samples. Dr Seema Sood. Funded by Min. of Science & Technology, Deptt. of Biotechnology, May 2007–2010. Funds: Rs. 53.736 lacs.

Departmental Projects

Completed

1. Study of emerging parasitic agents (Intestinal Coccidia and Microsporidia) in aetiologies of Malabsorption Syndrome. (Microbiology, Gastroenterology & HNU and Paediatrics).
2. Diagnosis of visceral leishmaniasis by use of the polymerase chain reaction (PCR) on patient blood (Medicine & Institute of Pathology).

3. Tuberculosis as an aetiological factor in Liver Abscess in adults (Microbiology and Medicine, Dr RML Hospital).
4. To study epidemiology of tuberculosis in India using molecular methods

Ongoing

1. Study of emerging parasitic agents (Intestinal Coccidia and Microsporidia) in aetiologies of Malabsorption Syndrome (Microbiology, Gastroenterology & HNU and Paediatrics).
2. Antigenic and molecular characterization of human influenza virus strains from acute respiratory infections.
3. Sequencing and phylogenetic analysis of Dengue and Chikungunya virus strains from Delhi.
4. Detection and genotyping of human cytomegalovirus from neonates and renal transplant recipients.
5. Study of inhibition of respiratory syncytial virus and human metapneumovirus multiplication by RNA interference in tissue culture and animal model.
6. Multiplex RT-PCR for detection of viruses causing lower respiratory tract infections viz. human respiratory syncytial viruses (RSV), human parainfluenza viruses, influenza viruses (FLU), and human metapneumovirus (hMPV) and real time RT-PCR for detection of human Respiratory Syncytial viruses (RSV) and human metapneumovirus (hMPV).
7. Detection, genotyping and Study of immune response to human metapneumovirus.
8. Cloning and expression of G protein gene of group B respiratory syncytial virus isolates from Delhi in bacterial and mammalian expression systems.
9. Genetic variability of human caliciviruses from cases of sporadic acute gastroenteritis.
10. Molecular epidemiology of extensively drug-resistant tuberculosis and development of rapid diagnostic techniques.
11. Identification and evaluation of *M. tuberculosis* antigens as biomarkers in clinical samples from tuberculosis patients.
12. Association of host genetic determinants to susceptibility and progression to disease in patients with Pulmonary Tuberculosis.
13. Detection of viable *M. tuberculosis* by reverse transcriptase-real time PCR of mRNA.

Collaborative Projects

Completed

1. Study of emerging parasitic agents (Intestinal Coccidia and Microsporidia) in aetiologies of Malabsorption Syndrome. (Microbiology, Gastroenterology & HNU and Paediatrics).
2. Diagnosis of visceral leishmaniasis by use of the polymerase chain reaction (PCR) on patient blood (Medicine & Institute of Pathology).
3. Congenital CMV infection in offspring of immune mothers with Dr Lalit Dar (ICMR Indo-US project)
4. A comparative study of VIA, cytodiagnosis, HPV testing and colposcopy as tools for cervical cancer screening (DBT Indo-US project, with the Department of Obstetrics and Gynaecology, AIIMS)

Ongoing

1. Administration of *Lactobacillus rhamosus* GG for the Prevention and Treatment of *Clostridium difficile* Infection and Subsequent Diarrhea in Indian Population. Chaudhry R. 2008–2011. In collaboration with The Energy Research Institute (TERI), New Delhi. Funded by DBT.

2. Assessment of Intestinal permeability in Chronic Liver Disease and its Complications. Co-investigator Dr Seema Sood with the Department of Gastroenterology.
3. Detection of mycobacterial pathogens in Crohn's disease patients with Department of Gastroenterology and Human Nutrition.
4. Diagnosis of genital tuberculosis in infertile women and the effect of antitubercular therapy with Department of Obstetrics and Gynaecology.
5. Drug Resistance Surveillance under RNTCP with Department of Medicine, Ministry of Health, Govt. of India.
6. Efficacy of thrice weekly intermittent short course antituberculosis chemotherapy in tuberculosis patients with and without HIV infection" with Department of Medicine
7. Efficacy and safety of immunomodulator (*Mycobacterium w*) 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 with Department of Medicine
8. 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) with Department of Medicine
9. Evaluation of the efficacy of thrice weekly DOTS regimen in TB pleural effusion at six months (multicenter project) with Department of Medicine
10. 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) with Department of Medicine
11. IBIS/SAPNA Project for Surveillance of Invasive Pneumococcal Disease with the Department of Pediatrics
12. *In vitro* expansion and establishment of human fetal liver hematopoietic stem cell line with Department of Medical Oncology, IRCH
13. Microscopy Center for Directly Observed, (DOTS) Therapy, Short-Course with Department of Medicine, Ministry of Health, Govt. of India.
14. Prevalence of respiratory viruses infection in hospitalized patient with acute exacerbation of COPD and their impact on morbidity and mortality" with Department of Medicine
15. Role of oral vitamin D as an adjunct therapy in Category I Pulmonary Tuberculosis along With assessment of immunological parameters." with Department of Medicine
16. Study of emerging parasitic agents (Intestinal Coccidia and Microsporidia) in aetiologies of Malabsorption Syndrome with Microbiology, Gastroenterology and HNU and Paediatrics
17. Treatment outcome and drug resistance among CAT II pulmonary tuberculosis under Revised National TB Control Programme (RNTCP) of India with Department of Medicine

PUBLICATIONS

Journals

1. Anirudhan D, Bakhshi S, 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. Bharaj P, Chahar HS, Pandey A, Diddi K, Dar L, Guleria R, Kabra SK, Broor S. Concurrent infections by all four dengue virus serotypes during an outbreak of dengue in 2006 in Delhi, India. *Virology*. 2008 9;5:1

3. B. Behera, Mirdha BR, Makharia GK, Bhatnagar S, Dattagupta S, Samantaray JC. Parasites in Patients with Malabsorption Syndrome: A Clinical Study in Children & adults. *Dig Dis Sci* 2008 March 5(3):672–679
4. 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* 2007 December
5. Broor S, Parveen S, Bharaj P, Prasad VS, Srinivasulu KN, Sumanth KM, et al A prospective three-year cohort study of the epidemiology and virology of acute respiratory infections of children in rural India. *PLoS ONE*. 2007; 2:e491.
6. Broor S, Bharaj P. Avian and human metapneumovirus. *Ann N Y Acad Sci*. 2007; 1102:66–85.
7. Chaudhry R, Varshney AK, Malhotra P. Adhesion proteins of *Mycoplasma pneumoniae*. *Front Biosci*. 2007 January 1; 12:690–9.
8. Dar L. Identifying human cytomegalovirus genotypes and defining their clinical significance. *Indian J Med Res* 2007; 126: 99–100.
9. Das A, Arora J, Rana T, Porwal C, Kaushik A, Gaur G, Thukral A, Verma S, Kabra SK, Singh UB. Congenital tuberculosis: An entity – underestimated, laboratory support in aid of Cantwell criteria. *Annals of tropical pediatrics*. 2008; 28: 137–141.
10. Deorari AK, Chellani H, Carlin JB, Greenwood P, Prasad MS, Satyavani A, Singh J, John R, Taneja DK, Paul P, Meenakshi M, Kapil A, Paul VK, Weber M. Clinicoepidemiological profile and predictors of severe illness in young infants (< 60 days) reporting to a hospital in North India. *Indian Pediatr*. October 2007; 44(10):739–48.
11. Gadepalli R, Dhawan B, Mohanty S, Kapil A, Das BK, Chaudhry R, Samantaray JC. Mupirocin resistance in *Staphylococcus aureus* in an Indian Hospital. *Diagn Microbiol Infect Dis*. May 2007; 58(1):125–127.
12. Goyal P, Kalek SC, Chaudhry R, Chauhan S, Shah N. Association of common chronic infections with coronary artery disease in patients without any conventional risk factors. *Indian J Med Res*. February 2007; 125(2):129–36.
13. Gupta R, Mirdha BR, Guleria R, Mohan A, Agarwal SK, Kumar L, Kabra SK, Samantaray JC. Improved detection of *Pneumocystis jirovecii* infection in a tertiary care reference hospital in India. *Scand J Inf Dis* 2007, 39(6–7):571–576.
14. Gupta V, Dhawan B, Khanna N, Agarwal N, Bhattacharya SN, Sreenivas V, Chaudhry R. Detection and biovar discrimination of *Ureaplasma urealyticum* in Indian patients with genital tract infections. *Diagn Microbiol Infect Dis*. January 2008; 60(1):95–7.
15. Kant S, Goswami K, Rai SK, Dar L, Misra P. Quality assurance of annual HIV sentinel surveillance 2006: experience of regional institute, central zone. *Indian J Pub Health* 2007; 51: 28–32
16. 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.
17. Madan K, Baba S, Srivasatava S, Datta Gupta S, Mirdha BR, Makharia GK, Samantaray JC, Acharya SK. Tropical mayhem: A chronic viral disease with superadded parasitic infection. *J Med Microbiol* February 2008 57 (Pt 2):232–235
18. Mohanty S, Kapil A, Das BK. Bacteriology of parapneumonic pleural effusions in an Indian hospital. *Trop Doct* October 2007; 37(4):228–9.
19. Mohanty S, Xess I, Hassan F, Kapil A, Mittal S and Tolosa J Prevalence and susceptibility to fluconazole of candida species causing Vulvovaginitis. *Indian J Med Res* 2007; 126:216–219

20. Mondal S, Mahapatra SC, Mirdha BR, Naik SN. Antimicrobial activities of essential oil obtained from fresh and dried leaves of *Ocimum sanctum* (L.) against enteric bacteria and yeast. *Acta Hort. (ISHS)* 2007, 756:267–270.
21. Pandey A, Dhawan B, Gupta V, Chaudhry R, Deorari AK. Clinical significance of airways colonization with *Ureaplasma urealyticum* in premature (<34 wk) neonates. *Indian J Med Res.* 2007 May; 125(5):679–84.
22. Pandey A, Diddi K, Dar L, Bharaj P, Chahar HS, Guleria R, Kabra SK, Broor S The evolution of dengue over a decade in Delhi, India. *J Clin Virol.* 2007 ; 40:87–8
23. Singh UB, Arora J, Suresh N, Pant H, Rana T, Sola C, Rastogi N, Pande JN. Genetic biodiversity of *Mycobacterium tuberculosis* isolates from patients with pulmonary tuberculosis in India. *Infect Genet Evol.* 2007; 7(4):441–8.
24. Sood S, Mohanty S, Kapil A, Tolosa J, Mittal S. InPouch TV culture for detection of *Trichomonas vaginalis*. *Indian J Med Res.* April 2007; 125(4):567–71.
25. Suresh N, Arora J, Pant H, Rana T, Singh UB. Spoligotyping of *Mycobacterium tuberculosis* DNA from Archival Ziehl-Neelsen-stained sputum smears. *J Microbiol Methods.* 2007; 68(2):291–5.
26. Suresh N, Singh UB, Gupta C, Arora J, Rana T, Samantaray JC. Rapid detection of rifampin-resistant *Mycobacterium tuberculosis* directly from stained sputum smears using single-tube nested polymerase chain reaction deoxyribonucleic acid sequencing. *Diagn Microbiol Infect Dis.* 2007; 58(2):217–22.
27. Varshney AK, Chaudhry R, Kabra SK, Malhotra P. Cloning, expression, and immunological characterization of the P30 protein of *Mycoplasma pneumoniae*. *Clin Vaccine Immunol.* February 2008; 15(2):215–20.
28. Xess I, Jain N, Hassan F, Mandal P, Banerjee U Prevalence of candidemia - Five years study and its associated risk factors in a tertiary care centre of North India. *Infections* 2007; 35:256–9.

Books

Seema Sood. *Microbiology for Nurses*. 2nd edition. New Delhi: ELSEVIER; (Reprint–May, 2007): 1–399.

Chapter in Books

B. R. Mirdha . Chapters in “Air, Water & Soil pollution. (Eds) Singh KK, Singh AK, Asha Juwarkar, Alka Tomar. Kalyani Publishers, Ludhiana, New Delhi 2007.

1. Air Pollution and its Health Hazard p.3–24
2. Waterborne Microbes and Human Illness p.143–162

PATIENT CARE

BACTERIOLOGY LABORATORY

Clinical samples	79,315
Antimicrobial Susceptibility tests	28,115
Total	1,07,430

SEXUALLY TRANSMITTED DISEASES LABORATORY

Clinical samples

High vaginal swabs (HVS)	311
Semen	357
Expressed prostatic secretions (EPS)	104
Urethral discharge	01
Cervical discharge	11
Total	784

Antimicrobial susceptibility testing

HVS	77
Semen	35
EPS	17
Urethral discharge	-
Cervical discharge	08
Total	137

HOSPITAL INFECTION CONTROL

Samples processed as a part of surveillance	15,731
Disinfectant in-use test and Autoclave control	
Water Bacteriology samples processed	1,064

SEROLOGY LABORATORY

Clinical samples

1. WIDAL	1,280
2. VDRL	5,085
Total	6,365

ANAEROBIC BACTERIOLOGY

Anaerobic culture	245
Antimicrobial sensitivity	30
Stool culture for <i>C. difficile</i>	256
ELISA for <i>C. difficile</i> toxin	256
Referred Anaerobic culture (for identification)	03
Anaerobic strains supplied to other hospitals	10

Leptospira

Leptospira culture	106
Leptospira serology for IgM antibodies	
By ELISA	106
By Lepto dri-dot	106

Mycoplasma

Mycoplasma pneumoniae IgM, IgG, IgA antibodies by ELISA	102
<i>Mycoplasma pneumoniae</i> culture	34
<i>Mycoplasma hominis</i> culture	156

<i>Ureaplasma urealyticum</i> culture	156
<i>Legionella pneumophilla</i>	31
Antibiotic Susceptibility	
for <i>Mycoplasma hominis</i>	11
for <i>Ureaplasma urealyticum</i>	19
<i>Campylobacter jejuni</i>	
Culture	285
Serology	05
<i>Chlamydia pneumoniae</i>	
By ELISA	102
<i>Legionella pneumophilla</i>	
By ELISA	102
Polymerase Chain Reaction	
for <i>Salmonella typhi</i>	36
for <i>Mycoplasma pneumoniae</i>	34
for <i>Legionella pneumophilla</i>	34
for <i>Mycoplasma hominis</i>	76
for <i>Ureaplasma urealyticum</i>	76
for <i>Chlamydia trachomatis</i>	58
for <i>Campylobacter jejuni</i>	285
Total	2,720

PARASITOLOGY LABORATORY

Serological investigations

1. <i>Toxoplasma gondii</i> serology for IgG antibodies by ELISA	39
2. Hydatid diseases serology by Indirect haemagglutination test	125
3. Amoebic serology of IgG antibodies by ELISA	159
Total	323

Investigation for malaria

1. Fluorescent staining (Acridine Orange)	3072
2. Giemsa staining	3072
3. Quantitative Buffy Coat (QBC) Assay	902
4. HRP-II Antigen Detection	253
Total	7299

Investigation for Kala-azar

1. Fluorescent staining (Acridine Orange)	124
2. Giemsa staining	124
3. Quantitative Buffy Coat (QBC) Assay	215
4. Kala-azar serology (rk-39)	292
5. Aldehyde test	292
Total	1047

Examination of faecal samples for intestinal parasitosis	
1. Direct and concentration	2998
2. Culture	25
3. Modified Acid-fast and special staining for intestinal coccidian	2998
4. Tissue specimens (homogenates)	60
Total	6081
Examination of aspirates	
1. Sputum, pus and others	53
Investigation for filariasis	
1. Direct and Concentration	75
2. Acridine Orange	75
3. Thin & Thick Smear	75
4. Hetrazan provocative test	15
Total	240
Other investigations	
1. Broncho-alveolar lavage (BAL), Induced sputum,	197
2. Tracheal aspirate, Nasopharyngeal aspirates	
3. for <i>Pneumocystis jiroveci</i> infection	
4. Cerebrospinal fluid examination for Free Living Amoebae (FLA)	42
Total	15,282
TUBERCULOSIS LABORATORY	
Samples processed for ZN Smear & Culture on LJ medium	15,341
Samples inoculated for Rapid Culture on BACTEC 460	1,861
Anti-tubercular Drug Sensitivity done on BACTEC 460	171
PCR for <i>Mycobacterium tuberculosis</i>	2,968
Total	20,341
VIROLOGY LABORATORY	
Viral culture and identification (HSV, dengue etc)	34
Viral serology	
Rubella IgM	4
CMV IgM	13
HSV (serum and CSF)	64
Measles (serum and CSF)	33
Dengue	578
Chikungunya	45
PCR	
CMV	167
HSV	103
Dengue	3
CMV antigen detection (pp65)	85
Miscellaneous (Tzanck smear etc.)	33
Total	1162

HIV AND IMMUNOLOGY LAB

CD4/CD8 Count	4,079
HIV PCR	46
HIV ELISA Tests	7142
Total	11,267

MYCOLOGY AND ICP LABORATORY

Samples Processed for Direct Examination and Culture	7,578
Fungal Serology	
Cryptococcal serology	309
Aspergillus serology	29
Histoplasma serology	14
Total	7,930

AWARDS and HONOURS

Dr Shobha Broor is the member of the following national committees: Task force on “Infectious Disease Biology” of Dept. of Biotechnology, Government of India, Scientific Advisory Group on Communicable diseases ICMR, Committee of ICMR for “Establishment of New Virology Laboratories in the Country”, Associate Editor of Indian Journal of Medical Microbiology, Advisor to NACO for procurement of kits for HIV, HBV and HCV, Advisor Govt. of India for procurement of equipment under PMSSY for medical colleges, Project Advisory Committee on Medical Sciences of Dept. of Science and Technology, Scientific Advisory Committee of National Institute of Virology, Task force on Influenza ICMR, Committee for procurement of Kits of National vector Borne Disease Control Programme of Govt. of India, Joint Monitoring Group on Avian Influenza of Ministry of Health

Dr Arti Kapil was awarded the DBT overseas fellowship as a guest researcher at CDC Atlanta, GA, USA for a period of 3 months w.e.f 15 October 07–15 January 08. She was awarded Certificate of Course Mastery by CDC, Atlanta in Laboratory Safety, Occupational Emergency Program and General Responsibilities

Dr B.R. Mirdha received Fellowship from Indian Society for Malaria and Other Communicable Diseases. He was also nominated for Fellowship from National Academy of Medical Sciences (India) and selected as Governing Body Member of Shaheed Bhagat Singh College, Delhi University by Delhi Government

Dr Lalit Dar is the Secretary General of the Influenza Foundation of India (IFI) and Editor, IFI Newsletter. He was also elected the Joint Secretary of the Indian Association of Medical Microbiologists (IAMM). He was invited as a Technical Expert by the International Atomic Energy Agency, Vienna and is a member of the HIV Technical Resource Group of the National AIDS Control Organisation (NACO)

Dr Seema Sood has been nominated as member of the National Academy of Medical Sciences - NAMS (India). She also received the Best Poster Award for “Synthesis of size controlled ZnO nanoparticles” at the International Conference on Nanomaterial Toxicology (ICONTOX-2008) held from 5–7 February, 2008 at Lucknow.

Dr Urvashi B Singh has been nominated as member of the National Academy of Medical Sciences-NAMS (India). Best Poster Award for “Genetic Biodiversity of Mycobacterium Tuberculosis Isolates from Patients with Pulmonary Tuberculosis” at academic meet of Indian Association of medical Microbiologists, Delhi Chapter held on 4 August 2007.

VISITING SCIENTISTS

1. Dr Wayne Sullender, University of Alabama at Birmingham, USA
2. Dr Salman Siddiqi, Becton Dickinson Diagnostic Systems, MD, USA

Academic, Administration, Finance, Engineering, Library, Central Facilities, Etc

Dr Shobha Broor Faculty in charge of Rajgarhia Vishram Sadan, Sai Vishram Sadan and Surekha Vishram Sadan (sarais) of AIIMS.

9.19 Nephrology

Professor and Head

S.C. Tiwari

Additional Professor

S.K. Agarwal

Associate Professors

S. Gupta

D. Bhowmik

S. Mahajan

EDUCATION

Long Term Training

Department runs DM Nephrology a 3-year degree course for post MD (Medicine) candidates, who get selected by AIIMS on the basis of merit. Three candidates were admitted to the DM Course and one passed out. Postgraduates in internal medicine are posted on rotational basis for a short period of one to two months. At present the department has thirteen DM students.

Short Term Training

Pool Officer from CMC Vellore worked for six months in the department. One doctor from Australia and two from Sikkim received training in nephrology. The department also provided training to nurses and technicians from other hospitals in Delhi.

Continuing Medical Education

Conferences, Seminars, Workshops

1. 2nd National congress on Prevention of Kidney Disease in India was conducted on 16–17 February 2008 at New Delhi.

Lectures Delivered

Professor S.C. Tiwari

1. Invited faculty for Annual Dialysis Conference, Orlando, Florida, USA and chaired a session from 2–4 March 2008, where he chaired a session.
2. Delivered talk on Renal Osteodystrophy at Pt. J.N.M. Medical College, Raipur; 16 January 2008.
3. Invited faculty for chairing a session “Paediatric nephrology in the 21st Century” and “Acute kidney injury – what is new” during 3rd Paediatric Nephrology Course organised by department of Paediatric, AIIMS, New Delhi; 23 February 2008.
4. Invited faculty for Annual Conference of Indian Society of Nephrology, West Zone Chapter; 21–22 September 2007.
5. Delivered a talk on Lupus Nephritis Induction therapy Vs MMF at 2nd National congress on Prevention of Kidney Disease in India at New Delhi; 16–17 February 2008.
6. Chairperson for a symposium on “Multiple myeloma” organized by Delhi Nephrology Society; February 2008.

7. Chairperson for symposium on “Immunosuppressive therapy in renal transplantation, what’s new” organized by Delhi Nephrology Society; September 2007.
8. Invited faculty at 38th Annual conference of Indian Society of Nephrology held at New Delhi; 13–15 December 2007.
9. Delivered a talk on “Diabetic Nephropathy” at Shirdi under the auspices of Maharashtra Association of Physician of India Congress 2007; 26–28 October 2007.

Dr S.K. Agarwal

1. Invited as faculty for the conference titled “Big Fight” on role of ACEI/ARB in patients with Diabetic Renal Disease held at Gurgaon on 18 August 2007.
2. Invited as chairperson for the meeting on “HIV Nephropathy and HIV scenario in India” held at New Delhi; 23 August 2007.
3. Attended “CKD Registry Meeting” as a core group member at Mumbai on 25–26 August 2007.
4. Invited to chair a session on plenary lecture on CAPD in India during 9th Annual conference of Peritoneal Dialysis Society of India held at New Delhi; 7–9 September 2008.
5. Invited talk on “CNI in Renal Transplant: Controversy and Challenges” during annual Conference of East Zone of Indian Society of Nephrology held at Kolkata; 22 September 2007.
6. Invited talk on “FK Experience in Renal Transplant” during 18th annual conference of Indian Society of Nephrology held at Bangalore; 5–7 October 2007.
7. Invited talk on “Post transplant viral infections-CMV and HCV” during 38th Annual conference of Indian Society of Nephrology held at New Delhi; 13–15 December 2007.
8. Invited as faculty to chair the session on “Renal replacement Therapy” during Golden Jubilee Medicine Update organised by Maulana Azad Medical College at New Delhi; 9–13 December 2007.
9. Invited faculty for a talk on “Primer in Renal Transplantation” during third Paediatric Nephrology Course organised by department of Paediatric, AIIMS, New Delhi; 2–3 February 2008.

Dr D. Bhowmik

1. “Metabolic Syndrome and Kidney Disease”, Department of Nephrology, SSKM Hospital, Kolkata, June 2007.
2. ‘Kidney Education’ Public Lecture in a programme organised by NGO Swar Rang; December 2007

Dr S. Mahajan

1. “Mechanical complications of peritoneal dialysis”. Annual Conference of Peritoneal dialysis Society of India September 2007
2. “Post transplant Diabetes”. Transplantation Update Ahemdabad; November 2007
3. “CMV Nephropathy”. Transplantation Update Ahemdabad; November 2007
4. “Cardio renal Syndrome”. DNS Nephrology Update, MAMC; March 2008
5. Invited faculty for “Modalities of renal replacement therapies” during 3rd Paediatric Nephrology Course organised by department of Paediatric, AIIMS, New Delhi; 2–3 February 2008.

RESEARCH

Funded Projects

Ongoing

1. Validation and development of predicting formula for measuring GFR in Indian adults. Dr SK Agarwal. Funded by ICMR, New Delhi, August 2006–2009. Funds: Rs 17 lakhs.

2. Assessment of QuantiFERON test for the diagnosis of latent TB in renal replacement therapy. Dr SK Agarwal. Funded by ICMR, New Delhi, May 2007–2010. Funds: Rs 11 lakhs.
3. A Randomised 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. Dr SK Agarwal Funded by Lajolla Pharmaceutical Company California, USA, February 2007–2009. Funds: Rs 12 lakhs
4. Detection of HCV core antigen (HCVc-Ag) for Diagnostic Screening of HCV Infection in Patients on Maintenance Hemodialysis. Dr SK Agarwal. Funded by ICMR, New Delhi, November 2007–November 2010. Funds: Rs 27 lakhs.
5. Linezolid Vs Vancomycin/Cefazolin in treatment of haemodialysis patients with catheter related gram Positive Blood Borne Infection. SK Agarwal. Funded by Pfizer Ltd for one year. Funds: Rs.5 lakhs (approx.).

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. Factors governing depression in spouses with ESRD.
4. Clinical characteristics associated with depression in Indian CKD patients.
5. Comparison of factors affecting depression on HD and CAPD.
6. Spectrum of kidney disease in pregnancy.
7. Donor kidney volume and transplant outcome.
8. Spectrum of renal involvement in HIV patients.

Ongoing

1. Tuberculosis prophylaxis in patients on maintenance haemodialysis.
2. Clinicopathological correlation of HBV and HCV infection in patients on renal replacement therapy.
3. Impact of CsA and Tacrolimus on outcome of living related renal transplantation.
4. Post-Nephrectomy Evaluation of the Kidney Donor.
5. Incidence of Hypertension and CKD among the native population in Leh valley.
6. Incidence of depression and its effect on clinical outcomes in patients on CAPD.
7. Oxidative stress in patients of CKD.
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. Metabolic syndrome in chronic kidney disease and post renal transplant patients.
12. Assessment of renal function reserve.

Collaborative Projects

1. Costing of hemodialysis 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 (Laboratory Medicine).
5. Detection and genotyping of Human Cytomegalovirus from Neonates and Renal Transplant Recipients (Doctor of Philosophy in Microbiology).
6. Plasma level monitoring of mycophenolic acid in renal transplant recipients (Pharmacology and Surgery).
7. 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 (Microbiology).
8. Targeted screening for CKD and its risk factors in first degree relatives of patients of non-diabetic CKD (Laboratory medicine).
9. Role of urinary cytology and immunocytochemistry in diagnosis and management of acute renal allograft dysfunction with department of Pathology.
10. Quality of life of live related renal donors with department of Surgery.

PUBLICATIONS

Journals

1. Agarwal SK. Prevention of Chronic Kidney Disease in India. (Editorial) J Intl Med Science Academy 2007; 20:291.
2. Agarwal SK. Magnitude and epidemiology of CKD in India. J Intl Med Science Academy 2007; 20:293–295.
3. Gupta R, Mirdha BR, Guleria R, Mohan A, Agarwal SK, Kumar L, Kabra SK, Samantharay JC “Improved detection of pneumocystis jirovecii infection in tertiary care reference hospital in India” Scand J Infect Dis. 2007;39(6–7):571–6.
4. 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. 11 December 2007
5. Nayak B, Guleria S, Varma M, Tandon N, Aggarwal S, Bhowmick D, Agarwal SK, Mahajan S, Gupta S, Tiwari SC. Effect of bisphosphonates on bone mineral density after renal transplantation as assessed by bone mineral densitometry. Transplant Proc. April 2007; 39(3):750–2.
6. Guleria S, Kamboj M, Sharma M, Chatterjee A, Dinda A, Chaudhary A, Mahajan S, Gupta S, Bhowmik D, Agarwal SK, Tiwari SC, Dash SC. Tacrolimus (Pan Graf) in live related renal transplantation: an initial experience of 101 recipients in India. Transplant Proc. April 2007; 39(3):747–9.
7. Mahajan S, Tiwari SC, Kalra V, Masih JA, Bhowmik DM, Bansal R, Agarwal SK. Analysis of depression and its effect on outcome among adult Indian peritoneal dialysis patients. Perit Dial Int. January 2007; 27 February (1):94–6.
8. Agarwal SK. Prevalence of Chronic Kidney Disease in India. Asian Journal of Diabetologia. 2007(In Press).
9. Bhowmik D, Tiwari SC. Renal Consequences of metabolic syndrome. J Assoc Phys India 2007;
10. Panigrahi A, Gupta N, Siddiqui JA, Margoob A, Bhowmik D, Guleria S, Mehra N. Post transplant development of MHC class I related chain A and anti HLA antibodies is associated with acute rejection episodes and renal allograft loss. Human Immun 2007; 27:467–468.

11. Nair RK, Khaira A, Sharma A, Mahajan S, Dinda AK. Spectrum of renal involvement in paroxysmal nocturnal hemoglobinuria: report of three cases and a brief review of the literature. *Int Urol Nephrol.* 27 March 2008; [Epub ahead of print]
12. Khaira A, Rathi OP, Mahajan S, Sharma A, Dinda AK, Tiwari SC. Lupus vulgaris with tubercular lymphadenitis and IgA nephropathy. *Clin Exp Nephrol.* February 2008; 12(1):79–81.
13. Bansal R, Dinda A, Mahajan S, Tiwari SC. An unusual cause of renal allograft dysfunction: graft papillary necrosis. *J Nephrol.* 2007; 20(1):111–3.
14. Tiwari SC, Sharma M, Deepak KK, Bhowmik D. Study assessing sympathetic activity in hypertension CKD patients of varying severity. *JASN* 2007; 18(Supplementary):11.
15. Tiwari SC, Mahajan S. Depression and its effect on outcome and infectious complications among adult Indian peritoneal dialysis patients: A 3 year follow-up study. *JASN* 2007; 18(Supplementary):11.
16. Panigrahi A, Gupta N, Siddiqui JA, Margoob A, Bhowmik D, Guleria S, Mehra NK. Monitoring of anti-HLA and anti-Major histocompatibility complex class I related chain a antibodies in living related renal donor transplantation. *Transplant Proc.* April 2007; 39(3):759–60.
17. Bhowmik D, Khaira A, Mahajan S, Tiwari SC. Initial experience with icodextrin in Indian patients. *Perit Dial Int.* July–August 2007; 27(4):467–8.
18. Tiwari SC, Bhowmik D. Staging of CKD: is a new stage needed. *Am J Kidney Dis* 2008; 51:346.

PATIENT CARE

Facilities Available in the Department

1. Hemodialysis
2. Acute peritoneal dialysis
3. Continuous Ambulatory Peritoneal Dialysis
4. Vascular Access (Minor surgery)
5. Plasmapheresis/Plasma exchange
6. CRRT (C II ICU, AB8 and CTVS)
7. Renal Transplants
8. Renal Laboratory Tests

I. Specialized treatment procedures

Department provides specialty care for seriously ill acute and chronic kidney failure patients.

Department performed the following specialized treatment methods:

• Hemodialysis	5467
• Intermittent peritoneal dialysis	490
• Continuous Ambulatory Peritoneal Dialysis	96
• Plasmapheresis/Plasma Exchange	110
• Continuous Renal Replacement Therapy	11

Venovenous/Arteriovenous Hemofiltration and Hemodialysis)

• Femoral vein catheterization	732
• Jugular and Subclavian Catheter Insertion	152
• AV Fistula	37
• AV Shunt	23

- Preparation for kidney transplantation
Patients of End stage kidney failure are treated,
dialyzed and selected for kidney transplantation on the
basis of suitable tests. Similarly patients and their donor
work up are done by a variety of tests for selection or rejection 375
- Renal Transplant done 129

II. Other Therapeutic Methods (Day Care Treatment)

- Kidney Biopsy 410
- Intravenous Pulse therapy for Immunosuppressants and iron therapy 776

III. Laboratory tests for diagnosis of renal diseases

- No. of patient 14319
- No. of Investigations 128035

Clinics

1. Renal Clinic (6 days per week) 21870
2. Renal Transplant Counseling Clinic (3 days per week) 3779
3. Renal Transplant Clinic 5400
4. Indoor Admissions (Long and Short) 2108
5. Nephrology Consultations 3550

COMMUNITY SERVICES

Professor SC Tiwari attended Super Speciality Medical Camp in Leh, Ladakh in August 2007. He also wrote a article on Transplantation information for kidney patients and their donors in Mahavir International.

AWARDS AND HONOURS

Dr S.C. Tiwari

1. Letter of appreciation from his Excellency, Shri Bhairon Singh Shekhawat, Hon'ble Vice President of India for the deep commitment to duty and Professional excellence during the last five years.
2. Nominated as Chairman, Hospital Management Board; July 2007 onwards.
3. Governing Body Member of RIMS, Jharkhand
4. Member, State Health Society, Bihar
5. Chairman, Organising Committee, 2nd National congress on Prevention of Kidney Disease in India
6. Referee of articles in Renal Failure.
7. Chairman, Antarctica Expedition programme under the auspices of Ministry of Earth Sciences, Goa.
8. Member of Editorial Board, Heal, India.
9. Editor, Journal of Renal Sciences,
10. Editorial Board, Indian Journal of Nephrology.
10. Visiting Professor at University of Missouri, Columbia, USA
11. Clinical Grand Round, North Shore University, New York.

Dr S.K. Agarwal

1. Invited to be external reviewer for faculty promotion to the post of professor in department of Nephrology in the University of Wisconsin, USA.
2. Invited to be member of “Advisory Group” for the “Registry of People with Diabetes with Young Age” initiated by ICMR, New Delhi.
3. Invited to be member of nephrology instrument specification committee for PMSSY scheme of government of India, held at New Delhi.
4. Working as co-investigator in a study titled “A randomised double blind placebo controlled parallel group study to determine whether in patients with type-2 diabetes at high risk for cardiovascular and renal events, aliskerin, on top of conventional treatment, reduces cardiovascular and renal morbidity and mortality” (ALTITUDE Trial, Novartis for five years).
5. Invited as expert for ICMR-WHO Workshop on “Mapping Pattern of Diabetes in India” held at ICMR headquarter; 21 November 2007, New Delhi.
6. Awarded best paper prize in oral presentation during 38th annual conference of Indian Society of Nephrology held on 13–15 December 2007 at New Delhi.
7. Member of Committee of Faculty expert for evaluation of Architectural Designs for AIIMS Like institutions at Bhopal, Bhubaneshwar, Raipur and Patna, 2008.
8. Invited to be member of editorial board for International nephrology Journal “Nephron Clinical Practice” for 2008–2010.

Dr S. Mahajan

1. Young investigator Award at the World-Congress of Nephrology, Brazil April 2007.
2. International speaker award at 52nd Annual Conference of Japanese Society of Dialysis Therapy, Osaka June 2007.

VISITING SCIENTISTS

1. Dr Sandeep Gupta Deptt. of Nephrology, University of Minnesota, USA.
2. Dr Edward Cole, Division of Nephrology, University of Toronto, Canada.
3. Professor Sumant Chugh, University of Alabama, U.S.A.
4. Professor Praveen Singhal, Chief of Nephrology, LIJ Medical Centre Albert Einstein University, U.S.A.

9.20 Nuclear Medicine

Professor & Head

A. Malhotra

Professor

G.P. Bandopadhyaya

C.S. Bal

Associate Professor

Rakesh Kumar

Assistant Professor (CNC)

Chetan D. Patel

EDUCATION

The faculty of the department participated in and delivered 26 lectures in continuing medical education programme, workshop, Symposia and annual conference during the year.

RESEARCH

Funded Projects

Completed

Pre-phase I Pharmacokinetic and dosimetric study of Lu177 EDTMP in Metastatic bone pain palliation in prostate cancer.

Ongoing

1. To evaluate radiolabelling and efficacy of radiolabelled β -cyclodextrin for infection imaging, ICMR, New Delhi. Dr G.P. Bandopadhyaya; Funds: Rs 45,00,000; Duration: 3 years (2006 – 2009).
2. Synthesis and Chemical Characterization of Different Formulations of Alginate-Tamoxifen beads. Department of Science and Technology, New Delhi. Dr G.P. Bandopadhyaya; Funds: Rs 60,00,000; Duration: 3 years (2006-2009).
3. Detection of silent of ischemia in asymptomatic diabetes using myocardial perfusion imaging. Funded by an International Atomic Energy Agency (IAEA), Vienna, Austria. Dr Rakesh Kumar; Rs 4,05000; Duration: 3 year (2006-2009).
4. A Multicenter, 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. Dr C.S. Bal; Funded by OXIGEN Inc., USA. Funds: Rs 10,00,000; Duration: 2 years (2007-2009).
5. Phase I Pharmacokinetic and dosimetric study of Lu177 EDTMP in Metastatic bone pain palliation in prostate cancer. Funded by an International Atomic Energy Agency (IAEA), Vienna, Austria. Dr C.S. Bal; US \$ 12,000; Duration: 2 year (2008-2010).

Departmental Projects

Completed

1. Evaluation of cardiac function in patients receiving anthracycline therapy by 1st pass study and equilibrium radionuclide ventriculography.

2. Usefulness of Tc99m – MAA lung perfusion imaging in patients post BD Glenn & TCPC.
3. Standardization of the preparation and quality control of ¹⁸⁸Re-Tin-colloid for Radiosynovectomy
4. Studies on Development and Analytical Pharmacokinetics of Polymeric radiopharmaceuticals under Varied Experimental Conditions.

Ongoing

1. Comparative analysis of ^{99m}Tc MDP vs. ¹⁸F-FDG & ¹⁸F-Fluoride PET-CT for detection of bone metastasis in Ca-breast/Ca-lung/Ca-prostate.
2. Role of F-18 FDG in acute Rheumatic heart disease.
3. Correlation between cardiovascular autonomic function and indicators of Myocardial ischemia in patients presenting anginal symptoms.
4. Prevalence of symptomatic and asymptomatic coronary artery disease in stroke patients.
5. Role of PET-CT in initial staging and post therapy assessment in patients of carcinoma ovary.
6. Evaluation of ⁶⁸Ga labelled peptides in evaluation of neuro-endocrine tumours

PUBLICATIONS

Journals

1. Kumar R, Dadparvar S. FDG-PET/ PET-CT in Carcinoma of Cervix. *Cancer* 2007; 30;110(8):1650-1653.
2. Kumar R. Editorial Commentary: Assessment of therapy response in malignant tumours with ¹⁸F-Fluorothymidine. *Eur J Nucl Med Mol Imaging*. 2007; 34:1334–1338.
3. Kumar R, Dhanpathi H, Basu S, Rubello D, Fanti S, Alavi A. Oncologic PET tracers beyond [¹⁸F]FDG and the novel quantitative approaches in PET imaging. *Q J Nucl Med Mol Imaging*. 2008 Mar;52(1):50-65.
4. Kumar R, Lal N, Alavi A. ¹⁸F-FDG PET in Detecting Primary Breast Cancer. *J Nucl Med*. 2007;48:1751.
5. Kumar R, Lal N. PET in Anti-Cancer Drug Development and Therapy. *Recent Patents Anticancer Drug Discov*. 2007 Nov;2(3):259-63.
6. Kumar R, Basu S, Torigian D, Anand V, Zhuang H, Alavi A. FDG-PET Imaging for assessing inflammation and infection. *Clin Microbiol Rev*. 2008 Jan;21(1):209-24.
7. Das CJ, Makharia G, Kumar R, Chawla M, Goswami P, Malhotra A. PET-CT-Enteroclysis: A new technique for evaluation of inflammatory diseases of the intestine. *Eur J Nucl Med Mol Imaging*. 2007;34: 2007;34: 2106-2114.
8. Kumar J, Seith A, Bakshi S, Kumar R, Kumar A, Sen S. Isolated Granulocytic sarcoma of the orbit using PET-CT. *Eur J Haematol*. 2007 May;78(5):456.
9. Fan C, Hernandez-Pampaloni M, Houseni M, Chamroonrat W, Basu S, Kumar R, *et al*. Age-related changes in the metabolic activity and distribution of the red marrow as demonstrated by 2-deoxy-2-[¹⁸F]fluoro-D-glucose-positron emission tomography. *Mol Imaging Biol* 2007;9:300
10. Bural GG, Torigian DA, Chamroonrat W, Houseni M, Chen W, Basu S, Kumar R, Alavi A. FDG-PET is an effective imaging modality to detect and quantify age-related atherosclerosis in large arteries. *Eur J Nucl Med Mol Imaging*. 2007 Oct 24; [Epub ahead of print]
11. Khaled A, Gonca B, Kumar R, Alavi A. Impact of dual-time-point (¹⁸F)-FDG PET imaging and partial volume correction in the assessment of solitary pulmonary nodules. *Eur J Nucl Med Mol Imaging*. 2008 Feb;35(2):246-52.

12. Patel C, Kumar R. Role of PET and PET-CT in management of bone sarcoma. *Ortho Today* 2007;2: 20-24.
13. Patel C, Kumar R. PET in gynaecological malignancies. *Gynae Today* 2007;3: 20-24.
14. Patel C, Kumar R. Positron emission tomography and positron emission tomography-computerized tomography in pediatric patients. *J Indian Assoc Pediatr Surg.* 2007;12: 121-125.
15. Dhanpathi H, Kumar R. FDG PET/PET-CT in the management of lymphoma. *Ind J Med & Peds Oncol* 2007;28: 17-23.
16. Dhanpathi H, Santra A, Kumar R. Role of FDG-PET in gall bladder cancer. *Ind J Med & Peds Oncol* 2007;28: 42-45.
17. Shukla J, Bandopadhyaya GP, Shamim AS, Kumar R. Characterization of Re-188-Sn microparticles used for synovitis treatment. *Int J Pharmaceutics* 2007;338;43-47.
18. Babu V, Kumar R, Mohapatra T, Nadig M, Dhanpathi H, Bal CS, Malhotra A. Hepatobiliary scintigraphy in detecting lesser sac bile leak in postcholecystectomy patients: the need to recognize as a separate entity. *Clin Nucl Med.* 2008 Mar;33(3):161-7.
19. Sood A, Kumar R, Unusual artefact in post therapy I-131 whole body scan. *Hell J Nucl Med.* 2007 Sep-Dec;9(3):154-7.
20. Kumar M, Bahl A, Sharma DN, Agarwal S, Dhanapathi H, Kumar R, Rath GK. Sarcomatoid squamous cell carcinoma of uterine cervix: Pathology, imaging and treatment. *J Cancer Res Thwer* 2008;4:1 37-39.
21. Tripathi M, Kumar R, Mohapatra T, Nadig M, Bal C, Malhotra A. Intense F-18 FDG uptake noted in a benign bone cyst. *Clin Nucl Med.* 2007; 32:255-7.
22. Kumar A, Srivastava DN, Chau TT, Long HD, Bal C, Chandra P, et al. Inoperable hepatocellular carcinoma: transarterial 188Re HDD-labeled iodized oil for treatment—prospective multicenter clinical trial. *Radiology.* 2007 May;243(2):509-19.
23. Patel CD, Chawla M, Nadig MR, Mahapatra AK, Bal C. Evaluation of dysfunction and malformations of the urinary tract in patients with meningomyelocele, by renal dynamic scintigraphy and direct radionuclide cystography. *An Indian perspective. Hell J Nucl Med.* 2007 May-Aug;10(2):102-4.
24. Zaknun JJ, Bal C, Maes A, Tepmongkol S, Vazquez S, Dupont P, Dondi M. Comparative analysis of MR imaging, Ictal SPECT and EEG in temporal lobe epilepsy: a prospective IAEA multicenter study. *Eur J Nucl Med Mol Imaging.* 2008 Jan;35(1):107-15.
25. Wadhwa P, Aron M, Bal CS, Dhanpatty B, Gupta NP. Critical prospective appraisal of renal morphology and function in children undergoing shockwave lithotripsy and percutaneous nephrolithotomy. *J Endourol.* 2007 Sep;21(9):961-6.
26. Bajpai M, Bal CS, Tripathi M, Kalaivani M, Gupta AK. Prenatally diagnosed unilateral hydronephrosis: prognostic significance of plasma renin activity. *J Urol.* 2007 Dec;178(6):2580-4. Epub 2007 Oct 22.
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29. Priya G, Jyotsna VP, Gupta N, Chumber S, Bal CS, Karak AK, et al. Clinical and laboratory profile of primary hyperparathyroidism in India. *Postgrad Med J.* 2008 Jan;84(987):34-9.

30. Balakrishnan VB, Kumar R, Dhanpathi H, Nadig M, Mohapatra T, Bal CS, Malhotra A. Hepatobiliary scintigraphy in detecting lesser sac bile leak in postcholecystectomy patients: the need to recognize as a separate entity. Clin Nucl Med. 2008 Mar;33(3):161-7.

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 Cancer Imaging, Vol.2: Instrumentation and Applications. Edi. Hayat MA. Elsevier, Philadelphia, USA 2008, pp 269-279.
2. Kumar R, Patel CD. PET-CT in Retinal Imaging in Retinal Imaging. Eds Venkatesh P, Garg S, Azad R. Publisher, Jaypee Brothers. Delhi 2007. pp 1-7.
3. Kumar R, Chawla M. Clinical Application of PET/ PET-CT. Eds G S Pant, Himalaya Publishing House. Delhi 2007 pp 480-527.

PATIENT CARE

Radionuclide Investigations

	Number
1. Radioactive Iodine Uptake (RAIU)	1288
2. Perchlorate discharge test	15
3. I-131 Whole body scans	7013
4. Dimercaptosuccinic Acid Scans	750
5. P-32 treatment	12
6. Ca-thyroid I-131 Whole body scan	100
7. Thyrotoxicosis	320
8. DTPA/LLEC ^{99m} Tc renal dynamic scan	3850
9. Direct Radionuclide Cystourethrography	336
10. GER	750
11. GFR	1470
12. Bone Scan	3000
13. ^{99m} Tc HIDA	500
14. Thyroid Scan	600
15. Liver Scan	48
16. Meckel's Study	90
17. GI Bleed	80
18. RBC Mass Survival	11
19. Lymphoscintigraphy	120
20. Pleuro Peritoneal Shunt Scintigraphy	4
21. MIBG (diagnostic and therapeutic)	500
22. Venography	10
23. ¹⁵³ Samarium bone palliation	20
24. ⁹⁰ Yttrium Synovectomy	20
25. ⁶⁷ Gallium Scan	40
26. ^{99m} Tc DMSA-V	750
27. Radionuclide ventriculography	1272
28. Thallium Scan	979

29. Tetrofosmin	141
30. Misc. (V/Q Ca Lung, PTH)	10
31. Brain SPECT	800
32. PET Whole Body	2848
33. Brain Glucoheptonate (GHA)	700

9.21 Nuclear Magnetic Resonance

Professor & Head

N.R. Jagannathan

Associate Professor

Rama Jayasundar (on leave)

Assistant Professor

S. Senthil Kumaran

Scientist II

Uma Sharma

Scientist I

Sujeet Kumar Mewar

EDUCATION

Postgraduate

The faculty participated in and delivered lectures for course entitled “*Structural Biology and NMR Technology*”, of M. Biotech programme of the Dept. of Biotechnology.

Short/Long Term Training

Five persons from medical and science disciplines from various Institutes and Universities from all over India underwent training in MRI and MRS techniques.

Continuing Medical Education

The faculty participated in and delivered several lectures in continuing medical education programs, symposia and conferences during the year.

Lectures delivered

Professor N.R. Jagannathan

- Diffusion and Metabolic MR Imaging Studies of Prostate Cancer, ‘*One day Symposium of Future Directions of NMR*’, (Invited talk), 25 August 2007. NMR Research Centre, Indian Institute of Science, Bangalore.
- Beyond Structural Biology: Understanding the biochemistry and metabolism of cancer by MR Imaging and in vivo NMR spectroscopy (Invited Talk). ‘*Workshop on Structural Biology*’, 21–23 December 2007, Indian Institute of Science, Bangalore.
- Biological application of MRI, ‘*Workshop cum Symposium on Electromagnetic fields Bio-Interactions, Applications and Mobile Computing: Electromagnetic Pollution*’, 14–15 March 2008, School of Environmental Sciences, Jawaharlal Nehru University, New Delhi.
- An Overview of the Role of MR Imaging and MR Spectroscopy in Medicine. *Special Symposium on ‘Advanced MR Applications’ and 14th NMRS Meeting*, 16–19 January 2008. Institute of Nuclear Medicine & Allied Sciences, Delhi.
- Biochemical characterization of lymphadenopathy in TB, Sarcodosis and Metastasis using in vitro MRS. *15th Scientific Meeting of the International Society for Magnetic Resonance in Medicine (ISMRM)*, Berlin, Germany; May 2007.

- Role of various *in vivo* MR methodologies in the evaluation of prostate cancer. *16th International Union of Pure and Applied Biophysics (IUPAB) Biophysics Congress*, February 2-6, 2008, Long Beach, USA.
- Biochemical Characterization of Involved and Non-involved Tissue from Breast Cancer Patients using *in vitro* NMR Spectroscopy. *16th International Union of Pure and Applied Biophysics (IUPAB) Biophysics Congress*, February 2–6, 2008, Long Beach, USA.
- Study of Biochemistry of Muscle Disorders using *in-vitro* Proton NMR Spectroscopy. *16th International Union of Pure and Applied Biophysics (IUPAB) Biophysics Congress*, Long Beach, USA; 2–6 February 2008.

Dr. S. Senthil Kumaran

- ‘Image Processing’, CEP course on ‘Soft Computing and its Application’, Scientific Analysis Group, DRDO, Delhi; 25th September 2007.
- Representation of different emotions in the brain - an MRI study, *Special Symposium on ‘Advanced MR Applications’ and 14th NMRS Meeting*, 16-19 January 2008. Institute of Nuclear Medicine & Allied Sciences, Delhi.

Dr. Uma Sharma

- Magnetic Resonance Spectroscopy Study in Oncology. ‘*National Symposium on Biophysics*’, 15-17 November, 2007, Department of Biophysics, Panjab University, Chandigarh.
- In vivo Magnetic Resonance Spectroscopy (MRS) Study of Breast Carcinoma.. *Special Symposium on ‘Advanced MR Applications’ and 14th NMRS Meeting*, 16-19 January 2008. Institute of Nuclear Medicine & Allied Sciences, Delhi.

RESEARCH

Funded Projects

Ongoing

1. 700 MHz NMR Spectrometer for Biomedical Research. N. R. Jagannathan. Funded by Department of Science and Technology (DST), Government of India, December 2007 to December 2012. Funds: Rs. 842.6 lakhs.
2. Up-gradation of the existing Animal MR scanner. N. R. Jagannathan. Funded by Department of Science and Technology (DST), Government of India, June 2004 to June 2009. Funds: Rs. 365 lakhs.

Departmental Projects

Ongoing

1. MRI and MRS study of animal model of demyelination
2. Development of novel pulse sequences for *in vivo* 2D MR spectroscopy.
3. 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 Department of Medicine).
2. In-vivo MRS of muscle in NIDDM patients (with Department of Medicine).

3. High-resolution ¹H MR Spectroscopy of axillary lymph nodes (with Department of Surgery).
4. In-vivo and in-vitro MR spectroscopy studies of tissue extracts of prostate cancers (with Departments of Urology and Pathology).
5. In-vitro MR spectroscopy of colon tissue in patients of IBD (Dept. of GI Surgery).
6. *In vivo* MR spectroscopy study of human breast carcinoma (with Departments of Surgery, Radiotherapy and Pathology).
7. MRI studies of skin cancers (with Department of Biochemistry).
8. In-vivo MRS of brain in NIDDM patients (with Department of Medicine).
9. Neuro-cognitive changes associated with perception, spatial orientation and coordinates in visually handicapped subjects, using functional magnetic resonance imaging (with RPC unit).
10. Functional MRI study in IBD and Achalasia Cardia patients (with Department of Gastroenterology).
11. Neural mapping during stoop task of familiar faces (with Department of Physiology)

PUBLICATIONS

Journals

1. Kumar V, Jagannathan NR, Kumar R, Thulkar S, Gupta SD, Dwivedi SN, Hemal AK, Gupta NP. Determination of a cut-off value of apparent diffusion coefficient (ADC) for the peripheral zone (PZ) of prostate in men with raised serum prostate specific antigen (PSA) or abnormal digital rectal examination (DRE) prior to transrectal ultrasound (TRUS) guided biopsy. *NMR Biomed* 2007; 20:505-11.
2. Mallick HN, Tandon S, Jagannathan NR, Gulia KK, Kumar VM. Brain areas activated after ejaculation in healthy young human subjects. *Ind. J. Physiol Pharmacol.* 2007; 51:81-5.
3. Kumar P, Jagannathan NR and Choudhry VP. Assessment of iron load in Thalassaemic patients by magnetic resonance imaging: A pilot study. *J. Ind. Med. Assoc.* 2007; 105: 561-64.
4. Kar M, Deo SS, Kumar V, Sharma U, Jagannathan NR, Danishad KA et al. In vivo proton magnetic resonance spectroscopic (PMRS) evaluation: Emerging tool to solve the diagnostic dilemma in soft tissue sarcoma management. *J. Clin. Onco.* 25, 18S, 2007.
5. Jagannathan NR. Molecular Imaging in Biomedical Research. *Curr. Sci.* 2007; 92:1061-70.
6. Brain activation pattern in patients with achalasia cardia using functional magnetic resonance imaging. Senthil Kumaran S, Makharia GK and Jagannathan NR. *J. Gastro. Hepato.* 22, A140, 2007.
7. Kaur P, Kumaran SS, Tripathi RP, Khushu S, Kaushik S. Protocol Error Artifacts in MRI: Sources and Remedies Revisited. *Radiography*, 2007;13(4):291-306.
8. Ajilore O, Haroon E, Kumaran S, Darwin C, Binesh N, Mintz J, Miller J, Thomas M A and Kumar A. Measurement of Brain Metabolites in Patients with type 2 Diabetes and Major Depression Using Proton Magnetic Resonance Spectroscopy. *Neuropsychopharmacology*, 2007;32(6):1224-31.
9. Rathore P, Dohare P, Varma S, Ray A, Sharma U, Jaganathan NR, Ray M. Curcuma Oil: Reduces Early Accumulation of Oxidative Product and is Anti-apoptogenic in Transient Focal Ischemia in Rat Brain. *Neurochem Res.* 2007 Oct 23. [Epub ahead of print]
10. Sah PL, Sharma R, Kandpal H, Seith A, Rastogi S, Bandhu S, Jagannathan. In vivo proton spectroscopy of giant cell tumor of the bone. *AJR Am J Roentgenol.* 2008; 190:W133-9.

Abstracts

1. Diffusion and Metabolic MR Imaging Studies of Prostate Cancer. N. R. Jagannathan. '*One day Symposium of Future Directions of NMR*', 25th August 2007. NMR Research Centre, Indian Institute of Science, Bangalore.
2. Beyond Structural Biology: Understanding the biochemistry and metabolism of cancer by MR Imaging and in vivo NMR spectroscopy. N. R. Jagannathan. '*Workshop on Structural Biology*', 21-23 December, 2007, Indian Institute of Science, Bangalore.
3. Biological application of MRI. N. R. Jagannathan. '*Workshop cum Symposium on Electromagnetic fields Bio-Interactions, Applications and Mobile Computing: Electromagnetic Pollution*', 14-15 March, 2008, School of Environmental Sciences, Jawaharlal Nehru University, New Delhi.
4. An Overview of the Role of MR Imaging and MR Spectroscopy in Medicine. N. R. Jagannathan. '*Special Symposium on "Advanced MR Applications" and 14th NMRS Meeting*', 16-19 January 2008. Institute of Nuclear Medicine & Allied Sciences, Delhi.
5. Biochemical characterization of lymphadenopathy in TB, Sarcodosis and Metastasis using in vitro MRS. '*15th Scientific Meeting of the International Society for Magnetic Resonance in Medicine (ISMRM)*', May, 2007, Berlin, Germany.
6. Role of various in vivo MR methodologies in the evaluation of prostate cancer. '*16th International Union of Pure and Applied Biophysics (IUPAB) Biophysics Congress*', February 2-6, 2008, Long Beach, USA.
7. Biochemical Characterization of Involved and Non-involved Tissue from Breast Cancer Patients using in vitro NMR Spectroscopy. '*16th International Union of Pure and Applied Biophysics (IUPAB) Biophysics Congress*', February 2-6, 2008, Long Beach, USA.
8. Study of Biochemistry of Muscle Disorders using in-vitro Proton NMR Spectroscopy. '*16th International Union of Pure and Applied Biophysics (IUPAB) Biophysics Congress*', February 2-6, 2008, Long Beach, USA.
9. Neurocognitive segregation between tactile object recognition and spatial orientation, Anand Mohan Sinha, S. Senthil Kumaran, Rohit Saxena, Radhika Tandon and Uma Sharma, pp102, Proceedings of Special symposium on "Advanced MR applications and 14th NMRS meeting, Jan 16-19, 2008, Delhi.
10. Neurocognitive changes associated with spatial orientation and tactile object recognition in early blind subjects, Anand Mohan Sinha, S. Senthil Kumaran, Rohit Saxena, pp104, Proceedings of Special symposium on "Advanced MR applications and 14th NMRS meeting, Jan 16-19, 2008, Delhi.
11. A comparative fMRI analysis between spatial perception task in early and late blind human subjects, Anand Mohan Sinha, S. Senthil Kumaran, Rohit Saxena, Radhika Tandon and Uma Sharma, pp106, Proceedings of Special symposium on "Advanced MR applications and 14th NMRS meeting, Jan 16-19, 2008, Delhi.
12. Magnetic Resonance Spectroscopy Study in Oncology. Uma Sharma and N. R. Jagannathan. '*National Symposium on Biophysics*', 15-17 November, 2007, Department of Biophysics, Panjab University, Chandigarh.
13. In vivo Magnetic Resonance Spectroscopy (MRS) Study of Breast Carcinoma. Uma Sharma and N. R. Jagannathan. '*Special Symposium on "Advanced MR Applications" and 14th NMRS Meeting*', 16-19 January 2008. Institute of Nuclear Medicine & Allied Sciences, Delhi.

14. Characterization of Lymphadenopathy using in vitro NMR Spectroscopy. Uma Sharma, S. M. Raashid Ali, Sanjay Juyal Arvind Kumar and N. R. Jagannathan. *Special Symposium on 'Advanced MR Applications' and 14th NMRS Meeting*, 16-19 January 2008. Institute of Nuclear Medicine & Allied Sciences, Delhi.
15. Study of Metabolism of Colonic Mucosa in Ulcerative Colitis (UC) and Crohn's disease (CD) Using NMR Spectroscopy. K Balasubramanian, R. Kumar, S. Kumar, U. Sharma, G. Makharia and N. R. Jagannathan. *Special Symposium on 'Advanced MR Applications' and 14th NMRS Meeting*, 16-19 January 2008. Institute of Nuclear Medicine & Allied Sciences, Delhi.
16. In vivo MR Spectroscopy of Soft Tissue Sarcomas. Uma Sharma, M. Kar, V. Kumar, K.A. Danishad, S.V. Deo, N. K. Shukla, S. Dattagupta, S. Dey, S. Tulkar and N. R. Jagannathan. *Special Symposium on 'Advanced MR Applications' and 14th NMRS Meeting*, 16-19 January 2008. Institute of Nuclear Medicine & Allied Sciences, Delhi.
17. In vivo Proton MRS Study of Brain Metabolism in Malnutrition. Uma Sharma, Rachna Seth, Veena Kalra and N. R. Jagannathan. *Special Symposium on 'Advanced MR Applications' and 14th NMRS Meeting*, 16-19 January 2008. Institute of Nuclear Medicine & Allied Sciences, Delhi.
18. Biochemical characterization of lymphadenopathy in TB, Sarcoidosis and Metastasis using in vitro MRS. Sharma U, Ali, S. R., Kumar A, and Jagannathan N. R. Proc. Intl. Soc. Magn. Reson. Med. *15th Scientific Meeting of the International Society for Magnetic Resonance in Medicine (ISMRM)*, May, 2007, Berlin, Germany, 129, 2007.
19. 2D MRSI in locally advanced breast cancer: Assessment of tumor response in patients undergoing neo-adjuvant chemotherapy. Danishad K. A, Seenu V, and Jagannathan N. R. Proc. Intl. Soc. Magn. Reson. Med., *15th Scientific Meeting of the International Society for Magnetic Resonance in Medicine (ISMRM)*, May, 2007, Berlin, Germany, 557, 2007.
20. Characterization of bone tumors with in vivo ¹H MR spectroscopy. Danishad K. A, Sah, P., Sharma R., Kumar V., Sharma U, Seith A, Rastogi S, and Jagannathan N. R. Proc. Intl. Soc. Magn. Reson. Med. *15th Scientific Meeting of the International Society for Magnetic Resonance in Medicine (ISMRM)*, May, 2007, Berlin, Germany, 2607, 2007.
21. Metabolic characterization of muscular dystrophy, inflammatory and mitochondrial myopathy using in vitro MRS. Sharma U, Jagannathan N. R, Rathore C., Juyal S., Singh S, and Sarkar C. Proc. Intl. Soc. Magn. Reson. Med. *15th Scientific Meeting of the International Society for Magnetic Resonance in Medicine (ISMRM)*, May, 2007, Berlin, Germany, 2642, 2007.
22. Monitoring of therapeutic response of tumor in locally advanced breast cancer by diffusion weighted MRI. Sharma U, Danishad K. A, Seenu V, and Jagannathan N. R. Proc. Intl. Soc. Magn. Reson. Med., *15th Scientific Meeting of the International Society for Magnetic Resonance in Medicine (ISMRM)*, May, 2007, Berlin, Germany, 2948, 2007.
23. DW imaging in prostate cancer: Determination of cut-off value of ADC for the peripheral zone to predict malignancy. Kumar V, Jagannathan N. R, Kumar R, Thulkar S, Gupta S. D, Dwivedi S. N, Hemal A.K and Gupta N. P. Proc. Intl. Soc. Magn. Reson. Med., *15th Scientific Meeting of the International Society for Magnetic Resonance in Medicine (ISMRM)*, May, 2007, Berlin, Germany, 3664, 2007.
24. Determination of cut-off value of metabolite ratio in prostate cancer prior to biopsy – 3D MRSI study. Kumar V, Jagannathan N. R, Kumar R, Thulkar S, Gupta S. D, Hemal A.K and Gupta N.

P. Proc. Intl. Soc. Magn. Reson. Med. *15th Scientific Meeting of the International Society for Magnetic Resonance in Medicine (ISMRM)*, May, 2007, Berlin, Germany, 3672, 2007.

25. Biochemistry of soft tissue tumors: An in vitro NMR study. Sharma U, Kar M., Juyal S., Deo S, and Jagannathan N. R. Proc. Intl. Soc. Magn. Reson. Med., *15th Scientific Meeting of the International Society for Magnetic Resonance in Medicine (ISMRM)*, May, 2007, Berlin, Germany, 3682, 2007.

PATIENT CARE

The department has two 1.5 Tesla whole body MR scanners for patient care and research. The department provides twelve hours per day of patient care MRI services. The details of the number of patients scanned during the period April 2007 to March, 2008 are:

Clinical Diagnostic MRI Scan	:	5061 patients
Research	:	218 patients

AWARDS AND HONOURS

Prof 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 of the editorial board “*NMR Biomedicine*”; President of the Indian Biophysical Society (IBS); elected Fellow of the National Academy of Medical Sciences of India (FAMS); elected member of the executive council, International Union of Pure and Applied Biophysics (IUPAB) (2008–2011); member of the Annual Meeting Program Committee (AMPC), International Society for Magnetic Resonance in Medicine (ISMRM); member of the Education Committee, International Society for Magnetic Resonance in Medicine (ISMRM); moderator, Joint Meeting of the International Society for Magnetic Resonance in Medicine (ISMRM) and European Society of MR in Medicine and Biology (ESMRMB), Berlin, May 2007; member of the Swarnajayanthi Fellowship Award Committee, Department of Science and Technology (DST), Government of India; member of the Program 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) of 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 of the INSA combined committee for International Union of Pure and Applied Biophysics (IUPAB) and International Union of Crystallography (IUCr); member of the Program Advisory Committee (PAC), National Facility for High Field NMR, Tata Institute of Fundamental Research (TIFR), Bombay; member of the Regional Sophisticated Instruments Facility (RSIC), Indian Institute of Technology (IIT), Chennai.

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

Abnish Chandra Tiwari

EDUCATION

Undergraduate, Postgraduate, paramedical

Delhi Post Graduate Medical Education Forum (Deptt. of Obst. & Gynae.) is organizing monthly meetings for postgraduate training since 2001. These are to supplement training of postgraduates in clinical and surgical skills, 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 training post graduates.

Short Term and Long Term Training

The Department offers short and long term training in various subspecialty subjects like 'Gynae. Endoscopy Surgery', 'High Risk Pregnancy' 'Gynae. Oncology, and 'Gynae. and Obstetrics Ultrasonography' & Infertility. During the year 2007-08 we had 12 long term fellows undergoing training in subspecialty subjects and 12 short term trainees.

CME

The department organizes 'National CME in Obst. & Gynae' in collaboration with National Board of Examination, 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. Module 3-Series 2 was held on 21-22 April 2007 and Module 4-Series 2 on 2-3 November 2007 at AIIMS, New Delhi. The CME modules are attended by more than 200 students as well as senior gynecologists and were accredited by Delhi Medical Council.

CME, Workshops & Seminars

1. CME cum Workshop on "IUGR : Maternal – Fetal Management and Therapy ", 8th April, AIIMS, 2007

2. National CME in Obstetrics & Gynaecology (Module 3 Series 2) at AIIMS, 21–22 April 2007.
3. Women's Health Initiative Training Course in Minimally Invasive Gynaecology conducted by Department of Obst. & Gynae, AIIMS, 23rd July, 2007 to 2nd August, 2007.
4. Delhi Post Graduate Medical Forum meetings held on 11th August 2007, AIIMS, New Delhi
5. Women's Health Initiative Training Course in Minimally Invasive Gynaecology conducted by Department of Obst. & Gynae, AIIMS, 10th September, 2007 to 20th September, 2007.
6. Pre-Congress Workshop on Advanced Infertility and PCOS Management at Sir Ganga Ram Hospital, New Delhi during the 29th Annual Conference of AOGD, 1st November, 2007.
7. Pre-Congress Workshop on Operative Gynae. Endoscopic Surgery at Jeevan Mala Hospital, New Delhi during the 29th Annual Conference of AOGD, 1st November, 2007.
8. Pre-Congress Workshop on Endoscopy Surgery, AIIMS, New Delhi during the 29th Annual Conference of AOGD, 1st November, 2007.
9. Pre-Congress Workshop on Simple Techniques with Dramatic Consequences at AIIMS, New Delhi during the 29th Annual Conference of AOGD, 1st November, 2007.
10. National CME in Obstetrics and Gynaecology (Module 4, Series 2) on 2nd–3rd November, 2007 at AIIMS, New Delhi
11. Women's Health Initiative Training Course in Minimally Invasive Gynaecology conducted by Department of Obstetrics . & Gynaecology, AIIMS, 27th November to 6th December, 2007.
12. Delhi Post Graduate Medical Forum meetings held on 1st December 2007 at AIIMS, New Delhi
13. Delhi Post Graduate Medical Forum meetings held on 22nd December 2007 at AIIMS, New Delhi
14. Delhi Post Graduate Medical Forum meetings held on 19th January 2008 at AIIMS, New Delhi
15. Pre AICOG (All India Congress of Obstetrics & Gynaecology) Workshop on 'Genetic & Fetal Medicine, Maternal-Fetal Care For Prevention Of Birth Defects', Organised by Genetic and Fetal Medicine Committee, FOGSI, Department. of Obstetrics & Gynaecology, AIIMS, 1st February 2008
16. Pre AICOG Workshop on "Research Methodology & Good Scientific Writing at AIIMS on 1st February, 2008.
17. Post AICOG Workshop on Urogynaecology at AIIMS , New Delhi on 6th February, 2008
18. Women's Health Initiative Training Course in Minimally Invasive Gynaecology conducted by Department of Obst. & Gynae, AIIMS, 18th February – 28th February, 2008.
19. Delhi Post Graduate Medical Forum meetings held on 29th March 2008 AIIMS, New Delhi

Lectures delivered

Dr. Suneeta Mittal

1. "Hyperprolactinemia" during the National CME in Obst. & Gynae. (Module – 3), Organised by Department of Obst. & Gynae AIIMS, New Delhi on 21st April, 2007.
2. "Current Status of endoscopic surgery in Gynae. Practice" on 23^d July, 2007 during the Women's Health Initiative Training Course in minimally Invasive Gynaecology from 23rd July – 2nd August, 2007 at AIIMS, New Delhi.
3. "Laparoscopic surgeries – complications & management" on 26th July, 2007 during the Women's Health Initiative Training Course in minimally Invasive Gynaecology from 23rd July – 2nd August, 2007 at AIIMS, New Delhi.

4. "Emergency Contraception" during the 2nd International Training Course 'Non scalpel vasectomy' for candidates from Ghana, MAMC, New Delhi on 27th July, 2007.
5. "Vescio-Vaginal fistula and urinary incontinence (case discussion) Tenth Practical Course & CME in Obst. & Gynae., MAMC on 4th August, 2007.
6. "Elucidating endometriosis using genomic strategy" during the CME on Endometriosis at Intraprastha Apollo Hospital, New Delhi on 12th August, 2007.
7. "Breech & occipito posterior" MRCOG Part II Course, AIIMS, 13th August, 2007.
8. "Current status of endoscopic surgery in Gynae. Practice" during the Women's Health Initiative Training Course in minimally Invasive Gynaecology on 10– 20th September, 2007 at AIIMS, New Delhi.
9. "Laparoscopic surgeries complications and management" during the Women's Health Initiative Training Course in minimally Invasive Gynaecology on 10– 20th September, 2007 at AIIMS, New Delhi.
10. "Introduction to WHO-RHL" during the National CME in Obst. & Gynae. (Module 4 – Series 2) organized by the Department. of Obstetrics. & Gynaecology, AIIMS, New Delhi on 2nd November, 2007.
11. "Hyperprolactinemia" during the National CME in Obst. & Gynae. (Module 4 – Series 2) organized by the Deptt. of Obst. & Gynae., AIIMS, New Delhi on 2nd November, 2007.
12. "Introduction to 12 x 12 Initiative" during the CME organized by the Gurgaon Obstetricians & Gynaecologists Society, 11th January, 2008 at Gurgaon.
13. "Laparoscopic surgeries complications & Management" during the Training Course in "Minimally Invasive Gynaecology" organized by the Deptt. of Obst. & Gynae., AIIMS, 18 – 28th February, 2008 at New Delhi.
14. "Current status of endoscopic surgery in Gynae. practice" during the Training Course in "Minimally Invasive Gynaecology" organized by the Deptt. of Obst. & Gynae., AIIMS, 18 – 28th February, 2008 at New Delhi.

Dr. Alka Kriplani

1. "Advances & Managing Menorrhagia", 22nd Annual CME, Organized by Pune Obst. Gynae Society, Pune, 14:4:2007.
2. "Advances in Management of Menorrhagia", CME, Organised by Ghaziabad Obst. Gynae Society, Ghaziabad, 18:4:2007.
3. "Endoscopy and Lap Hysterectomy", CME, Organised by Faridabad Obst. Gynae Society, Faridabad, 19:4:2007.
4. "Latest Management of Abnormal Uterine Bleeding", CME, Organised by Agra Obst. Gynae Society, Agra, 19:4:2007.
5. "PCOS", National CME in Obst. & Gynae (Module – 3), Organised by Deptt. of Obst. Gynae AIIMS, New Delhi, 21:4:2007.
6. "Levonorgestrel IUD", CME, Organised by Varanasi Obst. Gynae Society, Varanasi, 27:4:2007.
7. "Current concepts in Management of Endometriosis", CME, Organised by Kanpur Obst. Gynae Society, Kanpur, 17:6:2007.
8. "Evidence based Management of Endometriosis", CME, Organised by Lucknow Obst. Gynae Society, Lucknow, 17:6:2007.

9. “Adolescent gynae endocrine problems”, CME, Organised by North Delhi Obs Gynae study groups, Sunderlal Jain Hospital, Delhi, 12:7:2007.
10. “Gynae endocrine problems of adolescence”, 9th A P State Conference of Obs & Gynae (APCOG), CME, Organised by Karimnagar Obs & Gynae Society, Karimnagar, Andhra Pradesh, 15:7:2007.
11. “Dilemmas in management of ectopic pregnancy”, 9th A P State Conference of Obs & Gynae (APCOG), CME, Organised by Karimnagar Obs & Gynae Society, Karimnagar, Andhra Pradesh, 15:7:2007.
12. “Endoscopy & Hysterectomy” during the Women’s Health Initiative Training Course in minimally Invasive Gynaecology organized by Deptt. of Ob. & Gynae., AIIMS, UNU & Karl Storz Germany, Delhi, 1.8.2007.
13. “Endoscopy in infertility” during the Women’s Health Initiative Training Course in minimally Invasive Gynaecology organized by Deptt. of Ob. & Gynae., AIIMS, UNU & Karl Storz Germany, Delhi, 2.8.2007.
14. “Adnexal mass”, (Case discussion), Tenth practical course & CME in Obstetrics & Gynaecology, Organised by Maulana Azad Medical College & Associated Lok Nayak Hospital, Delhi, 4:8:2007.
15. “Abnormal Uterine Bleeding”, MRCOG Part 2 course, Organised by AIIMS, Delhi, 14:8:2007.
16. “Updates in management of endometriosis”, CME, Organised by Thrissur Obs & Gynae Society, Thrissur, Kerala, 24:8:2007.
17. “Endoscopy in infertility” during the Women’s Health Initiative Training Course in minimally Invasive Gynaecology on 10– 20th September, 2007 at AIIMS, New Delhi.
18. “Endoscopy & Hysterectomy” during the Women’s Health Initiative Training Course in minimally Invasive Gynaecology on 10– 20th September, 2007 at AIIMS, New Delhi.
19. “Non Contraceptive uses and benefits of Levonorgestrel – IUS”, CME, Organised by Kota Obs & Gynae Society, Kota, 6:10:2007.
20. “Fertility enhancing endoscopic surgery”, CME, Organised by Jaipur Obs & Gyn Society, Jaipur, 28:10:2007.
21. “Recent trends in management of cancer endometrium”, National CME in Obst & Gynae (Module 4), Series 2, Organised by Dept, Obst & Gynae, AIIMS, Delhi, 2:11:2007.
22. “Laparoscopic Surgery for fertility”, CME Organised by West Delhi Forum, Delhi, 25:3:2008.

Dr. Sunesh Kumar

1. “Current concepts in management of cancer ovary” during the National CME in Obst. & Gynae. (Module 4 – Series 2) organized by the Deptt. of Obst. & Gynae., AIIMS, New Delhi on 2nd November, 2007.

Dr. D. Deka

1. “Invasive procedures in Prenatal Diagnosis” at the ‘Genetics for Obstetricians – 2nd CME’ sponsored by DBT on 7th April, 2007 , AIIMS, New Delhi
2. “Maternal Plasma volume expansion, Amnioinfusion Therapy” at CME cum Workshop on IUGR : Maternal – Fetal Management and Therapy, 8th April, Conference Hall, AIIMS
3. “Recurrent pregnancy loss” at National CME in Obstetrics & Gynaecology, AIIMS, 22nd April, 2007.

4. “Fetal Therapy what is possible in India” and “An Introduction to Fetal Medicine & Genetics: The New Obstetrics” at CME In O& G on 5 August 2007 at Baroda, organized by Baroda Obst & Gynae Society.
5. “Nuchal Cord – to hang or not to hang?” at 7th Annual CME of Noida Obstetrics & Gynaecology Society, Noida, 2nd September, 2007.
6. “Introduction to Gyan Yatra Program of FOGSI” in the CME on Genetics and Foetal Medicine and Gyan – Yatra program on 7th September, 2007 at Guwahati Medical College , Assam
7. “Issues of current interest “cord blood” “ in the CME on Genetics and Foetal Medicine and Gyan – Yatra program on 7th September, 2007 at Guwahati Medical College , Assam
8. “Panel discussion on Prenatal Diagnosis & Therapy” in the CME on Genetics and Foetal Medicine and Gyan – Yatra program on 7th September, 2007 at Guwahati Medical College , Assam
9. “Screening for aneuploidy and prenatal diagnosis” at National CME, Department of Obstetrics & Gynaecology Module 4, Series 2 on 2nd November, 2007 at AIIMS.
10. “Recent Management of Postpartum Hemorrhage” and Panelist at Panel Discussion on “HIV in Obst. & Gynaecology” at ICOG sponsored Workshop and CME, 17th & 18th November, 2007 at Shillong.
11. “Fetal Therapy for improving Fetal Growth” and Panel Discussion at 19th UP Congress of Obstetrics and Gynaecology, Post Congress CME cum Workshop Update in Fetal Medicine Management & Therapy in IUGR at Aligarh on 26th November, 2007.

Dr. Neerja Bhatla

1. “Management of Abnormal Pap Smear” Moderator in Panel Discussion in the symposium/ CME “Newer Horizons in Diagnosis and Management of Precancerous Lesions of Uterine Cervix” organised by Indian Menopause Society, New Delhi, 6th April 2007.
2. “Classification of Hypertensive disorders in pregnancy & management of PE” in National CME in Obstetrics & Gynaecology, AIIMS, New Delhi 21-22nd April 2007.
3. “Ovarian Cancers” in CME, Dharamshila Cancer Research Hospital, NOIDA, January 19, 2008.

Dr. Vatsla Dadhwal

1. “Management of hypertensive crisis and eclampsia” during the National CME in Obst & Gyane. Module 3, series 2, organized by Deptt. of Obst. & Gynae., AIIMS, 21-22nd April, 2007.
2. “Renal disease in pregnancy” during the National CME in Obst & Gyane. Module 3, series 2, organized by Deptt. of Obst. & Gynae., AIIMS, 21-22nd April, 2007.
3. “Renal disorders” during the National CME in Obst. & Gynae. (Module 4 – Series 2) organized by the Deptt. of Obst. & Gynae., AIIMS, New Delhi on 2nd November, 2007.

Dr. Nutan Agarwal

1. “Demonstration on fetal monitoring of growth and well being” in CME-cum-workshop on IUGR maternal fetal management and therapy at AIIMS on 8th April, 2007.
2. “Carcinoma vulva, case discussion and management” at National CME in Obstetric & Gynaecology at AIIMS, New Delhi on 2nd November 2007.

Dr. J.B. Sharma

1. “Prediction and prevention of Pre-eclampsia” during the National CME in Obstetrics and Gynaecology on 21st April, 2007 at AIIMS, New Delhi.

National and International Conferences

Organized by the department

National

1. “12 by 12 Initiative – Making Pregnancy Safer” in collaboration with Govt. of India, WHO, UNICEF & FOGSI on 23rd April, 2007 at AIIMS, New Delhi.
2. Core Implementation Committee meeting of “12 by 12” on 15th May, 2007 at AIIMS, New Delhi.
3. Seminar on CORONIS – The International Study of Caesarean Section Surgical Techniques: A randomized factorial trial in AIIMS, New Delhi on 13th June, 2007
4. MRCOG Part 2 Course from 11th to 18th August 2007 in AIIMS, New Delhi and delivered a lecture on Urogynaecology in the Course.
5. 29th Annual Conference of Association of Obstetricians & Gynaecologists of Delhi, 3rd – 4th November, 2007.
6. Meeting of Delhi Society For Prenatal Diagnosis & Therapy (DESPAT), 8th March, 2008 at LT-I, AIIMS

Lectures delivered during National & International Conferences

Dr. Suneeta Mittal

1. “12/12 Initiative for Prevention of Adolescent Anemia” during the Seminar on “Safe Blood for Safe Motherhood” at Red Cross Society of India, New Delhi on 14th June, 2007.
2. “Impact of Medical Abortion & Emergency Contraception” during XVII Annual Conference organized by NARCHI, 22nd – 23rd September, 2008 at New Delhi.
3. “Role of Clinicians in Research” during the 29th Annual Conference of AOGD, 1-4th November, 2008 at AIIMS, New Delhi.
4. “We and EMOC” during the 29th Annual Conference of AOGD, 1-4th November, 2007 at AIIMS, New Delhi.
5. “Ever changing Endometriosis” during the 24th Annual Conference on 18th November, 2007 at Chennai.
6. “Emergency Contraception” during the Workshop on Contraction and Safe Abortion, 16th December, 2007 at PGIMER, Chandigarh
7. “Hormonal Contraception – Current” during the Symposium on “National Debate on Contraception-Past, Present & Future”, 29th December, 2007 at Ahmedabad.
8. “Introduction to 12 x 12 Initiative” during the CME organized by the Gurgaon Obstetricians & Gynaecologists Society, 11th January, 2008 at Gurgaon.
9. “Superspecialisation – need of hour” during the 51st All India congress of Obstetrics & Gynaecology, 1-5th February, 2008 at Delhi.
10. “Critical Appraisal” during the MRCOG Post-Graduate Course organized by the Amity University, 8th February, 2008 at Noida.
11. “Endometriosis-recent trends in reproductive medicine” during the 18th Annual Meet Symposium on “Recent Trends in Reproductive Health Research”, 20th – 22nd February, 2008 at Hyderabad.
12. “PCOD” during AICC-RCOG Conference, 29th February, 08 – 2nd March, 08 at Indore.
13. “Medical Eligibility Criteria for Contraceptive Use” during AICC-RCOG Conference, 29th February, 08 – 2nd March, 08 at Indore.

14. Moderator – panel discussion on “Sterilization to do or not” Symposium during AICC-RCOG Conference, 29th February, 08 – 2nd March, 08 at Indore.
15. Moderator – panel discussion on “Current Status of Medical Abortion in India” during AICC-RCOG Conference, 29th February, 08 – 2nd March, 08 at Indore.
16. “Emergency Contraception” and “Myths regarding contraception” during the Workshop on Contraceptive update, 8-9th March, 2008, at Govt. Medical College, Jammu.
17. “Adolescent PCOS – Dilemma for Gynaecologist” during the 24th National Congress of ISOPARB 2008, 15th March, 2008 at Ranchi.
18. “Endometriosis & IVF” during the 24th National Congress of ISOPARB 2008, 15th March, 2008 at Ranchi.

Dr. Alka Kriplani

1. “Management of AUB- Current Concepts”, 31st Annual Conference of AOGO, Organized by Association of Obstetricians & Gynaecologists of Orissa, Bhubneshwar, 7:4:2007.
2. “Laparoscopic Surgery for Vault Prolapse”, Installation ceremony of Nagpur Obst. & Gynae office bearers, Organised by Nagpur Obst. & Gynae Society, Nagpur, 8:4:2007.
3. “Total Laproscopic Hysterectomy”, 1st Annual Conference of Delhi Gynaecological Endoscopists’ Society, Delhi, Organized by Association of Gynaecological Endoscopist of Delhi, 13:4:2007.
4. “Hirsutism in Adolescent”, North Zone YUVA FOGSI- 2007, Organised by Gurgaon Obst. Gynae Society, Gurgaon, 15:4:2007.
5. “Advances in Management of Menorrhagia”, Armaan-2007, 1st Annual State Conference, Organised by Dehradun Obst. Gynae Society, Dehradun, 16:4:2007.
6. “Prevention & Management of Rhesus Iso Immunisation”, (Case presentation and question – answer session), 7th Program of FOGSI – ICOG Satellite School for post graduate education, Ahmedabad, d22:4:2007.
7. “Fertility enhancing Endoscopic Surgeries”, 11th FOGSI Certified Advanced Training Program in Gynae Endoscopy and Endosuturing, Organized by Jeevan Mala Hospital, Delhi, 7:6:2007.
8. “Adolescent gynae endocrine problems”, 8th Annual Congress on advances in Obstetrics & Gynaecology & Reproductive Medicine, Organised by Trivandrum Obs & Gynae Club, Trivandrum, Kerala, 14:7:2007.
9. “Management of abnormal uterine bleeding”, 8th Annual Congress on advances in Obstetrics & Gynaecology & Reproductive Medicine, Organised by Trivandrum Obs & Gynae Club, Trivandrum, Kerala, 14:7:2007.
10. “Non contraceptive uses of ING IUS”, Gyanvarsha – 2007, Annual conference of Bangalore Society of Obs & Gynae, Organised by BSOG, Bangalore, 18:8:2007.
11. “Ovulation Induction”, Focus 2007, All India PG training programme, Organised by Jubilee Mission Medical College, Thrissur, Kerala, 23:8:2007.
12. “Endometriosis”, (case presentation), Focus 2007, All India PG training programme, Organised by Jubilee Mission Medical College, Thrissur, Kerala, 23:8:2007.
13. “Rh isoimmunization”, Focus 2007, All India PG training programme, Organised by Jubilee Mission Medical College, Thrissur, Kerala, 24:8:2007.
14. “DUB”, (case presentation), Focus 2007, All India PG training programme, Organised by Jubilee Mission Medical College, Thrissur, Kerala, 24:8:2007.

15. "Endocrine problems in adolescents made easy", Gynae-Paediacon 2007, Organised by IMA-East Delhi Branch with East Delhi Gynae Forum, Delhi, 14:10:2007.
16. "Adolescent gynaecological problems", at 3rd annual Conference, Organised by Indian Railway Association of Gynaecologists & Obstetricians, Delhi, 27:10:2007.
17. "Endoscopic fertility enhancing surgery" (Video lecture), 29th AOGD 2007, Organised by AOGD, Delhi, 3-4:11:2007.
18. "Gynaecological endocrine problems in adolescents" at 19th UP congress of Obstetrics and Gynaecology (UPCON 2007), Organized by Aligarh Obs & Gynae Society, Aligarh, U.P., 24:11:2007.
19. "Endoscopy in infertility" 7th WHI Training course in MAS, Organised by Dept Ob Gynae, AIIMS, UNU & Karl Storz Germany, Delhi, 28:11:2007.
20. "The Laparoscopic Gynaecological Surgery for General Surgeons", 2nd Fellowship Course of IAGES, Organized by IAGES (Indian Association of Gastrointestinal Endo Surgeons), Apollo Hospitals, Delhi, 30:11:2007.
21. "Endoscopy & Hysterectomy" 7th WHI Training course in MAS, Organised by Dept Ob Gynae, AIIMS, UNU & Karl Storz Germany, Delhi, 5:12:..2007.
22. "Dealing with complications of endoscopy" (Panelist), Fertivision 2007, The National Congress on Infertility, Organized by Indian Fertility Society, Delhi, 8:12:2007.
23. "Laparoscopic Surgery" AMSCON-2007 (Annual Conference of IMA Academy of Medical Specialities), Delhi, 9:12:2007.
24. "Intrauterine Systems" 1st Joint Conferences of RCOG (Royal College of Obstetricians & Gynaecologists) & SAFOG (South Asian Federation of Obstetrics & Gynaecology, Organized by AICC RCOG, Kolkatta, 15:12:2007.
25. "Vault prolapse" Precongress workshop, 51st AICOG 2008, Organised by FOGSI, New Delhi, 1:2:2008.
26. "Laparoscopic applied anatomy" 51st AICOG 2008, Organised by FOGSI, New Delhi, 3:2:2008.
27. "Nulliparous prolapse" Postcongress workshop, 51st AICOG 2008, Organised by FOGSI, New Delhi, 6:2:2008.
28. "Fertility enhancing Hysteroscopic Surgery" Organised by Ghaziabad Obs & Gynae Society, Ghaziabad, 1:3:2008.
29. "Hysterectomy procedures" live laparoscopic surgery workshop, Organised by ASI UP Chapter, Surgical Club and FOGSI Kanpur Branch, Kanpur, 14:3:2008.
30. "Fertility Enhancing Surgery", Organised by Agra Obst & Gyn Society, Agra, 17:3:2008.
31. "Fertility Enhancing Surgery", during the symposium Organised by Gynaecologist Forum, West Town, Delhi, 23:3:2008.

Dr. Sunesh Kumar

1. "Contraception Today" at IMA, West Town Branch, New Delhi on 7th June, 2007.
2. "Preventing maternal deaths through safe blood transfusion" at Indian Red Cross Society, New Delhi on 14th June, 2007.
3. "Laparoscopy – pt. Positioning, pneumoperitoneum, port placement, indications, contradictions" during the Women's Health Initiative Training Course in Minimally Invasive Gynaecology at AIIMS on 24th July, 2007.

4. “Preventing maternal deaths through safe blood transfusion” at Indian Red Cross Society, New Delhi on 4th August, 2007.
5. “Vulval cancer and carcinoma endometrium” at MRCOG Part II course at AIIMS, New Delhi on 15th August, 2007.
6. “Effects of Nutrition on Pregnancy outcome” at R.D. Gargi Medical College, Ujjain, MP on 9th March, 2008.

Dr. D. Deka

1. “Sudden Fetal Demise”, at the 1st Annual State Conference of Dehradun Gynae & Obs Society, at Dehradun on 16th April, 2007.
2. “PND Awareness & Feasibility for Practicing Obstetrician & Gynaecologist” 12th May, 2007 at Timber Trail, Shimla.
3. “An Introduction to “Fetal Medicine & Genetics: The New Obstetrics” at Jolly Grant Medical College , Dehradun, 17th June, 2007.
4. “Recurrent Pregnancy Loss”, MRCOG Part III, 18th August, 2007 at Seminar Room, Organised by Deptt. of Obst. & Gynae, AIIMS.
5. “Cord Blood Sampling” at IAN Donald School Live Workshop on Ultrasound in Obs & Gyn, Organised by Agra Obstetrical and Gynecological Society, Agra, 19th August, 2007.
6. “Primary Amenorrhea : ‘Take home messages’ at
7. All India PG training programme “FOCUS 2007” at Jubilee Mission Medical College, Thrissur, Kerala on 23rd August, 2007
8. “Introduction to Fetal Medicine and Genetics” at Clinical Meeting of Thrissur O & G Society, 23rd August, 2007 Kerala
9. “Dilemma of Nuchal Cord” at AOGD monthly Meeting at AIIMS, 31st August, 2007.
10. “Understanding TORCH Test” clinical meeting of Rewari Obstetrics & Gynaecological Society, Rewari on 15th September, 2007,
11. “Endoscopy in fetal therapy and in pregnancy”, Sixth Training course in “Minimally Invasive Gynaecology” on 17th September, 2007 , Organised by Deppt of O & Gynae, AIIMS
12. “Treatment of Fetal Anemia in Rh Iso-immunized pregnancies with Ultrasound – Guided Intrauterine Fetal Blood Transfusion” at Faculty Research Presentation on 18th September, 2007 at Conference Hall, AIIMS.
13. “Introduction to Fetal Medicine and Genetics”, conducted Panel Discussion ‘PND and Therapy’ at Fetal Medicine Workshop (25th Sept., 2007) at Guwahati Medical College & Hospital, Guwahati, Organised by GOGS and GMCH.
14. “Protocol for USG screening for high risk mothers”, International Symposium on Fetal Interventions & Genetic Counseling for Major Congenital Malformations on 3rd October, 2007 at Board Room, AIIMS, New Delhi.
15. “Medico Legal issues in management of fetal defects during late pregnancy” at 2nd National Medico Legal Conference, Pune on 6th October, 2007
16. “Stem Cell Therapy” at 4th FOGSI National Satellite Conference on 28th October, 2007 at ORSAC Bhubaneswar.
17. “Obstetrics to Fetal Medicine – Requisites for the transition” at Annual Conference of ISPAT-CON 2007, 9th National Conference, Chennai on 24th – 25th November, 2007.
18. “Stem Cell Therapy & Cord Blood Collection” and Introduction to Gyan Yatra at Gyan Yatra Programme and PG Forum on 1st December, 2007, Venue – LT-1, AIIMS

19. “Fetal Endoscopy” at Workshop on Fetal Endoscopy on 5th December, 2007 at Deptt. of Obst. & Gynae, AIIMS
20. “Maternal-Fetal Care By Obstetricians & Gynaecologists for Prevention of Birth Defects” at FOGSI-ICOG satellite school on 23rd December, 2007, New Delhi.
21. “Peri-conceptional care” at 19th Convention of N.E. Obstetrics & Gynaecological Societies, organized by Jorhat Obst. & Gynae Society, Jorhat on 4-6th January, 2008 at Jorhat, Assam
22. “MMR – measures to be adapted to minimize” at National Seminar Women Health an Indian Scenario, on 19th –20th January, 2008, Pune.
23. “Intrauterine Transfusion” at Genetic & Fetal Medicine Workshop on Maternal-Fetal Care For Prevention Of Birth Defects, Organised by: Dr. Deka, Deptt. of Obst. & Gynae, AIIMS, 1st February 2008, JLN Auditorium, AIIMS
24. “Fetal Karyotyping and interpretation” on 3rd Feb, 2008 at AICOG 2008 organized by 51st All India Congress of Obstetrics & Gynaecology, Ashoka , New Delhi.
25. “Rubella “ at Seminar Teratology. Organized by Varanasi Obst. Gynae Society, Varanasi, 8th – 9th February, 2008.
26. “Fetal Surgery” at Women’s Health Initiative Training Course in Minimally Invasive Gynaecology Organized by Deptt. of Obst. & Gynaecology, AIIMS on 25th February, 2008 at Seminar Room, Obst. & Gynae Department., AIIMS

Dr. Neerja Bhatla

1. “VIA/VILI or PAP/HPV Test – The Best for Developing World” at session “New challenges in Cervical Cancer Control” 2nd International Congress on Cervical Cancer (2nd ICCCON 2007) at Patna, 7-8th April 2007.
2. “Stromal tumours of ovary: AIIMS experience” in a Symposium on “Ovarian Cancer” organised by IRCH, AIIMS, New Delhi., 13-14th April 2007.
3. “Mahilaon mein kuposhan se hone wali bimarian or unka ilaj” at All India Radio, New Delhi, 26th April 2007.
4. Cervical Cancer Prevention in Low Resource Settings. Mayo Clinic, Rochester, USA, 26 June 2007.
5. “Laparoscopy in Gynae Oncology” in Women’s Health Initiative Training Course in Minimally Invasive Gynaecology organized by Deptt. of Obst. & Gynae, AIIMS, August 1, 2007.
6. “Recent advances in Management of Cervical Lesions” IMA Westown Branch, 11th September 2007.
7. “Laparoscopy in Gynae Oncology” in Women’s Health Initiative Training Course in Minimally Invasive Gynaecology conducted by Deptt. of Obst. & Gynae, AIIMS, September 15, 2007.
8. “Screening Genital & Breast Malignancy” XVII Annual Conference of National Association of Reproductive & Child of India (NARCHI), New Delhi, 22-23rd September 2007.
9. Lecture on “Mahilaon mein khoon ki kami, karan va nivaran” at All India Radio, New Delhi, September 27, 2007.
10. “Screening of Ovarian Cancer”, Annual Conference - Indian Menopause Society (Delhi Chapter), Delhi Habitat Center, New Delhi, 7th October 2007.
11. “Management strategies for precancerous lesions of endometrium” in 16th Annual National Conference of the Association of Gynaecologic Oncologists of India (AGOICON 2007) at Madurai, 16-18th November 2007.

12. "Enhancing Quality of Life in women" - Panel discussion – The Psychology Association of Daulat Ram College, University of Delhi, 27th November 2007.
13. "AIIMS Experience with Fast HPV" National workshop at ICPO (Institute of Cytology and Preventive Oncology (ICPO / ICMR), Noida, U.P, 29th November 2007.
14. "Laparoscopy in Gynae Oncology" in Women's Health Initiative Training Course in Minimally Invasive Gynaecology conducted by Deptt. of Obst. & Gynae, AIIMS, December 1, 2007.
15. "Issues in site preparation for vaccines", First International Conference of Emerging and Re-emerging Viral Diseases of the Tropics & Sub-Tropics, organized by Indian Virology Society, New Delhi, December 11-14, 2007.
16. National Faculty for the Precongress Colposcopic Workshop of AICOG 51st All India Congress of Obstetrics & Gynaecology (AICOG), New Delhi, 1-5th February 2008
17. "Proteomic & Genomic approach to diagnosis of ovarian cancer" in the session "Ovarian Malignancy" 51st All India Congress of Obstetrics & Gynaecology (AICOG), New Delhi on 3.2.2008
18. "Laparoscopy in Gynae Oncology" in Women's Health Initiative Training Course in Minimally Invasive Gynaecology conducted by Deptt. of Obst. & Gynae, AIIMS, February
19. "Epidemiology Update: The Enduring Risk of Oncogenic HPV infection" in Seminars in HPV Vaccinology", organised by Taiwan Association of Gynaecologic Oncologists, Taiwan, 1-2nd March 2008.

Dr. Neena Malhotra

1. Intrauterine Insemination- Optimising outcome": During ART Training Programme organized by the Reproductive Research Center, Cleveland Clinic Foundation, Cleveland, Ohio, USA. 2-28th May, 2007
2. "Female Patient Selection for ART": During ART Training Programme, Organized by the Reproductive Research Center, Cleveland Clinic Foundation, Cleveland, Ohio, USA. 2-28th May, 2007.
3. "A comparison of single versus double intrauterine insemination in unexplained infertility" at the 63rd Annual Meeting of American Society of Reproductive medicine (ASRM), Washington DC, USA, 17th October, 2007.
4. "Induced abortion- Current Guidelines "at MRCOG Post-Graduate Course organized by the Amity University, 8th February, 2008 at Noida.
5. "Etnarcept-Drug Update"- 51st AICOG, organized by Federation of Obstetricians and Gynecologists of India (FOGSI), 5th February 2008, New Delhi
6. "Prenatal Diagnostic Procedures", at the Pre congress workshop of 24th National Congress of ISOPARB 2008, 14th March, 2008 at Ranchi.

Dr. Vatsla Dadhwal

1. "Prevention of mother to child transmission": during the Antiretroviral therapy in pediatric HIV, AIIMS-UCLA Collaborative project, 1st April, 2007 at AIIMS, New Delhi.
2. "Trauma in pregnant women" during the Teleconferencing session for DNB candidates, 31st May 2007 at IGNOU, New Delhi.
3. "Office hysteroscopy" during the Minimally Invasive Gynaecology Workshop organized by the Deptt. of Obst. & Gynae., AIIMS, 26th November – 6th December, 2007.

4. "Prevention of Mother to Child Transmission and Management of pregnant ladies with HIV infection" during the training programme for prevention, control & management of HIV/AIDS for nurses, 29-30th September, 2007.
5. "International PPTCT guidelines and the Indian experience" during the Conference on Best Medical Practices in HIV/AIDS Care at Apollo hospital, 18-19th November, 2007.
6. "FOGSI AIDs Day lecture-What is the need of the hour?" during the Gyan Yatra and Delhi Post Graduate Medical Education Forum, 1st Decemebr, 2007 at AIIMS.
7. "Diagnostic / Office hysteroscopy" during the training course in Minimally Invasive Gynaecology, 18-28th Feb. 2008 at AIIMS, New Delhi.
8. "Oral Contraceptives" during the Workshop on Contraceptive update, 8-9th March, 2008, at Govt. Medical College, Jammu.
9. "CVS risks and apprehension" during the Hemophilia Conference organized by Society for Hemophilia Care (India) on 13-14th March, 2008 at AIIMS, Ner Delhi.

Dr. Nutan Agarwal

1. "Medical management of ectopic gestation" at monthly meeting of East Obs & Gynae Society, Delhi on 20th April, 2007.
2. "Non-immune fetal hydrops in teleconference symposia" at ISRO, Ahmedabad on 22nd April, 2007.
3. "Special issues on the management of Rh-Negative pregnancy in teleconference symposia" at ISRO, Ahmedabad on 22nd April, 2007.
4. "Complications of hysteroscopy and their management" at 5th training course in minimally invasive gynaecology at AIIMS from 25th July, 2007.
5. "Complications of hysteroscopy and their management" at 6th training course in minimally invasive gynaecology at AIIMS from 12th September, 2007.
6. "Dysfunctional labour – Diagnosis and its Management" at 51st AICOG 2008 organized by FOGSI at New Delhi on 5th February 2008.
7. "Management of Hysteroscopy Complication" in 8th - WHI training Course in minimally invasive surgery at AIIMS, in collaboration with UNU and Karl Storz, Germany 27.02.2008.
8. "Complication of Hysteroscopy Surgery" in "Workshop on Hysteroscopic Surgery" organized by Ghaziabad, Obstetric and Gynaecology Society on 1st March 2008.
9. "Live Demonstration and Coordination for Hysteroscopic Procedures" at "Workshop on Hysteroscopic Surgery" organized by Ghaziabad, Obstetric and Gynaecology Society on 1st March 2008.

Dr. J.B. Sharma

1. "Incidental findings at Laparoscopic sterilization 'at 1st Delhi Gynecological Endoscopic Society Conference on 15th April 2007 in New Delhi
2. "Evidence based Management of menorhagia" in Noida Obstetric and Gynaecological Society, Noida on 27th April 2007
3. "Role of Laproscopy in Urogynaecology" in Training Course in Minimally Invasive Gynae Training Surgery at AIIMS New Delhi on 31st July 2007
4. "New Developments in the management of urinary incontinence" in Annual CME AICC RCOG North Zone Conference in New Delhi on 2nd September 2007
5. "Overview of urogynaecological problems and medical management of stress urinary incontinence", 7 October 2007, Indian Menopause Society Annual Conference at New Delhi

6. "Role of Parenteral Iron and Erythropoietin in Anemia During Pregnancy" during the 29th Annual Conference of AOGD at AIIMS, New Delhi, 1 – 4th November, 2007.
7. "Outcome of Haemoglobinopathies at RCOG SAFOG 2007 conference at Kolkata from 14th – 16th December, 2007
8. "Management of Anemia during Pregnancy" in Gurgaon Obstetrics and Gynaecological Society on 11th January, 2008
9. "Non-surgical Management of Stress Urinary Incontinence" during the 51st All Indian Congress of Obstetrics and Gynaecology (AICOG 2008) from 3rd to 5th February, 2008 at New Delhi.
10. "Medical Management of SUI" and "Anemia in Pregnancy" AICC-RCOG Conference, 29th February, 08 – 2nd March, 08 at Indore.

RESEARCH

Funded Projects

Completed

1. Role of Intravenous Immunoglobulins in Recurrent Abortions. Dr. D. Deka. Funded by Bharat Serum & Vaccines Ltd., 2005-2007. Funds: Rs.2.88 lakhs.
2. Weekly 70 mg Oral Alendronate therapy in Post-menopausal osteopenic women. Dr. Nutan Agarwal. Funded by Troikaa Pharmaceuticals, Sept 2005–Aug 2007. Funds: Rs. 3 lakhs.
3. Role of Bile Acids in diagnosis and therapeutic effects of Ursodeoxycholic Acids in Intrahepatic Cholestasis of Pregnancy. Dr. Nutan Agarwal. Funded by AIIMS. March 2006–Feb 2008. Funds: Rs 0.92 lakhs.

Ongoing

1. Comparison of two doses and two routes of administration of misoprostol after pretreatment with mifepristone for early pregnancy. Dr. Suneeta Mittal. Funded by WHO, July 2007–June 2008. Funds: Rs.5.97 lakhs.
2. Prevention of Parents to Child Transmission of HIV. Dr. Suneeta Mittal. Funded by Delhi State AIDS Control Society. Funds: Rs. 0.5 lakhs.
3. Phase I Clinical trial of once weekly administration of 50 mg Mifepristone as oral contraceptive. Dr. Suneeta Mittal. Funded by ICMR.
4. Phase III Multicentre clinical trial with subdermal single Rod contraceptive Impalnt - Implanon. Dr. Suneeta Mittal. Funded by ICMR (Two years).
5. Monthly statistics on Eclampsia. Dr. Suneeta Mittal. Funded by ICMR, 1/2/2006 to 31/1/2007
6. Diagnosis of genital tuberculosis in infertile women and the effect of antitubercular therapy. Dr. Alka Kriplani. Funded by ICMR. January 2006–December 2008. Funds: Rs 4.79 lakhs.
7. Evaluation of Curcumin in the management of Advance cancer cervix. Dr. Sunesh Kumar. Funded by DBT, January 2006 to 2009. Funds: Rs. 51 lacs. (approx.).
8. Seroprevalence of cytomegalovirus (CMV) infection in pregnant women and prenatal diagnosis of fetal CMV Infection. Dr. D. Deka. Funded by ICMR. 2 years (2007-2009). Funds: Rs. 2.75 lakhs.
9. Development of HPV candidate vaccine/s: preparation of clinical trial site/cohort for vaccine testing. Dr. Neerja Bhatla. Funded by DBT, March 2005–July 2008. Funds: Rs.84.98 lakhs.
10. A phase III, double-blind, randomized, controlled study to evaluate the immunogenicity and safety of GlaxoSmithKline Biologicals' HPV-16/18 VLP/AS04 vaccine administered intra-

- muscularly according to a 0, 1, 6 months schedule in healthy Indian female subjects aged 18-35 years. Dr. Neerja Bhatla. Funded by GSK. June 2006 to May 2008. Funds: Rs. 6.88 lakhs.
11. Parallel performance trial of Fast HPV versus HC2 for Cervical Cancer Screening. Dr. Neerja Bhatla. Funded by Digene. March 2007 to May 2008. Funds: Rs. 13,5 lakhs.
 12. Level of angiogenic cytokines (IL-8 and Leptin) in peritoneal fluid of Indian with endometriosis. Dr. Neena Malhotra. Funded by AIIMS. March 2006–Feb 2007. Funds: Rs. 0.6 lakhs.
 13. CORONIS—International study of caesarean section surgical techniques. A randomized factorial trial. Dr. J.B. Sharma. Funded by University of Oxford, U.K. March 2007 to March 2011. Funds: Rs. 68.27 lakhs.

Departmental Projects

Completed

1. To study the efficacy of uterine biophysical profile, antral follicle count and ovarian diameter in predicting outcome in infertile women on ovulation induction.
2. Evaluation of ultrasound and MRI in diagnosis of fetal congenital anomalies.
3. Ovarian function and endometrial changes in cases of carcinoma breast.
4. Role of bile acids in diagnosis and therapeutic effect of ursodeoxycholic acid in intrahepatic cholestasis of pregnancy.
5. The effect of warmed and humidified carbondioxide pneumoinsufflation on intraoperative and postoperative pain in laparoscopy.
6. Conscious pain mapping: A new technique of laparoscopy for evaluation of chronic pelvic pain.

Ongoing

1. Detection and quantification of fetomaternal hemorrhage (FMH) following deliveries in Rh-ve non immunized pregnancy by KBT, flow cytometry.
2. Comparison of harmonic scalpel with bipolar cautery in laparoscopic assisted vaginal hysterectomy.
3. A comparative study of VIA, cyto diagnosis, HPC testing and colposcopy as tools for cervical cancer screening.
4. 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.
5. Doppler Assessment in various fetal vessels and fetal weight estimation using antenatal soft tissue thickness in intra uterine growth restriction with normal pregnancies.
6. Prevention of uterine atony during cesarean section : Randomized comparison of sublingual misoprostol versus syntocinon
7. Value of routine antenatal screening ultrasonography at 24-28 weeks of gestation.
8. Effect of intraperitoneal bupivacaine in reducing postoperative pain after laparoscopic gynaecological surgery.
9. Endometrial changes and ovarian function in women with early breast cancer
10. A randomized study to compare two surgical technique of laparoscopic stripping of ovarian endometrioma.
11. Role of Middle Cerebral Atery – Peak Systolic Velocity in Predicting fetal anemia in Rh Isoimmunisation after previous Intrauterine Transfusions.

12. Use of Letrozole Versus Clomiphene Citrate combined with Gonadotrophin in Superovulation and IUI Cycles.
13. Hyperhomocystenemia : in unexplained recurrent pregnancy loss and therapeutic response to vitamin B₆, B₁₂ and folic acid.
14. Prophylactic administration of micronized progesterone in prevention of preterm labour in women at increased risk.
15. 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.
16. Correlation of stage and imaging of endometriosis with fertility outcome.
17. Role of messenger RNA PCR in the diagnosis of genital tuberculosis in infertile women.
18. Comparison of uterine and radial artery flow changes detected by pulse Doppler in women undergoing stimulated intrauterine insemination for unexplained infertility.
19. To compare three different time regimen of vaginal misoprostol after oral Mifepristone for medical abortion
20. Transvaginal ultrasound markers for ovarian reserve and periovarian adhesions after laparoscopic ovarian drilling in patients with clomiphene citrate resistant polycystic ovarian syndrome.
21. Comparison of the effectiveness of single versus double intrauterine insemination in infertile couples
22. Role of PET in staging of ovarian malignancies
23. Persistence of HPV DNA and its correlation with residual diseases in treated cases of CIN
24. To compare BPP with Doppler in pregnant patients with IUGR in normal pregnancies
25. Role of Anastrozole for treatment of symptomatic leiomyoma in premenopausal women.
26. Ovarian function and endometrial changes in case of carcinoma breast
27. Comparative study between MRI and Ultrasound in prenatal diagnosis using autopsy or postpartum imaging as a standard of reference
28. Role of Pulse Doppler in detecting Uterine and Radial artery flow changes in predicting Pregnancy outcome in Unexplained Infertility
29. Application of PET scan in preoperative evaluation of carcinoma endometrium
30. Effect of oral contraceptive containing ethinyl estradiol combined with drospirenone vs desogestrel on clinical and biochemical parameters in patients of PCOS
31. Correlation of HPV DNA testing with residual decrease in treated cases of CIN
32. Sentinel Lymph node biopsy in cancer cervix
33. The Comparison between laparoscopic assisted vaginal hysterectomy with non descent vaginal hysterectomy for large large uteri - a randomized clinical trial

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 & E 6 variants.(with Biochemistry).
2. Apoptosis in placental membranes in pre-eclampsia: An immunohistochemical study (with Anatomy)
3. PEARL study (post menopausal evaluation and risk reduction with lasofoxifene). Global research and development, Pfizer Ltd., Pfizer Ltd. (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 Lab. Medicine)
7. Establishment & characterization of human fetal liver hematopoietic stem cell line. (with Medical Oncology, IRCH)
8. To study the subset of Antiphospholipid syndrome defined by anti b2 glycoprotein 1 antibody. (with Lab. 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 & 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 & 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 case (with Endocrinology).
23. Correlation between first trimester glucose screening & serum insulin levels with development of gestational diabetes mellitus in pregnancy (with Endocrinology).
24. Comparative evaluation of neo adjuvant chemotherapy vs primary debulking surgery in the management of advanced epithelial ovarian cancer (with IRCH).
25. p16INK 4a and E-cadherin expression profile in pre-cancerous lesions of cervix and cervical carcinomas (with Pathology).
26. Role of circulating angiogenic factors in the pathogenesis of preeclampsia (with Anatomy).
27. Validation of strategies for rapid prenatal detection of aneuploides (with Genetics).
28. 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).
29. Non invasive prenatal diagnosis of Beta Thalassemia and fetal RhD status (with Paediatrics).

30. Establishment & characterization of human fetal liver hematopoietic stem cell line (with Medical Oncology, IRCH).
31. Endothelial progenitor cells as biomarker of disease activity in multiple myeloma (with Oncology).
32. Use of Hb A estimation by HPLC for prenatal diagnosis of b-thalassemia in fetal blood samples during second trimester pregnancies (with Haematology).
33. Delineation of molecular basis of trophoblast invasion (with National Institute of Immunology).

PUBLICATIONS

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- 2 Agarwal N, Lal S, Kriplani A, Estrogen-Dependent Recurrent Aggressive Angiomyxoma of the vulva: A surgical enigma. *J Gynaecologic Surgery*. 2007;23(1):37-40.
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PATIENT CARE

Hospital care : Facilities available with department includes special clinic and special laboratory facilities besides the regular Gynaecology outdoor which is held everyday. The following special clinics are held.

Clinics	Number of Patients Attended		
1. General OPD	6/ week	New – 26946	Old – 41463
2. High risk pregnancy clinic	3/week	New – 2209	Old – 11172
3. Gynae Endocrine clinic	3/week	New – 189	Old – 475
4. Gynaecological cancer clinic	2/week	New – 289	Old – 576
5. Post natal clinic	3/week	New – 176	Old – 84
6. Medical termination of pregnancy clinic	6/week	New – 1300	Old – 386
7. Family Welfare clinic	6/week	New – 2276	Old – 3700

Operations Performed

Gynaecological

Major:	Surgery for benign diseases	-	1300
	Oncology Surgery	-	188
	Infertility	-	703
	Endoscopy surgeries: Laparoscopy	-	2001
	Hysteroscopy	-	146
	Plastic surgery	-	49
Minor:	D&C/EA	-	2300
	Colposcopy/cryo/LEEP	-	284
	Diagnostic hysteroscopy	-	986
	MTP	-	1300
	Pap's smear	-	3200
	Cervical biopsies	-	186

Obstetrics

Major:	LSCS	-	836
	Em. Laparotomies	-	48
Minor :	Operataive vaginal deliveries	-	184
	Vaginal deliveries	-	1648

Fetal Medicine

Cordocentesis	-	86
Chorionic Villus Sampling	-	113
Amniocentesis	-	109
Intra Utero Infusion	-	69
High risk Obstetrics		
- Obstetric ultrasound	-	3600
- NST	-	2684
- BPP	-	2465
Gynae Ultrasound	-	184
Ovarian cyst aspirations	-	49

Laboratory Investigations

Urine Pregnancy test	-	2650
Haemoglobin	-	3600
Blood Groups	-	3165
Urine Alb./ Sug.	-	48600

POST PARTUM PROGRAMME

The Post Partum Programme (PPP) is a maternity centred hospital based approach to family welfare programme by providing a package of RCH and family welfare services with 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, Post Partum Programme (2006-2007)

Methods	Performance
CuT	684
Oral Pills (13 cycles=1 user)	cycles 312
Conventional Contraceptives (72 pieces=1 user)	pieces 69384
Sterilisation	
(a) Tubectomy	713
(b) Vasectomy	37

Note: Family Planning Methods are free of target

Maternal and Child Health (MCH) Performances (2006-2007)

Services	Performance
Pregnant Women	
TT(Mothers)(2 nd or Booster)	1734
Children (0-1) Year	
DPT (3 rd Dose)	1178
Polio (3 rd Dose)	1234
BCG	2167
Measles	1374
Children under five years	
DT	713

Community Services/Camps

The Faculty of the department participated in community awareness programmes through public education talks in radio, phone-in programmes and panel discussions on AIR and allied T.V. channels.

1. Medical Camp at Leh-Ladakh arranged by National Commission for Scheduled Tribes, New Delhi, September 3-9, 2007.
2. Camp on "Emergency Contraception" at Health Pavilion, Pragati Maidan, Trade Fair, New Delhi, 14-28 November, 2007.
3. Cancer detection camp at Janak Puri, New Delhi in collaboration with Rotary Club, December 23, 2007.
4. Reproductive Child Health camps organized by the Directorate of Family Welfare at different hospitals of Delhi Govt.

AWARDS AND HONOURS

Dr. Suneeta Mittal is Editor, Reproductive Health Library, WHO; Chairperson, North Zone, ISOPARB; Fellow of Royal College of Obstetricians & Gynaecologists, London; Vice-President, Federation of Obstetricians & Gynaecologists of India; Vice-President, Indian Society for Study of Reproduction & Fertility; Short Term Consultant for Technical assistance to WHO on Safe abortion in DPRK; awarded Dr Manju Gita Mishra Award – Annual ISOPARB Symposium, best performance North Zone, 2008; Member of WHO Fertility Regulation Group, WHO Task Force on Post-Ovulatory Methods of Contraception, International Clinical Epidemiology Network (INCLIN), Indian Clinical Epidemiology Network (IndiaCLEN), Global Network for Perinatal & Reproductive Health (GNPRH), Asia Pacific Network for Promotion of Emergency contraception (APNEC), International Consortium for Medical Abortion (ICMA), Core Assessment committee, ICMR; Member, Regional Technical Advisory Group (RTAG) on Adolescent Health Development (AHD) of the WHO; Member, Editorial Board, Asian Journal of Obst. & Gynae; Obstetrics & Gynaecology today; Samachar, MOHFW, Govt. of India; Scientific Communications in Obstetrics & Gynaecology; Chairperson at the 14th World Congress on In Vitro Fertilization and 3 World Congress on In Vitro Maturation organized by the International Society for IVF, 15-19 September 2007 at Montreal Canada; Chairperson of Indian delegation for the 24th Meeting of ISO/TC/157: Mechanical Contraceptives, 8-12 October 2007 at Jeju Island, South Korea. Appointed as a Consultant in the panel of consultants/experts to extend medical advice to the Vice President of India; Reviewer for

following National Journals (i) Indian Journal of Medical Research, since 1997; (ii) Indian Journal of Pediatrics, since 1998; (iii) National Medical Journal of India, since 1999; (iv) Journal of Obstetrics & Gynaecology of India; (v) Annals of National Academy of Medical Sciences, since 2005; (vi) Indian Journal of Community Medicine; Reviewer for following International Journals (i) International Journal of Obstetrics & Gynaecology of India; (ii) Reproductive Health, since 2001; (iii) Archives in Obstetrics & Gynaecology, since 2006; (iv) Reproductive Health Matters, since 2005; (v) British Biomedical Central Journal of Pregnancy & Childbirth, since 2007.

Dr. Alka Kriplani is Editor, Asian Journal Obs & Gynae Practice; Vice President, North Zone, IMAGES (Indian Society of Minimal Access and Gynaecological Endoscopic Surgery) since 2003; Member Governing Council ICOG, 2006-08; Member, Managing Committee, Indian Association of Gynaecological Endoscopists, 2007-09; Chairperson, Journal Committee, IAGE (Indian Association of Gynaecological Endoscopists), 2007; Chairperson, North Zone IAGE, 2007; Awarded Rashtriya Gaurav Award for meritorious services, outstanding performance and remarkable role by India International Friendship Society, 27 Nov 2007; MAAMS distinguished service Award 2007 (IMA Academy of Medical specialties) at Annual National Conference of IMAAMS-AMSCON 2007, New Delhi, 9 Dec 2007; Member editorial board of 4 journal.

Dr. Sunesh Kumar is Member, Project Advisory Committee on Screening for Common Cancers in three districts of Himachal Pradesh being conducted by ICMR

Dr. Deepika Deka is Chairman, Genetics & Fetal Medicine Committee (FOGSI) (2007-10) and Perinatal Medicine Committee Assoc. Obst. & Gynae of Delhi (AOGD); Executive Member of FOGSI Imaging Sciences Committee and International Exchange Committee; UNFPA Technical Advisory Committee, Member for Maternal Morbidity; Peer Reviewer for Journal of Obstetrics & Gynaecology of India; Editorial Board Member of Obs & Gynae Today; Member, Staff Council, 2006-07; Consultant incharge of Fetal Medicine OT and Obst. & Gynae OPD of department; UG & PG Examiner for Delhi Univ., Gauhati University, MAHE, Calcutta University –also (PhD), Bharti Vidhyapeeth - Pune, National Board of Examinations , AMU , Faridkot , Utkal Universities etc.

Dr. Neerja Bhatla is Founder-President, AOGIN-India (Asia Oceania research organisation on Genital Infections and Neoplasia, India Chapter); Member, Scientific Committee & Abstract Reviewer, 24th International Papillomavirus Conference, Beijing, November 2007; Member, Scientific Advisory Committee, PATH.

Dr. Neena Malhotra received Boyscast Fellowship of the Department of Science and Technology, GoI, tenable at Reproductive Research Center, Cleveland Clinic Foundation, Cleveland, Ohio, USA (April-Nov 2007) and was Visiting Fellow at the Yale Fertility Center, Department of Obstetrics and Gynaecology, Yale Medical School, New Haven, Connecticut, USA (October 2007)

Dr. Vatsla Dadhwal received Fellowship of Indian College of Obstetricians & Gynaecologists

Dr. Nutan Agarwal awarded WHO fellowship 2006-2007 in Australia; Member, National Academy of Medical Sciences, Oct 2007; Fellow, International Medical Sciences Academy, October 2007.

Dr. J.B.Sharma received AMRUT MODY Unichem Prize of ICMR on Maternal and Child Health for research contribution in the field of Management of Anemia During Pregnancy by Honourable Minister of Health and Family Welfare Govt. Of India on 6th July 2007; Co-ordinator for CORONIS

TRIAL on Caesarean section with National Perinatal Epidemiology Unit Oxford; Reviewer for following journals (i) International Journal of Gynecology and Obstetrics, (ii) Indian Journal of Medical Research, (iii) Indian Journal Of Medical Sciences, (iv) Archives in Obstetrics & Gynaecology; (v) BMC online, Journal of Obstetrics & Gynaecological Research; Editor, Obs and Gynae Today; Member, Editorial board of (i) International Journal of Gynaecology & Obstetrics, (ii) Indian Journal of Gynaecological Endoscopy, (iii) Asian Journal of Obstetrics and Gynaecology, (iv) Indian Medical Journal; Representative for AICC RCOG North Zone Representative Committee

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 Obst. & Gynae.

VISITING SCIENTISTS

1. Dr. Helena von Hertzen, WHO, Switzerland
2. Dr. Jeffrey M. Smith, Johns Hopkins University, USA
3. Dr. Shailaja Nair, London Women's Clinic, UK
4. Prof. S. Kennedy, Oxford University, UK

WHO fellows

- | | |
|---|-------------------|
| 1. Col. Atul Kumar Sood, Haryana | 21.2.07 – 20.8.07 |
| 2. Dr. Nandini, Sadar Hospital, Bihar | 19.2.07 – 18.8.07 |
| 3. Dr. Sumitra Bachani, CGHS Maternity Hospital, New Delhi | 19.2.07 – 18.8.07 |
| 4. Dr. Lumrilyne Myliem Umlong, Ganesh Das Hospital, Meghalaya | 12.2.07 – 11.8.07 |
| 5. Dr. Rajesh Panicker, INHS Sanjivini, Naval Base, Kochi, Kerala | 12.2.07 – 11.8.07 |
| 6. Dr. Rajesh Kumari, Safdarjung Hospital, New Delhi | 12.2.07 – 11.8.07 |
| 7. Dr. Sushma Rani, Safdarjung Hospital, New Delhi | 12.2.07 – 11.8.07 |
| 8. Dr. Bindu Bajaj, Safdarjung Hospital, New Delhi | 27.1.07 – 26.6.07 |
| 9. Dr. Rita Ranjan, DDU Hospital, New Delhi | 22.1.07 – 21.7.07 |
| 10. Dr. Sujoy Mitra, Air Force Hospital, West Bengal | 19.2.07 – 18.8.07 |
| 11. Dr. Srinivas Sangisapum, Kerala | 1.10.07 – 31.3.08 |
| 12. Dr. Renu Arora, Safdarjung Hospital, New Delhi | 9.9.07– 8.4.08 |

Short Term Training

- | | |
|---|----------------------|
| 1. Mr. Bader Mohammed Salim Al-Amri, Sultanate of Oman | 7.5.07 – 18.5.07 |
| 2. Mr. Khalfan Nasser Hamood Al-Abadli, Sultanate of Oman | 7.5.07 – 18.5.07 |
| 3. Mr. Abdullali Mohd. Khamis Al-Alawi, Sultanate of Oman | 7.5.07 – 18.5.07 |
| 4. Dr. Hanoon P. Pokharel, B.P. Korala, Nepal | 1.8.07 – 31.10.07 |
| 5. Mr. Ashwin Kumaria, India | 24.10.07 – 31.10.07 |
| 6. Stephanie Yau, Australia | – 6.11.07 – 13.11.07 |
| 7. Phoebe Alice Thwaites, Australia | – 6.11.07 – 13.11.07 |
| 8. Aaron Chidgey, Australia | – 6.11.07 – 13.11.07 |
| 9. Annabelle Kamrash, Australia | – 13.11.07 – 2.11.07 |
| 10. Dr. Kim SinII, DPR Korea | – 3.3. 08 – 31.5.08 |
| 11. Dr. Kangsun Chaul, DPR Korea | – 3.3. 08 – 31.5.08 |
| 12. Dr. Kim In Hyok, DPR Korea | – 3.3. 08 – 31.5.08 |

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

Short and long term training

The department hosts many short and long term observers in Spinal surgery, Sports Medicine, Hand surgery, Joint Replacement surgery and General orthopaedics. These observers are from several parts of India and abroad.

Continuing Medical Education

Dr. P.P. Kotwal

1. Chairman, Principles A.O. Course, New Delhi; Feb. 2008. This A.O. Course was organised under the aegis of A.O. Education, Switzerland
2. Chaired a Scientific Session at a Symposium on “Distal Radius Interactive fracture treatment” held at New Delhi, April 2007.
3. Chaired a Scientific Session on Trauma at the 15th Annual Conference of Delhi Orthopaedic Association in Jan. 2008

Dr. S. Rastogi

1. CME Programme of Orthopedic Club (UP chapter of IOA) on 15th June, 2007 at Jhansi. – Management of Hip fractures in geriatric age group.
2. Attended NEROSA Mid-Term CME at STNM Hospital, 6th October 2007 as speaker and moderator at Gangtok, Sikkim. Lectures on: i) Neglected Acromio-clavicular and Gleno-humeral Dislocations. (ii) Neglected Pilon Fractures of Tibia.
3. As a faculty for DNB-CME teaching programme in Orthopaedics at Central Institute of Orthopedics on 22.2.'08 at Safdarjung Hospital: Taught: Examination of Hip Joint.

Dr. H.L. Nag

1. “Arthroscopy and rehabilitation” – Guest Lecture by Dr. H.L. Nag at Indraprastha association of rehabilitation medicine: Inaugural Conference and CME, New Delhi, April 7, 2007.

2. “Arthroscopic assisted Mosaicplasty for Osteochondritis Dissecans of medial femoral condyle in an young college girl at Combined Round presented by Dr. H.L. Nag, AIIMS, New Delhi. Sept.18, 2007.
3. “Preparticipation musculoskeletal examination” Guest lecture by Dr. H.L. Nag at CME Team Physiotherapist Course at Sports Medcon 2007, New Delhi, Nov.15, 2007.
4. “Arthroscopic assisted ACL Reconstruction”, Guest lecture by Dr. H.L. Nag at CME of Kanpur Orthopaedic Society, Kanpur, Jan 27, 2008.
5. “Arthroscopic assisted Mosaicplasty”, Guest lecture by Dr. H.L. Nag at CME of Kanpur Orthopaedic Society, Kanpur, Jan 27, 2008.

Dr. Ravi Mittal

1. AO fracture classification at AO: Basic Course at New Delhi, Feb19-21, 2008
2. Infection after fracture surgery at AO: Basic Course at New Delhi, Feb19-21, 2008
3. ‘Clinical examination’ for DNB students at Safdarjung Hospital on February 23, 2008

NATIONAL AND INTERNATIONAL CONFERENCES

Dr. P.P. Kotwal

1. “Orthopaedic issues in Nerve Injury Management” at the Inaugural Conference and CME of the Indraprastha Association of Rehabilitation Medicine held at New Delhi, April 2007.
2. “Carpal Injuries” at the meeting of the Raipur Orthopaedic Association, June 2007.
3. “Fractures of the proximal humerus” at the A.O. Advanced Course, Organised by the A.O. International, Switzerland held at New Delhi in July 2007.
4. “Fractures of the distal radius” at the A.O. Advanced Course, Organised by the A.O. International, Switzerland held at New Delhi in July 2007.
5. “Outlook of Indian Antarctic medical research at Indian Maitri Station” at the Workshop on Antarctic Medical Research & Medicine – 2007 held on August 25, 2007 at National Institute of Polar Research, Tokyo, Japan.
6. “Fracture Dislocation of DIP joint”, DOAMIDCON-2007, held in Aug. 2007 at New Delhi.
7. “Dupuytren’s Contracture Release”, DOAMIDCON-2007, held at New Delhi in Aug. 2007.
8. “Flexor tendon injuries” at the P.G. Instructional Course held at the Maulana Azad Medical College, New Delhi” in Oct. 2007.
9. “The Old and the New Millennium – AO Foundation: Then and Now” during the A.O. Induction Programme organised at New Delhi in Nov., 2007.
10. “Wrist Injuries” at the P.G. Course organized during the 52nd Annual Conference of the Indian Orthopaedic Association held at Kolkata, Dec. 2007.
11. “Radial Club Hand: A long term experience” at the Annual Meeting of the Nepal Orthopaedic Association, held at Dharan, Nepal in Dec. 2007.
12. “Acute Flexor Tendon Injuries” at the Pre - Conference Workshop on Hand Injuries organised during the 52nd Annual Conference of the Indian Orthopaedic Association held at Kolkata, Dec. 2007.
13. “Acute Fracture Scaphoid” at the Pre-Conference Workshop on Hand Injuries organised during the 52nd Annual Conference of the Indian Orthopaedic Association held at Kolkata, Dec. 2007.
14. Performed demonstration surgery on cadavers during the Pre-Conference Workshop at the 52nd Annual Conference of the Indian Orthopaedic Association held at Kolkata, Dec. 2007

15. "Management options in Arthritis" at a Scientific Session held at New Delhi in Jan., 2008.
16. Past President's Oration on "Thumb Reconstruction" at the 15th Annual Conference of Delhi Orthopaedic Association held in January 2008.
17. "Fractures of the proximal humerus" at the A.O. Principles Course, Organised under the aegis of A.O. Education., Switzerland at New Delhi in Feb. 2008.
19. "Fractures of distal Radius" at the A.O. Principles Course, Organised under the aegis of A.O. Education, Switzerland at New Delhi in Feb. 2008.
20. Keynote address "Evolution of A.O. Principles and A.O. Philosophy of fracture treatment" at the A.O. Principles Course, Organised under the aegis of A.O. Education, Switzerland at New Delhi in Feb. 2008.
21. "The principles of absolute and relative stability of fixation"" at the A.O. Course on Principles in Operative Fracture Management for Operating Room Personnel, Organised under the aegis of A.O. Education, Switzerland at New Delhi in Feb. 2008.
22. "Stiff elbow and Arthrolysis", Indocon 08, Annual Conference, Indore Orthopaedic Association, Feb. 2008.
23. "Fractures of the Proximal Humerus", Indocon 08, Annual Conference, Indore Orthopaedic Association, Feb. 2008.
24. "Fractures of the Scaphoid", Indocon 08, Annual Conference, Indore Orthopaedic Association, Feb. 2008.
25. "Fractures of the distal radius", Indocon 08, Annual Conference, Indore Orthopaedic Association, Feb. 2008.
26. "Wrip drop-What to do and when", Indocon 08, Annual Conference, Indore Orthopaedic Association, Feb. 2008.
27. "Congenital anomalies of the Hand-Duplicated Thumb" , Indocon 08, Annual Conference, Indore Orthopaedic Association, Feb. 2008.
28. "Recent trends in the treatment of fractures of lower end of Radial" at the Annual Meeting of the Indian Railways Orthopaedic Association, held at New Delhi in March 2008.

Dr. S. Rastogi

1. Chairman for the Instructional Course lectures (IOAICL 2007) from 6-8th April 2007 at Mahabaleshwar, Maharashtra- : Lecture on: Implant Failure.
2. Speaker in the international symposium on Nimesulide of University of Novi Sad held in Belgrade from 14-15th May 2007- Lecture on: Clinical studies on Nimesulide in India
3. 9th Annual Meeting of Indian Orthopaedics Society (UK) on 30th June 2007 – Lecture on: Current status of Limb Salvage in Malignant Bone Tumours,
4. 15th Triennial Congress of (APOA-2007) from 9-13th Sept.2007 at Seoul, Korea- Delivered lecture on: i) Treatment options in Giant Cell Tumors of Bone. ii) Free Papers –a) Functional outcome following limb salvage surgery for Malignant Tumors of Fibula. b) Immunomodulation in Musculoskeletal Tuberculosis. Iii) Chaired two scientific sessions on: Bone tumors and infections.
5. Flap course for trauma surgeon's - Principles of soft tissue reconstruction learning in cadavers as faculty on 19-21st October 2007, Sri Sakthi Hospital, Tirunelveli, India. – Delivered lectures on: i) Management of open fractures of upper limb. ii) Management of open fracture of lower limb.

6. 7th Annual Conference Central Zone of Indian Orthopaedic Association (CEZCON 2007) at B.R. Ambedkar Memorial Hospital, Raipur from 26-28th October 2007. – delivered guest lecture on: Musculoskeletal Malignancies in Elderly People.
7. Postgraduate Instructional Course Lectures – 2007 from 2-4th Nov.2007 at MLB Medical College, Jhansi. Lectures on: i) Fractures around hip. ii) Examination of the Hip.
8. 52nd Annual Conference of Indian Ortho. Association 3rd-8th Dec.2007 at Kolkata- Conference lecture on- i) Malignant Bone Tumor in Elderly people. Ii) Quadratus femoris based graft on AVN hip – in Pre conference Workshop of IOACON 2007.
9. Faculty of Annual conf. of DOACON 2007 on 5-6th January 2008 at National Science Centre, Pragati Maidan, New Delhi. Lecture on: Management of Extra spinal metastasis on 5th Jan.2008.
10. Attended conference on 19-21st Jan, 2008 at Mussouri, Uttaranchal – Lectures on: i) Stem cells in orthopaedics. Ii) Management of fractures of Distal Femur.
11. Attended the 32 Annual Conference of the UP Orthocon Association, 1-3 Feb.2008 at AMU, Aligarh. Lecture on: Recent advances in management of malignant bone tumors - current status.
12. Attended the Gridlestone Orthopedic Society meeting – 2008 from 17-22nd Feb.2008 at Chennai. Lectures on: i) Malignant Bone Tumor – Current scenario in India ii) Total Hip replacement in Active Tuberculosis.
13. Faculty in Workshop on the principles of Practice of orth. research held on 24.3.'08 at UCMS. New Delhi.
14. As Indian Investigator Meeting in CV185-047 meeting held on 23rd July 2007 at Mumbai.
15. Meeting of Ortho-Cad Network Centre for Endo-Prosthetic Skeletal Reconstruction systems - 3rd January 2008 at Bangalore.

Dr. A. Jayaswal

1. “High Grade Spondylolisthesis”, Spine Update 2007, Sanchaiti Hospital, Pune, 7-8 April 2007.
2. “Anterior Scoliosis Correction & Instrumentation”, Spine Update 2007, Sanchaiti Hospital, Pune, 7-8 April 2007.
3. “Principles of Kyphosis Correction”, Spine Update 2007, Sanchaiti Hospital, Pune, 7-8 April 2007.
4. “Vertebroplasty & Complication”, Hands on Cadaveri Workshop+Certification Course on Kyphoplasty” at AIIMS New Delhi on 5-6 May 2007
5. “Evolution of Spinal Fixation Systems”, at Instructional Course on Spinal Trauma & Recent Advances in Spine Surgery, Kathmandu, 20-22 May 2007
6. “Minimally Invasive Spine Surgery– An overview”, at Instructional Course on Spinal Trauma & Recent Advances in Spine Surgery, Kathmandu, 20-22 May 2007
7. “Principles of Correction & Instrumentation of Scoliosis”, Instructional Course on Spinal Trauma & Recent Advances in Spine Surgery, Kathmandu, 20-22 May 2007
8. “Principles of Management of Scoliosis” at B.P. Koilrala Institute of Health Sciences Dharam, Nepal on 22nd May 2007
9. “Scoliosis”, P.G. Orthopaedic Update-Non-Traumatic Spinal Lesions, Patna, 23-24 June 2007
10. “Spinal Decompression”, P.G. Orthopaedic Update-Non-Traumatic Spinal Lesions, Patna, 23-24 June 2007.
11. “Failed Back Syndrome”, P.G. Orthopaedic Update-Non-Traumatic Spinal Lesions, Patna, 23-24 June 2007.

12. "Newer Horizons in Spine Surgery" P.G. Orthopaedic Update-Non-Traumatic Spinal Lesions, Patna, 23-24 June 2007
13. "Endoscopic Discectomy – Video Presentation" P.G. Orthopaedic Update-Non-Traumatic Spinal Lesions, Patna, 23-24 June 2007
14. "Outcome Study of MISS Vs Open Surgery in low grade Spondylolisthesis" Paper presentation at "International Meeting on Advanced Spinal Techniques"(IMAST); Bahamas 12-14 July 2007
15. "Thoracoscopic Assisted Anterior Surgery for Tuberculous Spondylitis" at World Spine IV, Istanbul, 29 July – 1 August 2007
16. "Minimally Invasive Surgery for Lumbar Disc" Faculty Lecture at Pre conference workshops on "Minimally Invasive surgery & Motion Preservation in Spine" at Combined spine Society of Europe (SSE) & (ASSI) Associate of Spine Surgeons of India (ASSI) Instructional Course on Spine ICS 2007 Goa on 9th August 2007
17. "Minimally Invasive Lumbar Instrumentation & Fusion" Faculty Lecture at Pre conference workshop on "Advances in Spine surgery & Motion Preservation in Spine" at Goa on 9th August 2007
18. "A new laboratory test for diagnosis of Ankylosing Spondylitis with Estimation of serum Sialic Acid & Glycosaminoglycons" at "42nd Annual Meeting of Scoliosis Research Society, SRS 2007, 5-8 September 2007 at Edinburgh, U.K.
19. "Vertebroplasty Vs Kyphoplasty" Faculty Lecture at Cadaveric Workshop & Course on Kyphoplasty at Chennai 9 September 2007
20. "Anterior Scoliosis Correction & Instrumentation" Lecture at "Conference on Spinal Deformities" ISIC New Delhi 5-7 October 2007
21. "Scoliosis – Posterior Correction & Instrumentation" Video demonstration & Faculty Lecture at "Conference on Spinal Deformities" ISIC New Delhi 5-7 October 2007
22. "Minimally Access Posterior Instrumentation & Interbody fusion for low grade, Spondylolisthesis" Faculty Lecture at ISIC 5-7 October 2007, New Delhi.
23. "How to manage – Rigid Severe Deformities" Faculty Lecture at "Joint Symposium of AO Spine Asia Pacific (AOSAP) & AO Spine North America (AOSNA)" Hong Kong 12-13 Oct. 2007
24. "Posterior Hardware Complications in T-L Spine" Faculty Lecture at "Complication in Spine Surgery organized by Musculoskeletal Education & Research Centre (MERC), Las Vegas USA 8-10 November 2007
25. "TB Spine" Faculty Lecture by at "Complication in Spine Surgery organized by Musculoskeletal Education & Research Centre (MERC), Las Vegas USA 8-10 November 2007
26. "MAST-Introductory -Overview" Invited Lecture at "Advanced Spine Care- MISS" 30th November 2007 at New Delhi
27. Invited Lecture "Mini Open Pedicle Screw fixation & Interbody Fusion" Lecture at "Advanced Spine Care- MISS" 30th November 2007 at New Delhi
28. "Rigid Neglected Scoliosis" Faculty Lecture at "Meeting of ASEAN Orthopaedics Association & 27th Meeting Vietnam Orthopaedics Association (ASEAN + VOA meet 2007)" Ho chi Minh City, Vietnam on 5-8 December 2007
29. "Minimally Access Surgery in Management of Tuberculous Spondylitis" Faculty Lecture at "Meeting of ASEAN Orthopaedics Association & 27th Meeting Vietnam Orthopaedics Association (ASEAN + VOA Meet 2007)" Hochi Minh City, Vietnam on 5-8 December 2007.

30. "Management of Osteoporotic Vertebral fractures" Faculty Lecture at the XV Annual Medical Conference of Delhi Orthopaedic Association, N. Delhi 5-6 Jan, 2008.
31. "MIS Fusion for Lumbar Spine"-Video demonstration by World Society for Endoscopic Navigated & Minimal Invasive Spine Surgery (WENMISS) 2007/2008 on 12-14 January 2008.
32. "Vertebroplasty & Baloon Kyphoplasty in VCF" Faculty Lecture at World Society for Endoscopic Navigated & Minimal Invasive Spine Surgery (WENMISS) 2007/2008) on London 12-14 January 2008.
33. "Tuberculous Spondylitis – the role of Minimally Access Surgery" - Faculty Lecture at World Society for Endoscopic Navigated & Minimal Invasive Spine Surgery (WENMISS) 2007/2008 on 12-14 January 2008.
34. "Outcome Study of Minimally Access Surgery Vs Open Surgery in low grade Spondylolisthesis"- Faculty Lecture at World Society for Endoscopic Navigated & Minimal Invasive Spine Surgery (WENMISS) 2007/2008 on 12-14 January 2008.
35. "Minimally Access Surgery for low grad Spondylolisthesis" invited Faculty lecture at "Combined Instructional Course of International Society for Study of Lumbar spine (ISSLS)& Association of Spine Surgeons of India (ASSI) & XXI Annual Conference of Association of Spine Surgeons of India (ASSICON 2008) 17-20 January 2008 at Coimbatore Hospital
36. "High grade spondylolisthesis"–Reduction & Instrumental Fusion 20 January 2008 "Combined Instructional Course of International Society for Study of Lumbar spine (ISSLS)& Association of Spine Surgeons of India (ASSI) & XXI Annual Conference of Association of Spine Surgeons of India (ASSICON 2008) 17-20 January 2008 at Coimbatore.
37. "Percutaneous Posterior Lumbar Stabilisations & MIS Inter body Fusion" Video Presentation at "Combined Instructional Course of International Society for Study of Lumbar spine (ISSLS)& Association of Spine Surgeons of India (ASSI) & XXI Annual Conference of Association of Spine Surgeons of India (ASSICON 2008) 17-20 January 2008 at Coimbatore.
38. "MAST Interbody fusion" –Invited Lecture at International Group for Advancement in Spinal Science (IGASS) "Symposium on Spinal deformity & Minimally invasive Spine" New Delhi 21 Feb 2008
39. "Kyphoplasty" Video Demonstration at International Group for Advancement in Spinal Science (IGASS) "Symposium on Spinal deformity & Minimally invasive Spine" New Delhi 21 Feb 2008
40. "Minimally Invasive Options for surgical Management of Potts Spine" Guest Faculty Lecture – "International Spine & Spinal Injuries Conference Issicon 2008 Taj Palace Hotel, New Delhi 22-24 Feb 2008
41. "Spondylolisthesis" "Spine Update" at National Hospital of Srilanka, Colombo- 26-27 February 2008.
42. "Failed Back Syndrome" "Spine Update" at National Hospital of Srilanka, Colombo- 26-27 February 2008
43. "MAST- an overview" "Spine Update" at National Hospital of Srilanka Colombo- 26-27 February 2008.
44. "Spinal Fixation in TB Spine" "Spine Update" at National Hospital of Srilanka Colombo- 26-27 February 2008.
45. "Under standing Scoliosis" "Spine Update" at National Hospital of Srilanka Colombo- 26-27 February 2008.

46. “Kyphoplasty” Faculty Lecture at the “Minimal Conference of Indian Railways Orthopaedic Association”, Delhi 15-16, March, 2008.

Dr. R. Malhotra

- 1 “Surgical Management of Osteoporosis” in “Symposium on Osteoporosis” held under the auspices of Indian Society of Bone and Mineral Research (ISBMR) in Indore on May 13, 2007.
- 2 “Bone Graft in Revision THR” in MIDCON 2007 – Midterm Conference of Delhi Orthopedic Association held at India Habitat Centre, New Delhi, on Aug 5, 2007.
- 3 “Redefining Pain Management-Lornoxicam” lecture delivered at India Habitat Centre on 5.08.2007.
- 4 “Uncemented THR” in Session III-How I do it: Video Vignettes, Conference: Dissection Hall to Operation Theater at Maulana Azad Medical College & Sant Parmanand Hospital on September 8, 2007.
- 5 “Calcaneal Fractures” held at Institution for Physically Handicapped, East Delhi Orthopaedic Club, New Delhi on Sep. 22, 2007.
- 6 “Role of orthopedic surgeon in management of osteoporosis – Are we missing the opportunity?” at Hotel Taj, New Delhi, on Sep. 30, 2007.
- 7 “Principles of Locked internal fixators and the development of the LCP” in Seminar & Hands-on-Workshop on Locking Compression Plating (LCP) organized by Orthopaedic Surgeons Association of Kashmir on 26th October, 2007 at Hotel Grand Mumtaz, Srinagar, Kashmir.
- 8 “Technique of LCP Plating - Tips and Tricks & Adverse events using LCP” in Seminar & Hands-on-Workshop on Locking Compression Plating (LCP) organized by Orthopaedic Surgeons Association of Kashmir on 26th October, 2007 at Hotel Grand Mumtaz, Srinagar, Kashmir.
- 9 “Early Experiences with LCP anatomically pre-contoured plates” in Seminar & Hands-on-Workshop on Locking Compression Plating (LCP) organized by Orthopaedic Surgeons Association of Kashmir on 26th October, 2007 at Hotel Grand Mumtaz, Srinagar, Kashmir.
- 10 “Locking Distal Radius Plating System” in Seminar & Hands-on-Workshop on Locking Compression Plating (LCP) organized by Orthopaedic Surgeons Association of Kashmir on 26th October, 2007 at Hotel Grand Mumtaz, Srinagar, Kashmir.
- 11 “Principles of Locked internal fixators and the development of the LCP” in Seminar & Hands-on-Workshop on Locking Compression Plating (LCP) organized by Orthopaedic Surgeons Association of Kashmir on 28th October, 2007 at Jammu.
- 12 “Technique of LCP Plating - Tips and Tricks & Adverse events using LCP” in Seminar & Hands-on-Workshop on Locking Compression Plating (LCP) organized by Orthopaedic Surgeons Association of Kashmir on 28th October, 2007 at Jammu.
- 13 “Early Experiences with LCP anatomically pre-contoured plates” in Seminar & Hands-on-Workshop on Locking Compression Plating (LCP) organizing by Orthopaedic Surgeons Association of Kashmir on 28th October, 2007 at Jammu.
- 14 “Management of osteoporosis - Role of bisphosphonates” in Seminar on Osteoporosis on 16.11.2007 at Amritsar
- 15 “Distal Femur Fixation- Techniques & Advances” in IOACON 2007 “Workshop on Advances in Plate Osteosynthesis” held at Science City - Kolkata on December 3, 2007.
- 16 “MIPPO Vs ORIF” in DEBATE Dr. Lee vs Dr. Malhotra, IOACON 2007 held at Science City - Kolkata on December 3, 2007.

- 17 “Classification of long bone fractures with prognostic values” in Advances in Intramedullary Nailing in IOACON 2007 “Workshop on Advances in Intramedullary Nailing” held at Science City - Kolkata on December 4, 2007.
- 18 “Adult Hip Problems” in PG Course, IOACON 2007 held at NRS Medical College - Kolkata on December 4, 2007.
- 19 “TRAP approach for intercondylar fractures of humerus” in INVITED CONFERENCE LECTURE in IOACON 2007 held at Science City - Kolkata on December 6, 2007.
- 20 “Templating” in Delhi Arthroplasty Course (Basic) held at Ethicon Institute of Surgical Education (Johnsons & Johnsons) New Delhi on 17.02.2008.
- 21 “The Valgus Knee – Tips for correction” in Delhi Arthroplasty Course (Basic) at Ethicon Institute of Surgical Education (Johnsons & Johnsons) New Delhi on 17.02.2008.
- 22 “Revision THR” in 3rd Annual Conference Indian Railway Orthopaedic Association (IROA) at Rail Museum, Chanakyapuri, New Delhi on 15-16 March, 2008.
- 23 Faculty- “AO Advance Course” held at Hotel Grand, New Delhi, on July 29-31, 2007.
- 24 MIDCON 2007 – Midterm Conference of Delhi Orthopedic Association held at India Habitat Centre, New Delhi, on Aug 5, 2007.
- 25 Panelist in “Panel Discussion on Osteoporosis” organized by ISBMR on the occasion of Release of Book on Osteoporosis by Hon’ble Minister for Mrs. Renuka Chowdhury at Hotel Shangri La, New Delhi, on 21.04.2007.
- 26 Penalist in “Fixed Drug Combinations of COX inhibitors, analgesics, muscle relaxants and proteolytic enzymes for inflammation and pain” In, Brainstorming Workshop on Rationality Assessment and Guidelines for Fixed Dose Combinations, sponsored by World Health Organization held at AIIMS, New Delhi, on June 26, 2007.
- 27 Moderator for session on “Hip & Knee Arthroplasty” Case Discussion during the DOA at India Habitat Centre, New Delhi on 05.08.2007.
- 28 Penalist for “Discussion with the Bosses!” In “Dissection Hall to Operation Theater” Conference at Maulana Azad Medical College and Sant Parmanand Hospital on September 8, 2007.
- 29 Chairman for the 3rd National Conference ISBMR (Indian Society of Bone Mineral Research) & SASBMR (South Asian Society for Bone & Mineral Research) “Session V: Management of Osteoporosis” on Sep. 29-30, 2007 AIIMS, New Delhi.
- 30 “Seminar& Hands on Workshop on Locking Compression Plating (LCP)” organized by Orthopaedic Surgeons Association of Kashmir on October 26-28, 2008 at Srinagar & Jammu.
- 31 Faculty in IOACON 2007- Chairperson for the “Session IV: Difficult Scenarios” in IOACON 2007 held at Science City - Kolkata on December 3, 2007.
- 32 Faculty in the 15th Annual Conference of Delhi Orthopaedic Association (DOACON) held at National Science Centre, Pragati Maidan, New Delhi on January 05-06, 2008. Panelist for “Fire the Panel an Interactive Session” Case Discussion during 15th Annual Conference of Delhi Orthopaedic Association (DOACON), Pragati Maidan, New Delhi on 05.01.2008.
- 33 Moderator for session III “Arthroplasty” Case Discussion during the 15th Annual Conference of Delhi Orthopaedic Association (DOACON) held at National Science Centre, Pragati Maidan, New Delhi on 06.01.2008.
- 34 Faculty in DNB-CME held at Safdarjung Hospital, New Delhi on February 23, 2008.
- 35 Faculty in the International Spine and Spinal Injuries Conference (ISSICON) For Panel discussion on “Role of Stem Cells in Spinal Cord Injury.” panelists- Dr. Ekran Kaptanoglu, Prof. Alfredo

Gorio, Dr. Raj Bhadur, Dr. H.S. Chhabra, Dr. R. K. Singh, Dr. Ravi Kumar, Dr. Rajesh Malhotra held at Hotel Taj Palace, New Delhi on February 24, 2008.

36. Faculty in Symposium on Thromboprophylaxis – A changing scenario in India- Addressing barriers to VTE Prophylaxis, panelists- Dr. Rajiv Parakh, Prof. Ajay Kakkar, Dr. S. K. Sharma, Dr. Rajesh Malhotra, held at Hotel Le Meridien, New Delhi on February 28, 2008.

Dr. H.L. Nag

1. “Ankle arthroscopy – Set up, positioning, instrumentation, portals, indications and surgical techniques” , 2nd Annual Symposium on Current Concepts in Arthroscopic Surgery of lower limb, New Delhi April 21, 2007.
2. “Indications and Surgical Techniques of Ankle Arthroscopy”, 2nd Annual Symposium on Current Concepts in Arthroscopic Surgery of lower limb, New Delhi, April 22, 2007.
3. “Arthroscopic Management of Arthritic Knee”, 2nd Annual Symposium on Current Concepts in Arthroscopic Surgery of lower limb, New Delhi, April 22, 2007.
4. “Complications and problems of knee arthroscopy”, IAS Cadeveric Course, New Delhi, June 16, 2007.
5. “How to assess clinically the injured knee joint?”, IAS Cadaveric Workshop at New Delhi, Sept. 22, 2007.
6. “Conservative management of partial thickness Rotator Cuff Tear”, IASCON 2007 at Manipal, Oct 13, 2007.
7. “ACL fixation options on Tibia”, 4th Sports Medicine & Arthroscopy Workshop, New Delhi, 2 March 2008.
8. “Indications and surgical techniques of Ankle Arthroscopy” , New Delhi, March 3, 2008.
9. “Arthroscopic management of Osteoarthritis Knee”, New Delhi, March 3, 2008.

Dr. C.S. Yadav

1. Large diameter head in THR. NZIOACON April 2007, CMC Ludhiana
2. Management of poly-trauma. A Indian perspective, Inaugural conference & CME Indraprastha Assoc of Rehabilitation Medicine 7-8 April 07 Delhi.
3. Large diameter head in THR.(What we have achieved?) Workshop by Bihar Orthopaedics Association, Patna, 26TH Aug. 2007
4. Over view if Arthritis & Joint Replacement Arthroplasty, Gymkhana Club, New Delhi 31-08-07
5. Management of infection in THR (Main Conference) IOACON, Calcutta, 2007
6. Methods of gaining extra flexion in TKR, Indian Arthroplasty Association, Subspecialty Meeting, IOACON, Calcutta, 2007
7. Surgical techniques in cemented THR, Pre-conference workshop, IOACON, Calcutta, 2007
8. Surface Arthroplasty of Hip or Headless Chicken, BOACON, Bhagalpur,, Feb 2007
9. How to improve ROM in TKA, UPCON, Aligarh, Feb 2007
10. Orthopaedics surgery in Hemophilia, AIIMS Hemophilia Conference, AIIMS, Feb 2007

Dr. Ravi Mittal

1. Graft harvest at IOACON 2007 at Kolkatta December 3, 2007
2. MRI of knee at DOACON 2007 at Delhi Jan 5-6, 2008
3. ACL radiology and its correlation with arthroscopy at Gangaram Hospital, New Delhi on March 2, 2008

Dr. Shah Alam Khan

1. Metastatic Bone Disease, Surgery Update 2008, Department of Surgery, Jawaharlal Nehru Medical College, Aligarh, March 8-10, 2008.
2. Faculty for the CME in Orthopaedics organised by the National Board of Examinations of India, Safdarjung Hospital, New Delhi on February 23-24, 2008.
3. Endoprosthetic Replacement on Giant Cell Tumors, Annual Conference of the UP Chapter of Indian Orthopaedics Association, held in Aligarh on February 1-3, 2008.
4. Management of Pain in Cerebral Palsy, 2nd Annual Conference of the Indian Academy of Cerebral Palsy, held in Bangalore on December 1-2, 2007.
5. Examination of Bone Tumors, UP Postgraduate Instructional Course Lectures, Jhansi, 2-4 November 2007.
6. Bone Sarcomas – The Indian Scenario, 2nd Symposium on Management of Cancers in Resource Limited Countries, Srinagar, Jammu & Kashmir on September 10-12, 2007.
7. Endoprosthesis in Giant Cell Tumors, Master Class on GCT in Jaipur on May 6, 2007.
8. 72nd Annual Conference of the American Academy of Orthopaedic Surgeons Chicago, February 13-17, 2007, Presented a paper entitled *Ankle function following Fibular Tumors – A Clinical Study*

Dr. Vijay Kumar

1. Preoperative Templating in Total Knee Replacement: presented at “Delhi Arthroplasty Course” 17th February 2008.

RESEARCH

Funded Projects

Ongoing

- 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. Dr A. Jayaswal. Funded by ICMR, 3 years (23/12/2004 to 22/12/2007).
- 2 A new hip hemiarthroplasty option based on femoral stem design suitable for the morphology of proximal femur of elderly Indian population. Dr. R. Malhotra. Funded by CSIR, 3 years (June 2005-June 2008). Funds:Rs. 23.33 lakhs.
- 3 Some medico-technical – i. Determining Mechanical properties of ligaments and ii. Development of stereo-cameras for operative / anatomic video-sequences”. Dr. R. Malhotra. Funded by ICMR, 3 years (October 2006–October 2009). Funds:Rs. 04.50 Lakhs.
- 4 Clinical and electrophysiological recovery following endoscopic or open carpal tunnel release for carpal tunnel syndrome. Dr. R. Malhotra. Funded by ICMR. 3.5 years. Funds: Rs. 21 lakhs
- 5 A new hip hemiarthroplasty option based on femoral stem design suitable for the morphology of proximal femur of elderly Indian population. Dr. R. Malhotra. Funded by CSIR.
- 6 Proteomics of Human Body Fluids: Structural Characterization of Proteins and Target Identification for Diagnosis and Drug Discovery. Dr H. L. Nag. Funded by Department of Biotechnology (DBT). 3 years (June 2005 to May 2008). Funds: Rs.34.5 lakhs.
- 7 Development of dual growth factor delivery systems for tissue engineering application. Dr H. L. Nag. Funded by Department of Biotechnology (DBT). 3 years (Nov. 2006–Nov. 2009). Funds: Rs.39.25 lakhs.

Departmental Projects

Completed

1. Arthroscopic and MRI correlation of meniscal lesions in ACL deficient knee
2. MRI evaluation of gleno humeral instability
3. Arthroscopic and MRI correlation of meniscal lesions in ACL deficient knee
4. MRI evaluation of gleno humeral instability

Ongoing

1. Arthroscopic assessment of the extent of Bankart lesion in acute traumatic shoulder dislocation and radiological correlation
2. Functional outcome after arthroscopic assisted miniopen rotator cuff repair
3. MRI evaluation of gleno humeral instability
4. Comparison of Nitroglycerin and Diltiazem as adjuncts to Lignocaine in intravenous regional Anaesthesia
5. Clinical prognostic factors in Osteosarcoma
6. Thesis CHIEF GUIDE - Correlation between Radiological assessment & functional outcome in Total knee arthroplasty
7. Thesis co guide - Effect of intra articular pressure, post comminution & Gordon's alignment index on the management of intracapsular fracture neck femur
8. Arthroscopic assessment of the extent of Bankart lesion in acute traumatic shoulder dislocation and radiological correlation
9. Functional outcome after arthroscopic assisted miniopen rotator cuff repair
10. MRI evaluation of gleno humeral instability
11. Project entitled, "Biodegradable Polymer Composite Bone Scaffolds by Microcellular Injection Mould Technique" accepted and funded by the Department of Science & Technology, Government of India. Project is in collaboration with the IIT, Delhi. Cost Rs. 25 Lacks/ year, DBT, 2006 onwards.
12. Co-Guide for MS Orthopaedic thesis entitled, Functional Outcome following Mini Rotator Cuff repair (Project underway)
13. Co-Guide for MS Orthopaedic thesis entitled, Role of PET-CT in Osteosarcoma for initial staging and chemotherapy response evaluation: Comparison with conventional radiological modalities (MRI Scan, CT Scan & Bone Scan) and Histopathological tumor necrosis. Project underway)
14. Co-Guide for MS Orthopaedic thesis entitled, Immunohistochemical and image analytic characterisation of stromal components in primary and recurrent Giant Cell Tumor of bone. (Project underway)
15. A new hip hemi-arthroplasty option based on femoral stem design suitable for the morphology of proximal femur of elderly Indian population – CSIR Project.
16. Determining mechanical properties of ligaments and development of stereo-cameras for operative / anatomic video sequences – ICMR Project.

Collaborative Projects

1. Prevalence of vitamin D deficiency in atraumatic hip fracture.
2. Efficacy & safety studies of medicinal plant used in Unani system in inflammatory arthritis

PUBLICATIONS

Dr. P.P. Kotwal

1. Bandopadhyaya G., Shukla J., Kumar R., Kotwal P.P): Tc 99m Hydroxypropyl - B Cyclodextrin for Infection imaging in patients with prosthesis. The Journal of Nuclear Medicine (Supplement) (Abstract) 2007: 48(2):321.
2. Kumar J., Bandhu S., Sharma V., Kotwal P.P., Kumar A.: Idiopathic bilateral acetabular labral ossification. Diagnostic & Interventional Radiology. Sept, 2007:13(3):149-51

Chapters in Books

1. Kotwal P.P., Ashok Kumar.: "Examination of the hand" in the Textbook of Orthopaedics and Trauma. Jaypee Brothers Delhi, Editor: G.S.Kulkarni, 2007
2. Kotwal P.P., Ashok Kumar.: "Functional Anatomy of hand" in The Textbook of Orthopaedics and Trauma. Jaypee Brothers Delhi, Editor: G.S.Kulkarni, 2007
3. Kotwal P.P., Dua Aman.: "Carpal Instability" in the Textbook of Orthopaedics and Trauma. Jaypee Brothers Delhi, Editor: G.S.Kulkarni. 2007.
4. Kotwal P.P., Garg Bhavuk.: "Functional Anatomy of the Wrist" in the Textbook of Orthopaedics and Trauma. Jaypee Brothers Delhi, Editor: G.S.Kulkarni, 2007
5. Kotwal P.P., Upendra B.N.: "Biomechanics of the hand" in The Textbook of Orthopaedics and Trauma. Jaypee Brothers Delhi, Editor: G.S.Kulkarni, 2007
6. Kotwal P.P., Varshney M.K.: "Fracture of the Scaphoid" in the Textbook of Orthopaedics and Trauma. Jaypee Brothers Delhi, Editor: G.S.Kulkarni, 2007
7. Kotwal P.P., Shamsheery, P.K.: "Orthopaedic Complications of Osteoporosis, in "Nutritional and Metabolic Bone and Stone Diseases – An Asian Perspective", Eds: Teotia S.P.S. and Teotia M., CBS Publishers & Distributors, New Delhi, 2007; pp: 461-467.

Dr. S. Rastogi

1. Shah Alam Khan, Ashok Kumar, M. K. Varshney & S. Rastogi.: Chondromyxoid fibroma of clavicle in a child: Euro J. Ortho Surg. Traumatol (2008)18:135-137
2. Sah P.L. Sharma R, Kandpal.H, Seith A, Rastogi S., Bandhu. S., Jagannathan NR – "In Vivo proton Spectroscopy of giant cell tumor of the bone.Am.J.Roentgenol.2008 Feb;190 (2):W133-9.
3. Rehabilitation following fracture of Hip in the Elderly – Shishir Rastogi & Vivek Trikha – Book on the generation, Repair & Rehabilitation Redefined Published by NIMHANS, Bangalore India, Page 89-93, 2006.

Dr. A. Jayaswal

1. Upendra B, Mahesh B, Sharma L, Khandwal P, Choudhury B, Ahmed A, Jayaswal A correlation of outcome measures with epidemiological factors in thorocolumber spinal trauma. Indian Journal of Orthopaedics Vol 41 Dec. 2007, 4 : 290-294
2. Jayawal A, Upendra B, Ahmed A, Choudhury B, Kumar, A. Video- Assisted Thoracoscopic Anterior Surgery for Tuberculous Spondylitis. Clinical Orthopaedics & Related Research (CORR) Number 460, July 2007, 100-107
3. Bijjawara Mahesh, Arvind Jayaswal, Surya Bhan. Fracture Dislocation of the Spine after total hip arthroplasty in a patient with ankylosing spondylitis with early pseudarthrosis. The Spine Journal (on line) 2007

4. Lalit Sharma, Vijay Kumar, Rajesh Malhotra, Arvind Jayaswal. 'Osteoporotic Fractures: Vertebral Compression Fractures - Management and Controversies- Orthopaedics Today Vol. IX No. 2: April-June 2007
5. Upendra B, Meena D, Chowdhury B, Jayawal A, Ahmed A. Outcome based classification for assessment of thoracic pedicular screw placement. Spine vol.33, 4 Feb 2008 – 384-390

Dr. R. Malhotra

- 1 R Malhotra, Aman Dua, E Krishna Kiran, S Bhan. Femoral Revision using long hydroxyapatite-coated interlocking stem. Arch Orthop Truma Surg 2007; April 25th. e publication ahead of print.
- 2 Pankaj A, Malhotra R, Logani V, Bhan S. Stress fractures Following Total Knee Arthroplasty: A Case Report And Review of Literature. Arch Orthop Trauma Surg. 2007; May 15; e publication ahead of print: 17503063. Volume 127, Number 7, September 2007, pp. 549-552(4).
- 3 Amite Pankaj, Rajesh Malhotra, Surya Bhan. Femoral component malrotation and arthrofibrosis after total knee arthroplasty: cause and effect relationship? Int Orthop. 2007 Apr 11; : 17429622
- 4 Rajesh Malhotra. Surgical management of the severely displaced supracondylar fracture of the humerus in children [Injury 2002;33(6):517-22]. Injury 2007 Volume 38, Issue 5, Pages 640-640 (e version Mar 15; : 17368459)
- 5 Lalit Sharma, Vijay Kumar, Rajesh Malhotra. Letter to the editor. J Orthop Trauma online 20(10):745, November/December 2006.
- 6 Garg B, Malhotra Rajesh, Jayaswal Arvind, Kotwal PP. Is intraoperative lateral femoral wall fracture preventable? Letter to the editor. J Bone Joint Surg (Am) online. (26 March, 2007).
- 7 Bhavuk Garg, Vijay Sharma, Shah Alam Khan, Rajesh Malhotra. An unusual cause of shoulder pain: self-assessment questions. Letter to the editor. NZMJ: Vol 120 No 1260 P. U2687.
- 8 Vivek Logani, Rajesh Malhotra, Surya Bhan. Pseudo fracture of the neck of femur secondary to osteomalacia. Letter to the editor. J Bone Joint Surg Br 2007; 89-B: 956-958.
- 9 Malhotra R. Management of Osteoporotic Fractures. Podcast on Ortho hyper guide (www.Ortho.hyperguides.com).
- 10 Malhotra R, Krishna KE, Dua A, Mallinath SG, Bhan S: Endoscopic versus open carpal tunnel release: A short-term comparative study. Indian Journal of Orthopaedics 2007: Vol. 41, No.1; Pp 57-61.
- 11 Bhavuk Garg, Aman Dua, Rajesh Malhotra, Surya Bhan: Osteoporosis and Hip Fractures: Modern Perspective: Orthopedics Today 2007: Vol. IX No. 2; 88-92.
- 12 Bhavuk Garg, Rajesh Malhotra: Ortho Quiz No. 11; Proximal Focal Femoral Deficiency: Orthopedics Today 2007: Vol. IX No. 2; 102.
- 13 Aman Dua, Bhavuk Garg, Malhotra R., Surya Bhan: Periprosthetic Fractures following Total Knee Replacement-Supracondylar Femoral Fractures. Orthopaedics Today 2007: Vol. IX, no. 3: 114-119.
- 14 Bhavuk Garg, Malhotra R., Surya Bhan: Stem Cells: Ethical Concerns. Orthopaedics Today 2007: Vol. IX, no. 3: 124-126.
- 15 Mittal K, Malhotra R.: Non Pharmacological Management of Osteoporosis. Orthopaedics Today 2007: Vol. IX, no. 3: 136-140.
- 16 Bhavuk Garg, Rajesh Malhotra: Ortho Quiz No. 12; Gaucher's Disease: Orthopedics Today 2007: Vol. IX No. 3; 149.

- 17 Vijay Kumar, Lalit Sharma, Dharmesh Khatri, Malhotra R.: Allografts for Cartilage Repair Osteochondral Allografts. *Orthopaedics Today* 2007: Vol. IX, no. 4: 178-183.
- 18 Sujata Mohanti, Krishan Gopal Jain, Malhotra R.: Tissue Engineering, Articular Cartilage Defect: Cell Based Therapy. *Orthopaedics Today* 2007: Vol. IX, no. 4: 184-189.
- 19 Malhotra R. Aman Dua, KS Leung: Ortho Education, *Orthopaedics Hyperguide – An Introduction*. *Orthopaedics Today* 2007: Vol. IX, no. 4: 184-189.
- 20 Bhavuk Garg, Rajesh Malhotra: Pioneers in Orthopaedics [Holger Werfel Scheuermann (1877-1960)]; *Orthopaedics Today* 2007: Vol. IX No. 4; 192.
- 21 Bhavuk Garg, Rajesh Malhotra: Ortho Quiz No. 13; Accessory navicular syndrome: *Orthopaedics Today* 2007: Vol. IX No. 4; 193.
- 22 Devdatta Suhas Neogi, Malhotra R, Vijay Kumar. Pain: Assessment and Measurement. *Orthopaedics Today* 2008: Vol. X, no. 1: 14-20.
- 23 Nataraj AR, Malhotra R. Fracture Healing. *Orthopaedics Today* 2008: Vol. X, no. 1: 38-41.
- 24 Bhavuk Garg, Rajesh Malhotra: Pioneers in Orthopaedics (Ambroise Pare 1510 - 1590); *Orthopaedics Today* 2008: Vol. X No. 1; 42.
- 25 Bhavuk Garg, Rajesh Malhotra: Ortho Quiz No. 14; Osteochondritis Dissecans: *Orthopaedics Today* 2008: Vol. X No. 1; 44.
- 26 Malhotra R: Osteoporotic Fractures: Need to act before it is too late! *Orthopaedics Today* 2007: Vol. IX No. 2; 63-64.
- 27 Malhotra R: Road to Prediction: *Orthopaedics Today* 2007: Vol. IX No. 3; 112.
- 28 Malhotra R: Healing Cartilage-From Repair to Regeneration: *Orthopaedics Today* 2007: Vol. IX No. 4; 160.
- 29 Malhotra R: Post Operative Pain Management: *Orthopaedics Today* 2008: Vol. X No. 1; 8-10.

Dr. H.L. Nag

1. Kumar A, Khan SA, Yadav CS, Nag HL. Locking compression plate in treatment of forearm fractures: a prospective study (letter to the editor). *J Orthop Surg (Hong Kong)* 2007;15(1):121-122.
2. Sameer N, Ravi M, Nag HL, Raju S. “Arthroscopic and MRI evaluation of meniscal lesions in chronic ACL deficient knee” *Arthroscopy* (accepted)

Chapters in Books

1. Bhan S, Nag HL. *Skeletal tuberculosis*. In: Editors. Sharma SK and Mohan A. Tuberculosis. 2nd Edition (In press). New Delhi: Jaypee Brothers Medical Publishers (P) Ltd. 2007:237-260
2. Nag HL, Ashok K. *Textbook on Clinical Surgery*. In: Editor, Chamber S. Examination of Muscles, Tendons and Fascia (In press)

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. *Archive of Orthopaedics Trauma & Surgery* 2007, May 15.
2. Kumar A, Khan SA, Yadav CS, Nag HL. Letter to Editor on Locking compression plate in treatment of forearm fractures – a prospective study. *Journal of Orthopaedic Surgery (Hong Kong)*. 2007; 15 (1):121.
3. Neogi DS, Yadav CS, Phani MV. Ensuring appropriate timing of antimicrobial prophylaxis. *JBJS (Am)* Feb, 2008

4. Neogi DS, Yadav CS, Rastogi S. Methicillin resistant S Aureus site infection following primary total hip arthroplasty, JBJS (Br), March 2008
5. Neogi DS, Yadav CS, Alam SA, Rastogi S, Refampicin – minocycline coated orthopaedic implants – Is there a need for a caution ? March 2008
6. Varshney MK, Kumar A, Khan SA, Yadav CS. Kimura disease of extremity- an unusual manifestation in bone. Joint Bone Spine (Accepted for publication July 007).
7. Khan SA, Kumar A, Varshney MK, Trikha V, Yadav CS. Dextrose prolotherapy in the management of recalcitrant coccygodynia. Hong Kong Journal of Orthopaedic Surgery (Accepted for publication, March 2007).
8. Khan SA, Tulkar S, Sharma DK, Kumar A, Varshney MK, Yadav CS, Rastogi S. CT guided radiofrequency ablation of osteoid osteomas – Indian Perspective. Hong Kong Journal of Orthopaedic Surgery (Accepted for publication, September 2007).

Abstracts

9. C.S. Yadav, V Trikha, Devdutt, Ashok Kumar, Rastogi S. Management of Infected arthroplasty in the Souvenir of 52nd Annual conference of IOACON Dec 2007 at Kolkata.
10. Devdatta SN, CSYadav, Khan SA. Total hip replacement in active tuberculosis – A myth or reality. Souvenir of 52nd Annual conference of IOACON on 5-8th Dec 2007 at Kolkata
11. Yadav CS, Khan SA Management of polytrauma. A Indian perspective, Souvenir, Inaugral conference & CME Indraprastha Assoc of Rehabilitation Medicine April 07 Delhi.

Dr.Ravi Mittal

1. Rastogi S, Prashanth I, Khan SA, Trikha V, Mittal R. Giant cell tumor of bone: Is curettage the answer? Indian Journal of Orthopaedics Vol 41. issue 2.april-june 2007. 109-114.
2. Sameer N, Ravi Mittal, HL Nag, Raju Sharma. Arthroscopic and MRI evaluation of meniscus lesions in chronic ACL deficient knee. -accepted for publication in Arthroscopy”.
3. Yeow Wai Lim, Roger P van Riet, Ravi Mittal, Gregory I Bain. Pattern of osteophytes distribution in primary osteoarthritis of the elbow. Accepted in Journal of Shoulder and Elbow Surgery
4. Rastogi S, Varshney MK, Trikha V, Khan SA, Mittal R. Desmoplastic fibroma: A report of three cases at unusual location. *Joint Bone Spine*. 2008, 75:222-225
5. Rastogi S, Prashanth I, Khan SA, Trikha V, Mittal R. Giant Cell Tumor of bone: Is curettage the answer? *Indian J Orthop* 2007;41:109-114

Dr. Shah Alam Khan

1. Khan SA, Shamschery P, Gupta V, Trikha V, Varshney M, Kumar A. Locking compression plate in long standing clavicular non-unions with poor bone stock.
2. Khan SA. Calcaneal Osteomyelitis caused by *Exophiala jeanselmei* in an Immunocompetent Child. A Case Report. *J. Bone Joint Surg Am*. 2007;89:2547 (Letter to Editor)
3. Varshney MK, Kumar A, Khan SA. A predictive method for subsequent avascular necrosis of the femoral head (AVNFB) by observation of bleeding from the cannulated screw used for fixation of intracapsular femoral neck fractures. *J Orthop Trauma*. 2007 Oct;21(9):670;
4. Rastogi S, Varshney MK, Trikha V, Khan SA, Mittal R. Desmoplastic fibroma: A report of three cases at unusual location. *Joint Bone Spine*. 2008, 75:222-225
5. Garg B, Sharma V, Khan SA, Malhotra R. Medical image. An unusual cause of shoulder pain: self-assessment questions. Synovial chondromatosis. *NZ Med J*. 2007 Aug 24;120 (1260):U2687.

6. Khan SA, Kumar A, Varshney MK, Rastogi S. Chondromyxoid Fibroma of the Clavicle in a child. *Euro J Orth Surg Trauma*. March 2008; Vol 18. No.2:135-37
7. Khan SA, Varshney MK, Hasan AS, Kumar A, Trikha V. Tuberculosis of Sternum – A Clinical Study. *J Bone Joint Surg Br* 2007 89-B:817-820
8. Kumar A, Varshney MK, Trikha V, Khan SA, Yadav CS, Hasan AS: A rare actinomycosis of humerus: an unusual location and a diagnostic dilemma. A case report. *Arch Orthop Trauma Surg*. 2007 May 15
9. Kumar A, Khan SA, Yadav CS, Nag HL. Locking Compression plate in treatment of Forearm fractures: A Prospective study (Letter to Editor). *J Orthop Surg (Hong Kong)*;2007 April;15(1):121
10. Rastogi S, Prashanth I, Khan SA, Trikha V, Mittal R. Giant Cell Tumor of bone: Is curettage the answer? *Indian J Orthop* 2007;41:109-114

Books

1. R. Anwar, N. Tuson and Shah Alam Khan Classification of Fractures, Published in January 2008 by the Cambridge University Press, London.

PATIENT CARE

- At Jawaharlal Nehru Stadium, Lodhi Road, Dr. H.L. Nag attends the injured athletes and Sports personnels every Monday afternoon as the Honorary Consultant of Sports Authority of India (SAI).

Community Service

- On DD News Channel TV Programme – “Health show”, Dr. H.L. Nag discussed and deliberated on “Arthrities – causes and management” – 4 to 4.30 pm on 29/03/2008.

The department of Orthopaedics is one of the finest departments in the country. State of the art surgery is being performed in all specialities of Orthopaedics and Traumatology. The department has separate operation theatre complex which is fully equipped with all the modern equipments and instruments. Effective control of infection in the operation theatres has lead to aseptic surgery. The department has a spinal surgery centre of excellence in the entire North India. It has also developed the specialty of Hand Surgery, a facility which is available at very few centres in the country particularly in the North India. The department runs various speciality clinics. The department also has an excellent physical therapy and occupational therapy set up.

AWARDS AND HONOURS

Dr. P.P. Kotwal

1. Appointed on the panel of Consultants of experts to extend medical advice to the Hon’ble Vice President of India, Oct. 2007.
2. Expert Member, Selection Committee of the North Eastern Indira Gandhi Regional Institute of Health and Medical Sciences, (NEIGRIHMS), Shillong to select Professor of Orthopaedics, April 2007.
3. Nominated by the National Centre for Antarctic and Ocean Research, Goa (under the Ministry of Earth Sciences, Govt. of India) to represent India at the “Workshop on Research in Medicine in Antarctica” held at the National Institute of Polar Research, Tokyo, Japan in Aug. 2007.

4. Nominated as an Expert member by the Union Public Service Commission (UPSC), New Delhi to assist in the selection of Specialist Grade II (Jr.Scale) in Orthopaedics, Oct. 2007.
5. Expert Member, Selection Committee constituted by the Govt. of Madhya Pradesh to select Assistant Professors in Orthopaedics in the Medical Colleges of Madhya Pradesh, March 2008.
6. Nominated as a member of Board of Studies in Orthopaedics by the Barkatullah University, Bhopal, April 2007.
7. Expert Member, Screening Committee for evaluation of National Awards for the Empowerment of Persons with Disabilities, under the Ministry of Social Justice & Empowerment, Govt. of India; Aug. 2007
8. Member, Technical Specification Committee or procurement of equipment for JDWNR Hospital, Thimpu and Regional Referral Hospital, Mongar, Bhutan; July 2007.
9. Nominated as a Faculty member for the A.O. Advanced Course in India, Organised by the A.O. International, Switzerland. The Course was held at New Delhi in July 2007.
10. Member, Committee regarding alleged negligence in providing medical treatment to Shri Ravinder Prasad, May 2007.

Dr. S. Rastogi

1. Nominated Chairman of IOA Instructional Course Lectures (IOAICL) of Indian Orthopaedic Association.
2. Chairman, Foreign Fellowship committee of Indian Orthopaedic Association.
3. Honorary fellow of Uttaranchal Ortho. Association.

Dr. A. Jayaswal

1. Member of Board of Directors of World Spine Society (WSS).
2. Executive Committee Member of (i) Pacific Asia Society for Minimally Invasive Spine Surgery (PASMIS); (ii) Asian Academy of minimally Invasive Spine Surgery (AAMIS); (iii) Spine Section of Asia Pacific Orthopaedic Association(APOA); (iv) World Society for Endoscopic Navigated & Minimally Invasive Spine Surgery (WENMIS).
3. President of Association of Spine Surgeons of India (ASSI); President of Delhi Spine Society; Vice President Spinal Cord Society of India

Dr. R. Malhotra

1. Adjunct Faculty CMET, AIIMS
2. Editor, "Orthopaedics Today":
3. Reviewer Indian Journal of Orthopedics, Indian Journal of Pediatrics, National Medical Journal of India, Clinical Anatomy.
4. Member, Editorial Board, Neurology India
5. All India Radio Program on "Bone Banking" on 28.03.2007 (Wednesday) at 2.00 PM in New Delhi; Regional Advisory Board Member – Ortho Hyperguide – A web based global Orthopedics learning portal
6. TV programs: Arthritis (Gathia): Lakshan aur Roktham program on Sahara TV, 17June 2007; Expert in live TV Interactive Show on Joint Pains Among Women in Sahara Uttar Pradesh, 23 Jan 2008.

Dr. H.L. Nag

1. Expert Member in “Orthopaedics Sports Medicine Committee of International Society of Arthroscopy, Knee Surgery and Orthopaedic Sports Medicine” (ISAKOS).
2. Nominated as the 1st Secretary General of Indian Federation of Sports Medicine (IFSM)
3. Medical Council of India (MCI) nominated member of the “Board of speciality of Sports Medicine” for periodic update of curriculum of Sports Medicine Course in India.
4. Nominated as Honorary Member of the “Editorial Board of International Journal of Biosciences and Technology”
5. Nominated as board member of “Elsevier Clinical Advisory Boards” for the clinical updates for Sports Medicine and Arthroscopy
6. Honorary Consultant of Sports Authority of India (SAI) for the care and treatment of injured athletes and sports personnels.
7. Reviewer for (i) Indian Journal of Orthopaedics, (ii) Indian Journal of Medical Research, and (iii) Indian Journal of Physical Medicine and Rehabilitation
8. Member, Doctoral Committee, Ph.D student at AIIMS.

Dr. C.S. Yadav

1. Elected representative of Delhi chapter of IOA, Member national executive IOA
2. Reviewer Indian J Paediatrics

Dr. Shah Alam Khan

1. Elected as a co-opted member on the Editorial board of the Indian Journal of Orthopaedics
2. Elected on the International Editorial board of the Chinese Journal of Research and Tissue Engineering
3. Elected as an International reviewer to the Editorial board of the Scottish Medical Journal.
4. Elected as an International reviewer to the Editorial board of the Journal of Children’s Orthopaedics, France.
5. Selected as Member, Expert Group of Indian Council of Medical Research (ICMR) Co-ordinated project, *Nutrition Profile of Assam, Manipur & Meghalaya*. Attended the meeting & Training Workshop held in New Delhi on September 8, 2007.
6. Selected as an Expert Member, Review Group of ICMR on the project entitled, *Developing Capacity Building of Primitive Tribes for Health Care*. Attended the Review Group meeting in ICMR, New Delhi held on Sep 16th, 2007.

Dr. Ravi Mittal

1. AO fellowship at Städtisches Klinikum at Karlsruhe, Germany- 3 September to 12 October 2007
2. Reviewer for Indian journal of Orthopaedics in 2007, 2008
3. Listed in Marquis Who’s who in Asia 1st edition 2007
4. Member of executive committee of Indian Federation of Sports Medicine for 2007-2008
5. Member of the MBBS curriculum at AIIMS for 2008
6. Adjunct faculty at CMET, AIIMS since 2008

Dr. Vijay Kumar

1. Membership of the Royal College of Surgeons and Physicians of Glasgow, UK.

SIGNIFICANT EVENTS

Dr. A. Jayaswal

1. Current President of Association of Spine Surgeons of India (ASSI), President Spine Society Delhi Chapter & Vice President of the Spinal Cord Society of India.
2. Delivered the Presidential address at the XXI Annual Conference of Association of Spine Surgeons of India (ASSICON 2008) 18 January 2008 at Coimbatore.
3. Invited to attend the “Board of Directors Meetings of the World Spine Society (WSS) at Istanbul, Turkey; the World Society for Endoscopic Navigated & Minimally Invasive Spine Surgery (WENMISS) at London and the Asia Pacific Orthopaedics Association. Spine Section at Hochi Minh City, Vietnam.
4. Invited Faculty to Three International Spine Conferences - held in London, Las Vegas (US), Hochi Minh City (Vietnam)
5. Nominated to organize the Scoliosis Research Society (USA) meeting in under the SRS World wide programme –SRS, in India – New Delhi Oct. 2-4 2008
6. Nominated Course Coordinator for Conducting Spine Courses & Spine CMEs in India & South Asia of the International Group for Advancement in Spine Surgery (IGASS) a non Commercial Spine Educational body based in France. – organised at Delhi & Sri Lanka.
7. Nominated Coordinator for Conducting Cadaveric Workshops & Certification Course of Kyphoplasty in India – organized at Delhi & Chennai.
8. Editorial Article reviewer – Indian Journal of Orthopaedics (I.J.O.)
9. Course Co-ordinator for Instructional Course on Spine & Trauma & Recent Advances in Spine Surgery, Kathmandu, Nepal, 20-21 May 2007.
10. Two scientific papers awarded at National conferences, one Best paper and poster awards.
11. Invited Panelist at 4 Conferences; Chairperson/Moderator of sessions at Conferences: 5 national, 3 international.

Dr. R. Malhotra

1. Member of working group for “ICMR-WHO Workshop on Development of feasibility Modules on Road Traffic Injury Surveillance”, New Delhi.
2. Member of “Advisory Group for Research in Accidents and Injuries (AGRAI) of ICMR-”, New Delhi.
3. 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.
4. Member Advisory Group on Determination of Musculoskeletal Burden in Indian Population.
5. Member Advisory Group on Determination of Normative Laboratory Parameters in Indian Population.
6. Member Expert Group for ICMR Task Force on Cancer Management Guidelines
7. Member Expert Group for ICMR Task Force on Osteoporosis.
8. Expert/Chairman Project Review Committee of ICMR for funding of projects in the field of NCD, BMS and Biomedical Engineering since 1994.
9. 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.

10. Expert for UGC Common Wealth Fellowship Selection on 17.12.2007.
11. Member of Committee on Tele Medicine at AIIMS for the year 2006-2007, 2007-2008.
12. Member of Hospital Infection Control Committee for year 2005-2006, 2006-2007, 2007-2008.
13. Member of “Staff Council”.
14. Member of Advisory Committee for the Central Workshop (orthopedic implants & devices) at the All India Institute of Medical for the year of 2007, 2008.
15. Member Department Store Purchase Committee.
16. Member of the Education and Community Development body of the AO India Council for the year of 2007.
17. Member of the Indian Orthopaedic Research Collaborative for the year, 2007.
18. Member of the Collaborative for the International Hip Fracture Research Collaborative (IHFRC) for the year, 2007.
19. Judge for Hindi Vaad- Vivaad Pratiyogita (Competition) on 13.09.2007 at Conference Hall, AIIMS, New Delhi.
20. Consultant for the Expert Group for New Millennium Indian Technology
21. Leadership Initiative (NMITLI) project entitled “Medical Implants” for Council of Scientific & Industrial Research.
22. Member of Doctoral Committee for “Bone Tissue Engineering by Growing and Differentiating Mesenchymal Stem Cell on Biocomposite Scaffold” candidate Mr. Krishan Gopal Jain, PhD student in Stem Cell Facility, Department of CTVS, at All India Institute of Medical Sciences.
23. Attended the National Seminar on the promotion of voluntary blood donations on National Voluntary Blood Donation Day on 1st Oct. 2007 at Gulmohar Hall, India Habitat Center, New Delhi.
24. Attended PRC meeting (Non Communicable Diseases - NCD) of Indian Council of Medical Research (ICMR) for reviewing projects submitted to ICMR as expert (NCD) of ICMR on 05.11.2007.
25. Attended ICMR – WHO Workshop on “Action Plan for Development of a National Injury Surveillance Network” at ICMR Headquarters on 26th November 2007.
26. Internal Examiner for MS (Orthopaedics) in All India Institute of Medical Sciences, New Delhi for the Examination held in May 2007.
27. Examiner for IIT for M. Tech thesis (Evaluation) for Mr. SS Pathan, Mr. Sagar Umhale, Mr. Tushar, Mr. KL Mishra on 24.05.2007 in Indian Institution of Technology, New Delhi.
28. External Examiner for MS (Ortho) Examination held on 25th May 2007, Gwalior.

Dr. H.L. Nag

1. Sent by Medical Council of India for the inspection of Santokba Durlabhji Memorial Institution Research Institute for DNB Course, Jaipur, Rajasthan on May 12 – 14, 2007.
2. Technical Expert Committee for the procurement of equipments for JDWNR Hospital, Thimpu and Regional Referral Hospital at Mongare, Bhutan.
3. Member Expert Committee of U.G.C did inspection of Institute of Medical Sciences and SOM Hospital, Bhubaneshwar, Orissa for inclusion under ambit of Siksha ‘O’ Anusamadhan, Khandagiri Square Deemed University.
4. Expert member, UGC, conducted selection of teachers/scholars from Indian universities, Indo-Hundarian Educational Exchange Programme, 2007–2008, New Delhi, Dec 2007.

Dr. C.S. Yadav

1. Acted as Expert for the selection of Lectures in Orthopaedics in various medical colleges of UP, Public Service Commission Allahabad, Jan 2007
2. Reviewer of ICMR Projects
3. Appointed as paper setter & Examiner for MS(Ortho) for L N Mithila University
4. Reviewer for Indian Journal of Pediatrics
5. Did AO Tips for Trainers Course, Chennai, Jan 2007
6. Appraiser for DNB Hindu Rao Hospital
7. Examiner & Paper setter for M.Ch in Surgery, MBBS & Paper setter, AIIMS students
8. Examiner & Paper setter Master in Physiotherapy for Jamia University
9. Performed & demonstrated THR invited by Agra Vikas March Sep 2007
10. Acted as Penalist, Brain storming Workshop on Fixed drugs combinations, 25th to 26th June 2007
11. Acted as Penalist, Workshop on THR, Bihar Orthopaedics Association, Patna, 26TH Aug. 2007
12. Acted as Demonstrator, cemented THR, Pre-conference workshop, IOACON, Calcutta, 2007
13. Chaired a session, BOACON, Bhagalpur, Feb 2007
14. Chaired a session in UPCON, Aligarh, Feb 2007
15. Appointed as Delhi State Representative for IOA national executive

Dr. Shah Alam Khan

1. Attended the workshop on Orthopaedic Research and Evidence Based Medicine, at the University College of Medical Sciences, New Delhi on March 24, 2008.
2. Served as a Table instructor at the Basic AO Course, organized by the AO Group, Switzerland in New Delhi, February 19-21, 2008.
3. Attended the national meet of Editors of Indian Biomedical Journals organized by the US – India Science & Technology Forum in the AIIMS, New Delhi, February 8-11, 2008.
4. Attended the 2nd Annual Conference of the Indian Academy of Cerebral Palsy at Bangalore on December 1-3, 2007.

Dr. Vijay Kumar

1. Faculty in “Delhi Arthroplasty course” 17th February 2008, New Delhi
2. Table Instruction in “AO Course – Principles in Operative Fracture Management” 22-24th February 2008, New Delhi.

9.24 Otorhinolaryngology (ENT)

Professor and Head

Ramesh C. Deka

Professors

Sudhir Bahadur
(Superannuated on 29.2.08)

Suresh C. Sharma
(On assignment)

Associate Professors

Kumud K. Handa

Alok Thakar

Assistant Professors

Rakesh Kumar

Venkatarthikeyan C.

EDUCATION

The departmental faculty has actively participated in the academic activities of undergraduate, postgraduate and paramedical teaching

Continuing Medical Education

CME programmes organized

- The department organized and hosted the monthly meeting of the Delhi Chapter of Association of Otolaryngologists of India at AIIMS in July 2007.
- The department organized and conducted “RHINOFESS 2007” Live surgical workshop and CME on Rhinoplasty and FESS on 30–31st December 2007 and 1st January 2008, at AIIMS, New Delhi.
- The department co-organized and conducted 9th Annual conference – Skull Base Society of India, and International Skull Base CME from 25–28th October 2007, New Delhi in collaboration with department of neurosurgery.
- The department organized and conducted Head-Neck Cancer CME and Workshop on 15–17th March 2008, New Delhi.

Lectures delivered

Professor R.C. Deka

- ‘Need of quality Control of Health Care Institutions and the Role of such an organization’, expert talk while chairing the session in “National Health Accreditation–Achieving Excellence in Health Care in India—Regional ICHA Convention at Bangalore on 21st April 2007.
- “Economic growth and National integration” at the grand annual ceremony of the India International friendship society in New Delhi on 7th July 2007.
- ‘Role of Health care executives in quality care in Hospitals’, 27–28th August 2007 in Health care executive management development programme at Goa as a guest of honour.
- ‘Health Care Management—Need in North Eastern Region’, S.M. Medical college and Hospital, Panikhaiti, Gauhati; 29th March 2008.

Professor Sudhir Bahadur

‘Surgical Management of Gingivo—buccal sulcus cancers’. Head and Neck Cancer Surgery workshop: Diamond Jubilee of Govt. Medical College, Nagpur, June, 2007.

Professor S.C. Sharma

‘Management of carotid body tumours’. “Professor R. N. Misra Memorial oration” on 20th August 2007, At King George Medical University & G.M. associated Hospital, Lucknow.

Dr K.K. Handa

- “Surgical management of Sleep Medicine” at CCR in AIIMS on 5th February 2008
- “Auditory pathways, Assessment of hearing in children” workshop on Developmental pediatrics at LHMC New Delhi on 5th October 2007.
- “Laryngopharyngeal reflux (LPR)”, Workshop on Phonosurgery, Bombay Hospital, 1-2 September 2007.
- “Muscle Tension Dysphonia”, Workshop on Phonosurgery, Bombay Hospital, 1-2 September 2007.
- “Facial Nerve”, Instructional course lecture, Annual conference of NES India, Calcutta, 8 August 2007.
- “Basics of Phonosurgery” Surgical workshop on Phonosurgery, Kolhapur, 8-9 March 2008.
- “Spasmodic Dysphonia” at Surgical workshop on Phonosurgery, Kolhapur, 8–9 March 2008.
- “Phonosurgery - Past Present and Future” NK Agarwala oration at workshop on Phonosurgery organized by AOI North Eastern branch at Guwahati on 15th March 2008.
- ‘Laryngotracheal Stenosis’ in workshop on Phonosurgery organized by AOI North Eastern branch at Guwahati on 15th March 2008.
- ‘Spasmodic Dysphonia’, Workshop on Phonosurgery, AOI North Eastern branch, Guwahati, 15 March 2008.
- ‘Care of Professional voice’, Workshop on Phonosurgery, AOI North Eastern branch, Guwahati, 15 March 2008.

Dr Alok Thakar

- ‘Treatment Decisions in Head-Neck Cancer’. AIIMS Head-Neck Cancer CME, New Delhi, 15–17th March 2008.
- ‘Approach to a patient with Vertigo’. IMA Meeting Bareilly, March 29th 2008.
- ‘Benign Paroxysmal Positioning Vertigo’. CME on Neuro-otology, Bareilly, 30th March 2008.
- ‘Intratympanic Gentamicin in the Treatment of Vertigo—Indications and Technique’ CME on Neuro-otology, Bareilly, 30th March 2008.
- ‘Stapedotomy, glomus Jugulare tumour’—Surgical Video presentation, XIXth advanced course in Microsurgery of the Ear, Sir Ganga Ram Hospital, Delhi, March 2008.

Dr Rakesh Kumar

- ‘Rhinological diseases for GP and ENT surgeons’ at Mata Chanan Devi Hospital, New Delhi, in March 2008.
- “Surgical technique of Rhinoplasty” in RHINOFESS 2007. Live surgical workshop and CME on Rhinoplasty and FESS. 30–31st December 2007 and 1st January 2008, AIIMS, New Delhi.

Dr C.V. Karthikeyan

- “Cochlear implantation in cochleovestibular abnormalities” Associations of Otolaryngologists of India—Delhi Chapter meeting at AIIMS in July 2007.
- “Endoscopic anatomy of nose and paranasal sinuses” in RHINOFESS 2007. Live surgical workshop and CME on Rhinoplasty and FESS. 30–31st December 2007 and 1st January 2008, AIIMS, New Delhi.

NATIONAL AND INTERNATIONAL CONFERENCES*Lectures delivered***Professor R.C. Deka**

- ‘Deafness problem in India including Cochlear implant Surgery’. 50th Anniversary celebration of Widex International: An International seminar on Deafness and Hearing aid technology, Copenhagen, Denmark, 10–17th June 2007.
- “Endoscopic surgery of Paranasal sinuses and anterior skull base” Expert talk as a Chairperson in the scientific session at the World Federation of Neurosurgical societies, microsurgery & Endoscopic skull base cadaver workshop and 9th annual conference of skull base society of India and international skull base CME, 25–28th October 2007, AIIMS, New Delhi.
- ‘Allergic fungal rhino sinusitis—An overview including Role of Amphotericin B. Lavage’. 12th Asian Research Symposium on rhinology (ARSR) 28–29th November 2007 at Manila, Republic of Philippines.
- ‘Cochlear implantation in India’, 6th SAARC Otolaryngology and head and Neck surgery conference, 15–18th February 2008, Dhaka, Bangladesh.
- ‘Basic Aspect of middle ear cholesteatoma and Tympano mastoid surgery’, 6th SAARC Otolaryngology and head and Neck surgery conference, 15–18th February 2008, Dhaka, Bangladesh.
- ‘Role of safe perforation in the prevention of middle ear cholesteatoma’, expert talk as a panelist in the panel discussion at 6th SAARC Otolaryngology and head and Neck surgery conference, 15–18th February 2008, Dhaka, Bangladesh.
- ‘Management of Discharging ear’, expert talk as a chairperson in the session on ‘Discharging ears’ at 6th SAARC Otolaryngology and head and Neck surgery conference, 15–18th February 2008, Dhaka, Bangladesh.
- ‘Undergraduate Medical Education: Need for skill enhancement and research enquiry’ in 3rd UAE Medical Students conference. Dubai, 16–17th March, 2008.

Professor S. Bahadur

- “Treatment protocols in advanced carcinoma of the larynx and hypopharynx”. International Symposium on ‘Recent advances in Otolaryngology; organized at BYL Patil Medical College, Mumbai, 27–28th August 2007.
- ‘Skull Base Surgery—extra cranial perspective. Presidential Oration’—9th Annual Conference of Skull Base Surgery Society of India, 28–30th October 2007, AIIMS, New Delhi.
- ‘Craniofacial resection for malignant tumours of nose & PNS’. Diamond Jubilee Annual conference of the Association of Otolaryngologists of India, Agra, 3–5th January 2008.

Dr K.K. Handa

- Medialisation Thyroplasty versus Type I Throplasty—Current day status. EUFOS Conference, Vienna, 3rd July 2007.
- “Fungal Ball” in the International meeting of the Fungal sinusitis group at PGIMER Chandigarh from 9–11th February 2008.
- ‘Care of Professional Voice’ at Annual conference of association of Otorhinolaryngologists “Delhi branch on 13th May 2007.
- ‘Laryngopharyngeal reflux’ surgical workshop in Phonosurgery at on Ahmedabad 15th April 2007.
- ‘Approach to Dysphonic Patient’ surgical workshop in Phonosurgery at Ahmedabad on 15th April 2007.
- ‘Approach to Dysphonic patient’ at workshop on Phonosurgery at Bombay Hospital from 1-2nd September 2007.

Dr Alok Thakar

- Near Total laryngectomy: a failure analysis. EUFOS conference, Vienna, July 2007
- Delayed Optic Nerve Decompression for Traumatic Visual loss EUFOS Conference, Vienna, July 2007.
- Surgical Treatment of Intracranial Angiofibroma. Plenary Lecture—6th SAARC Otolaryngology-Head and Neck Surgery Conference, Dacca, February 2008.
- Surgical Management of advanced laryngeal/hypopharyngeal cancers. Plenary Lecture—6th SAARC Otolaryngology-Head and Neck Surgery Conference, Dacca, February 2008.
- Endoscopic Optic Nerve Decompression. 9th Annual Conference Skull Base Surgery Society of India. October 2007, New Delhi.
- Role of Nasal endoscope in orbital lesions. Invited lecture(Adjudged Best Presentation—Orbital Section). Delhi Ophthalmological Society, Annual Conference, April 2007.
- Surgical Treatment of Intracranial Angiofibroma. 9th Annual Conference of the Skull Base Society of India, New Delhi, October 2007.
- Pulsatile Tinnitus. 29th Annual Conference, Neuro-otological and Equilibriometric Society of India, Kolkata, December 2007.
- Clinical Diagnosis and Treatment of Positional Vertigo. 29th Annual Conference, Neuro-otological and Equilibriometric Society of India, Kolkata, December 2007.
- Contemporary role of surgery in the Treatment of Vertigo. 29th Annual Conference, Neuro-otological and Equilibriometric Society of India, Kolkata, December 2007.
- Endoscopic Sphenopalatine artery ligation for intractable epistaxis. Diamond Jubilee Annual conference of the Association of Otolaryngologists of India, Agra, January 2008.

Dr Rakesh Kumar

“Management of Invasive fungal sinusitis” paper presented at the World Federation of Neurosurgical societies, microsurgery & Endoscopic skull base cadaver workshop and 9th annual conference of skull base society of India and international skull base CME, 26–28th October 2007, AIIMS, New Delhi.

Dr C.V. Karthikeyan

“Surgical management of large juvenile nasopharyngeal angiofibroma” World Federation of Neurosurgical societies, microsurgery & Endoscopic skull base cadaver workshop and 9th annual

conference of skull base society of India and international skull base CME, 26–28th October 2007, AIIMS, New Delhi.

Residents and Research associates

1. “Endoscopic removal of angiofibroma: a two-gate technique” Anurag R, Rakesh Kumar, Venkatarthikeyan C., Deka RC. “RHINOFESS 2007” Live surgical workshop and CME on Rhinoplasty and FESS on 30–31st December 2007 and 1st January 2008, AIIMS, New Delhi.
2. Cochlear implantation in children with cochleovestibular malformations AIIMS experience”: Anurag R, Rakesh Kumar, Venkatarthikeyan C, Deka RC poster presentation in World Federation of Neurosurgical societies, microsurgery and Endoscopic skull base cadaver workshop and 9th annual conference of skull base society of India and international skull base CME, 26–28th October 2007, AIIMS, New Delhi.
3. Paragangliomas of the Jugulotympanic region. Sinha P, Sharma SC, Thakar A, Bahadur S. 9th Annual Conference of the Skull Base Surgery society of India, 25–28th October 2007, AIIMS, New Delhi (Received Best paper award).
4. Principles of Endoscopic Angiofibroma Excision. G. Agarwal, Thakar A (Best Video presentation). 30th Annual Conference of the Association of Otolaryngologists of India, Delhi Branch, May 2007.
5. Efficacy of Flutamide as a Tumour Volume reducing agent in Nasopharyngeal Angiofibroma Gupta G, Thakar A, Bahadur S. Deka RC, Sharma SC, Sharma R, Seith A, Jain V. 9th Annual Conference of the Skull Base Surgery society of India, 25–28th October 2007, AIIMS, New Delhi.
6. Delayed optic nerve Decompression for post-traumatic optic nerve injury. Sikka K., Thakar A., Mahapatra AK, Tandon DA. 9th Annual Conference of the Skull Base Surgery society of India, 25–28th October 2007, AIIMS, New Delhi.
7. Etiology, outcome and limitations of Endoscopic management of CSF rhinorrhea. Verma R, Thakar A, Bahadur S. Mahapatra AK, Suri A. 9th Annual Conference of the Skull Base Surgery society of India, 25–28 October 2007, AIIMS, New Delhi.
8. Treatment outcome of malignancy of the external auditory canal and temporal bone. Pradhan T, Bahadur S, Thakar A. 9th Annual Conference of the Skull Base Surgery society of India, 25–28 October 2007, AIIMS, New Delhi.
9. Optic Nerve Decompression in Visual Loss secondary to Allergic Fungal Sinusitis. Lal P. Thakar A. 9th Annual Conference of the Skull Base Surgery society of India 25–28th October 2007, AIIMS, New Delhi.
10. Chemoradiation for organ preservation in advanced laryngeal and hypopharyngeal cancers. Agarwal G, Thakar A, Sharma A. Mohanti BK. Bahadur S. 30th Annual Conference of the Association of Otolaryngologists of India, Delhi Branch, May 2007.
11. Endoscopic management of CSF rhinorrhea. Verma R, Thakar A, Mahapatra AK, Suri A. 30th Annual Conference of the Association of Otolaryngologists of India, Delhi Branch, May 2007.
12. Treatment results of Parotid cancer; 10 year experience. Shyam S, Thakar A Bahadur S, 30th annual conference of the Delhi branch of the AOI held on 12–13th May 2007.
13. Auricular Syncope. Shyam S, Thakar A. Poster presentation at the 30th annual conference of the Delhi branch of the AOI held on 12–13th May 2007.

14. Oncocytic Papillary Cystadenocarcinoma in a Child. Shyam S. Rakesh Kumar, Venkatakarthikeyan C, Deka RC – poster presented at the 30th annual conference of the Delhi branch of the AOI held on 12–13th May 2007.

RESEARCH

Funded Projects

Completed

1. Role of Amphotericin lavage & Corticosteroid nasal spray combination therapy in Allergic Fungal Sinusitis—Prof RC Deka. ICMR Project, 6.32 lakhs, 3 yrs.
2. Effect of electromagnetic field of mobile phones on the hearing and vestibular system in human beings—Fellow: Dr Subhalaxmi Rautray, Chief Guide: Prof RC Deka, CSIR project, 3 years.
3. Quality of life in Head and Neck Cancer following multi-modality treatment —Fellow: Dr Tapaswini Pradhan, Chief Guide: Dr S Bahadur, CSIR funded project, 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. Fellow: Dr Anurag Ramavat, Chief Guide: Prof RC Deka, CSIR project, 3 years.
2. ‘Role of intratympanic dexamethasone therapy in patients with tinnitus’ Prof RC Deka, ICMR project, 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’ Prof RC Deka, ICMR project, 3 years.
4. Phase II/III Randomized placebo controlled clinical trial of curcumin in respectable stage III & IV squamous head and neck cancers. Professor S. Bahadur/Dr A. Thakar. DBT Project Rs.43 lakhs, 3 yrs.
5. Voice changes in Presbylarynges and Disorders of central origin. Dr KK Handa, Fellow: Dr Rajiv, CSIR project, 3 years.
6. Prevalence of Hypothyroidism following treatment of Head-Neck Cancer and its impact on Quality of Life. Dr A. Thakar, Rs. 11 lakhs, DST Project, 2007–2009.

Collaborative Projects

Ongoing

1. Neuro-developmental disabilities in children; An INCLEN study In collaboration with International Epidemiological Clinical Network
2. Stereological study of the age related morphological and neurochemical changes in the human cochlear nucleus (with Department of Anatomy)
3. Prenatal Development and Maturation of Human Inferior Colliculus (with Department of Anatomy)

Departmental Projects

Ongoing

1. To determine the efficacy of flutamide as a tumour volume reducing agent in Nasopharyngeal angiofibroma(NPA)

2. Role of proton pump inhibitors in laryngopharyngeal reflux
3. Clinical profile of patients with laryngotracheal stenosis
4. Bilateral Submandibular duct transposition and bilateral sublingual gland excision for drooling in children
5. Comparison of various techniques of tonsillectomy in terms of post operative pain and other post operative variables
6. Oncologic efficacy and functional outcome in early and moderately advanced laryngeal and hypopharyngeal cancer using laser

Completed

1. Otolaryngologic and head and neck manifestations in HIV/AIDS patients
2. Ki-67 expression in retraction pocket of TM & to evaluate its effect on healing of TM.
3. Study of indications, outcome & limitations of endoscopic management of CSF rhinorrhea

PUBLICATIONS

Journals

1. Ramesh Chandra Deka, Venkatarathikeyan Chokkalingam, Rohit Kumar Vishnoi, Rakesh Kumar. Topical Amphotericin B and Steroid in AFS. *Otolaryngology-Head and Neck Surgery*, Vol 137, No 2S, August 2007: 40
2. Gupta R.P, Bahadur S, Thakar A, Handa K.K. Sarkar C .Management protocols in allergic fungal sinusitis. *Indian Journal of Otolaryngology*, 2007; (1):35–40.
3. Mohanti BK, Nachiappan P, Pandey RM, Bahadur S, Thakar A. Analysis of 2167 head and neck cancer cases: Treatment compliance and outcomes. *The Journal of Laryngology and Otology*, 2007; 121:49–56.
4. Handa KK, Mackenzie Ken; How We do it: A technique for the orientation of endoscopically resected laryngeal specimens; *Clinical Otolaryngology A technique for the orientation of endoscopically resected laryngeal lesions. Clin Otolaryngol.* 2007 Jun; 32(3):201–3.
5. Sunder RA, Handa KK. Airway management of an infant with extensive naso-oral cicatrization causing severe upper airway obstruction. *Pediatr Anaesth.* 2007 Aug;17(8):810–11.
6. Chawla JM, Handa KK, Tripathi BM Unilateral pseudohypacusis in children. *Indian J Pediatr.* 2007 Mar; 74(3):312–13.
7. Handa K, NB Shunyu. Paediatric vertigo, *Vertigo View Point* 2007; Number 2:11–15.
8. Thakar A. The distended ventricle as a sign of bilateral abductor paralysis. *Otolaryngology Head-Neck Surgery* 2007;136(4):663–5. PMID: 1741827
9. Thakar A, Deepak KK, Shyam S. Auricular Syncope. *The Journal of Laryngology & Otology* (2007) Oct 12:1–3 (Epub ahead of print) PMID: 17931450
10. Sharma S, Sharma MC, Johnson MH, Lou M, Thakar A, Sarkar C. Esthesioneuroblastoma – a clinicopathologic study and role of DNA topoisomerase alpha. *Pathol Oncol Res.* 2007;13 (2):123–9. Epub 2007 Jul 3. PMID: 17607373
11. Gadodia A, Seith A, Sharma R, Thakar A. Congenital salivary fistula of accessory parotid gland: imaging findings. *J Laryngol Otol.* 2008 Mar;122(3):e11. Epub 2008 Jan 7. PMID: 18177535
12. Verma R, Sikka K, Thakar A. Autologous embedded foreign body of mobile tongue. *Indian Journal of Otolaryngology and Head and Neck Surgery* 2007; 59:291–92.

Abstracts

1. A. Thakar, AK Mahapatra, DA Tandon Delayed Optic Nerve Decompression for Traumatic Visual loss. European Archives of Otorhinolaryngology and Head & Neck (2007), (Suppl. 1) S297.
2. A. Thakar, S. Bahadur, Toran KC, Mohanti BK, Julka PK. Near Total Laryngectomy– A failure analysis. European Archives of Otorhinolaryngology and Head & Neck (2007), (Suppl. 1) S36.
3. Sinha P, Sharma SC, Thakar A, Bahadur S. Paragangliomas of the Jugulotympanic region. 9th Annual Conference of the Skull Base Surgery society of India and World Federation of Neurosurgery workshop, Conference proceedings, p26.
4. Gupta G, Thakar A, Bahadur S. Deka RC, Sharma SC, Sharma R, Seith A, Jain V. Efficacy of Flutamide as a Tumour Volume reducing agent in Nasopharyngeal Angiofibroma. 9th Annual Conference of the Skull Base Surgery society of India and World Federation of Neurosurgery workshop, Conference proceedings, p25.
5. Sikka K, Thakar A, Mahapatra AK, Tandon DA. Delayed optic nerve Decompression for post-traumatic optic nerve injury. 9th Annual Conference of the Skull Base Surgery society of India and World Federation of Neurosurgery workshop, Conference proceedings, p25.
6. Verma R, Thakar A, Bahadur S, Mahapatra AK, Suri A. Etiology, outcome and limitations of Endoscopic management of CSF rhinorrhea. 9th Annual Conference of the Skull Base Surgery society of India and World Federation of Neurosurgery workshop, Conference proceedings, p30.
7. Lal P, Thakar A, Dhiwakar M, Bahadur S. Optic Nerve Compression in Allergic Fungal Sinusitis. 9th Annual Conference of the Skull Base Surgery society of India and World Federation of Neurosurgery workshop, Conference proceedings, p27.
8. Pradhan T, Bahadur S, Thakar A. Treatment outcome of malignancy of the external auditory canal and temporal bone. 9th Annual Conference of the Skull Base Surgery society of India and World Federation of Neurosurgery workshop, Conference proceedings, p32.

Chapters in book

S.Bahadur & Alok Thakar. Chronic specific infections of nose and sinuses. Scott. Brown Text book of Otolaryngology (7th Edition) Gen. Editor. M. Gleeson. Arnold Pub. London, 2008, Vol.2, 1958.

PATIENT CARE

The Department provides a state of art ENT service and equipped with the entire range of diagnostic and therapeutic facilities including a Cochlear Implant Lab, audiological facilities, Electronystagmographic facilities, Electro diagnostic Audiometry, Hearing Aid Analyzer, Ear mould Lab, Speech Therapy facilities, stroboscopy and computer aided speech analysis. The Rehabilitation Unit of Audiology and Speech Therapy function with the clinical department to provide supportive, diagnostic and rehabilitative services for the people with speech and Hearing Impairment.

The cochlear implantation (CI) program was started in All India Institute of Medical Sciences in 1996 under the chairmanship of Professor RC Deka and the first adult patient was successfully operated upon in February in 1997. Soon, the department started the Children Programme in 1998. Since then, 201 patients have been subjected to Cochlear implantation at AIIMS till March, 2008. Professor RC 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 & also PGIMER, Chandigarh. The Department is an established centre for cochlear implantation and in the year under review, a total of 40 cases have had successful cochlear implantation. All such cases are 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 from all parts of the country. The departmental faculty provides their surgical expertise in the effective management of head and neck cancers apart from the management of general and complicated Otorhinolaryngology diseases and disorders 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 (MBBS) teaching manual and a post graduate log book. It provides short and long term training to national and international doctors and audiologists every year.

OPD & Specility Clinics

ENT OPD New Cases: 44193
 Old cases: 36014

Specialty Clinics

RUAS– Speech : 2456
RUAS–Hearing : 2086
Head & Neck Clinic : 5591
Voice : 1589
Vertigo : 213
Audiology : 121
Skull Base : 89
Rhinology : 167

In– Patients

Long Admission– 869
Short Admission– 242

Surgical Procedures

Major– 2027
Minor– 1501
Minor OT– 22736

Community Services/ Camps

The Department provides comprehensive ENT services at Primary Health Center at Ballabhgarh, Haryana. In addition Dr Rakesh Kumar rendered his services in the OPD once a week at Deaf Center Gurgaon, under Haryana government.

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Professor R.C. Deka is the Dean of AIIMS; founder chairman of Indian Academy of Otolaryngology– Head Neck Surgery; Inspector for Medical council of India (MCI) and National board of examinations (NBE); Chairman of the Technical advisory group for the speech and hearing handicapped to the Ministry of Social Welfare; Chairman of Sectional committee of ENT surgical instruments (MHR04) of Bureau of Indian standards; International Editorial Board Member of (i) Acta–Otolaryngologica (Stockholm), (ii) Otolaryngology– Head and Neck Surgery (USA), (iii) Otolaryngology–Neurotology (USA), (iv) Pakistan Journal of Otology; Editorial Chief of Indian J of Otology and Vertigo view point.

Professor Deka was an invited international distinguished faculty at 50th Anniversary celebration of Widex International: An International seminar on Deafness and Hearing aid technology, Copenhagen, Denmark, 10–17th June 2007 and delivered a lecture on the Deafness problem in India including Cochlear implant Surgery; distinguished national faculty and patron for the World Federation of Neurosurgical societies, microsurgery & Endoscopic skull base cadaver workshop and 9th annual conference of skull base society of India and international skull base CME, 26–28th October 2007, AIIMS, New Delhi and he chaired a scientific session on “Endoscopic surgery of Paranasal sinuses and anterior skull base”

He was an invited distinguished international guest faculty at the 12th Asian Research Symposium on rhinology (ARSR) 28th to 29th November 2007 at Manila, Republic of Philippines and delivered a lecture on the treatment of allergic fungal rhino sinusitis ; invited distinguished international guest faculty at the 6th SAARC Otolaryngology and head and Neck surgery conference, 15 to 18th February 2008, Dhaka, Bangladesh. He delivered lectures on ‘Cochlear implantation in India’, ‘Basic Aspect of middle ear cholesteatoma and Tympano mastoid surgery, gave his expert talk as a panelist in the panel discussion’ Role of safe perforation in the prevention of middle ear cholesteatoma’ and chaired the session on ‘Discharging ear’; invited distinguished international guest faculty at the 3rd UAE Medical Students conference. Dubai, 16–17th March, 2008 and delivered a lecture on ‘Undergraduate Medical Education: Need for skill enhancement and research enquiry’

Professor Deka was the organizing chairman of “RHINOFESS 2007” Live surgical workshop and CME on Rhinoplasty and FESS on 30-31st December 2007 & 1st January 2008, AIIMS, New Delhi. He demonstrated the techniques of functional endoscopic sinus surgery to the audience and moderated a session on current concepts in Rhinology.

Professor Deka was honored with the most coveted institutional and globally reputed presentation of “Rashtriya Gaurav Award” along with the “Certificate of Excellence” at the grand annual ceremony of the India International friendship society in New Delhi on 7th July 2007 and spoke on the seminar with the theme “Economic growth and National integration”; awarded the “Best Citizen of India” at the grand annual ceremony of the India International friendship society in New Delhi on 7th July 2007

Professor S. Bahadur is President of the Skull Base Surgery Society of India, 2006–2007; Chairman, Organizing Committee in the World Federation of Neurosurgical societies, microsurgery & Endoscopic skull base cadaver workshop and 9th annual conference of skull base society of India and international skull base CME, 25–28th October 2007, AIIMS, New Delhi ; Moderator for the

Panel discussion on Parapharyngeal space tumour and Panelist for Panel discussion on Therapeutic dilemmas in head and neck cancers at the Diamond Jubilee Annual conference of the Association of Otolaryngologists of India, Agra, 3–5th January 2008

Professor SC Sharma was awarded Professor R. N. Misra Memorial oration on 20 August 2007 at King George Medical University & G.M. associated Hospital, Lucknow.

Dr K.K. Handa is Vice President of Association of Phonosurgeons of India from January 2006 to date; Treasurer of Neuro-otological and Equilibriometric Society of India from October 2005 till date; Reviewer of Indian Journal of Pediatrics and Indian Journal of Otorhinolaryngology; Delivered NK Agarwala oration “Phonosurgery Past Present and Future” at Guwahati at workshop on Phonosurgery organized by AOI North Eastern branch on 15th March 2008; invited guest faculty for the workshop on Developmental pediatrics at LHMC new Delhi on 05.10.2007 and he delivered a talk on Auditory pathways, Assessment of hearing in children; invited Faculty for surgical workshop in Phonosurgery at Ahmedabad on 15.04.2007; invited Faculty for the workshop on Phonosurgery at Bombay Hospital on 1.9.2007 to 2.9.2007; invited Faculty for Phonosurgical workshop and Hands on Cadaveric dissection at Annual conference of the Association of Phonosurgeons of India at Calcutta on 16.02.2008; invited Faculty for Surgical workshop on Phonosurgery in Kolhapur on 8-9th March 2008, for the International meeting of the Fungal sinusitis group at PGIMER Chandigarh on 9-11th February 2008, and for workshop on Phonosurgery organized by AOI North Eastern branch at Guwahati on 15th March 2008; Panelist for the panel discussion on care of professional voice at Annual conference of the Association of Phonosurgeons of India at Calcutta on 16.02.2008; Panelist for the panel discussion on “angiofibroma” in the 9th annual conference of skull base society of India on 27.10.2007; Panelist for panel discussion on phonosurgery Annual conference of Association of Otorhinolaryngologists of India Agra 4.01.2008; Instructor for the Instructional course on “Facial Nerve” at Annual conference of NES India at Calcutta on 08.12.2008; Moderator for Cross fire “Is the present system of residency training “adequate” at Annual conference of association of Otorhinolaryngologists “Delhi branch on 13.05.2007; Moderator for panel on “Laryngeal Framework Surgery” at Annual conference of the Association of Phonosurgeons of India at Calcutta on 16.02.2008; Conducted Surgical workshop on Phonosurgery in Kolhapur on 8–9 March 2008; Table tutor for temporal bone dissection on 25.10.2007 in 9th annual conference of skull base society of India on 27.10.2007 and a Faculty for Hands on Cadaveric dissection at Annual conference of the Association of Phonosurgeons of India at Calcutta on 16.02.2008.

Dr Alok Thakar was Vice Chairman, Organizing Committee, 9th Annual conference–Skull Base Society of India, and International Skull Base CME, October 2007, New Delhi; Co-organizer Head–Neck Cancer CME and Workshop, Mar 2008, New Delhi; was awarded the European Federation of Otolaryngological Societies (EUFOS) Fellowship (2007) to attend the 7th EUFOS Congress at Vienna; availed of the UICC International Cancer Technology Transfer Fellowship (2007) awarded by the UICC (International Union Against Cancer) for training to be undertaken at Kiel, Germany (Sept 2007) on “Disability limitation by Trans-oral CO₂ Laser Surgery for Laryngeal and Hypopharyngeal Cancers”; Member, ICMR Task Force on Review of Cancer Management Guidelines; Invited Faculty, SAARC Otolaryngological Association congress. Dhaka, February 08; Work undertaken by him was awarded the best paper award & Best video Awards at the Skull

Base Conference, Delhi AOI ENT Conference, and Delhi, Ophthalmological Conference (Orbital Subsection); Editorial Board Member, Otology India (Journal of the Indian Society of Otology). and Indian Journal of Otology; Reviewer, Laryngoscope; Moderator for Panel Discussion– Cancer Larynx in the 6th SAARC Otolaryngology–Head and Neck Surgery Conference, Dhaka, February 2008; Moderator for Panel on “Recent Advances in Otolaryngology”, Dhaka. Diamond Jubilee Annual conference of the Association of Otolaryngologists of India, Agra, Jan 2008; Panelist for the panel discussion on “Nasopharyngeal Angiofibroma” in the Diamond Jubilee Annual conference of the Association of Otolaryngologists of India, Agra, Jan 2008; Panelist for the Panel Discussion on “Para Nasal Sinus tumours” 6th SAARC Otolaryngology–Head and Neck Surgery Conference, Dhaka, February 2008; Panelist for the Panel Discussion on “Vertigo” at the 6th SAARC Otolaryngology–Head and Neck Surgery Conference, Dacca, February 2008; Panelist for the Panel Discussion on “Cancer Thyroid” at the 6th SAARC Otolaryngology–Head and Neck Surgery Conference, Dhaka, February 2008; Panelist for Panel Discussion on “Septo–rhinoplasty” at the 6th SAARC Otolaryngology–Head and Neck Surgery Conference, Dhaka, February 2008; Panelist on Panel Discussion on Recent Advances in Otology (Theme Stapes Surgery), GTB Hospital, New Delhi, March 2008; Panelist for the Crossfire– Should cadaveric dissection be part of PG examination? At the 30th Annual Conference of the Association of Otolaryngologists of India, Delhi Branch, May 2007.

Dr Rakesh Kumar is a co–member of Sectional committee of ENT surgical instruments (MHR04) of Bureau of Indian standards; Organising Secretary for Live surgical workshop on FESS and Rhinoplasty (RhinoFESS 07–08) organized by the ENT department, AIIMS from 30 December to 1st Jan 2008; as Joint Secretary he has helped in organizing “9th Annual Conference Skull Base Surgery Society of India, International Skull Base CME” on 26–28 October 2007, New Delhi; panelist for the panel discussion on “Functional Endoscopic Sinus Surgery” held at India International Center and organized by AOI (Delhi Br) in May 2007; Panelist for Panel Discussion on “Patient selection in rhinoplasty” and “Rhinoplasty made easy – Tips and Tricks in rhinoplasty” at the RHINOFESS 2007. Live surgical workshop and CME on Rhinoplasty and FESS. 30–31st December 2007 & 1st January 2008, AIIMS, New Delhi; Table Demonstrator for the World Federation of Neurosurgical societies, microsurgery & Endoscopic skull base cadaver workshop, 25–28th October 2007, AIIMS, New Delhi

Dr C. Venkata Karthikeyan availed of “Fellowship in Head and Neck oncology and LASER surgery at Southampton General Hospital and Royal South Hants Hospital, Southampton, UK from 4 February 2008 to 15 March 2008; organizing co-secretary of RHINOFESS 2007, live surgical workshop and CME on Rhinoplasty and FESS, 30–31 December 2007 & 1st January 2008, AIIMS, New Delhi; Member, Organizing committee, World Federation of Neurosurgical societies, microsurgery & Endoscopic skull base cadaver workshop and 9th annual conference of skull base society of India and international skull base CME, 26–28 October 2007, AIIMS, New Delhi; Panelist for Panel Discussion on “Complications of FESS–prevention and management” at RHINOFESS 2007; Table Demonstrator for World Federation of Neurosurgical societies, microsurgery & Endoscopic skull base cadaver workshop, 25–28th October 2007, AIIMS, New Delhi ; Assistant editor, Indian Journal of Otology; Reviewer Indian Journal of Pediatrics.

9.25 Paediatrics

Professor and Head

Veena Kalra

Professor

Maharaj K. Bhan
(On deputation)
Arvind Bagga

Vinod K. Paul
Ashok K. Deorari

Narendra K. Arora
Upto September 2007

Additional Professor

Sushil K.Kabra

Madhulika Kabra

Associate Professor

Pankaj Hari

Sheffali Gulati

Assistant Professor

Rakesh Lodha
Ramesh Agarwal

Rachna Seth

Vandana Jain

Scientists

Shinjini Bhatnagar
Manju Ghosh

Pratima Ray
Madhumita Roy Choudhary

Suman Vashisht
Manju Saxena

EDUCATION

Undergraduate, Postgraduate, Paramedical (Only innovations; changes; new courses):

PhD Program: Total PhD students 8 (Pediatric Gastroenterology 4, Genetics 4)

DM in Child Neurology ongoing program

DM in Neonatology ongoing program

MSc Pediatric Nursing ongoing program of College of Nursing: pediatric faculty participate in teaching and guiding students

MSc Biotechnology: Pediatrics faculty participate in teaching

BSc Nursing: Pediatric faculty including dietician participate in teaching

Postgraduate Quiz in Pediatrics (college round) organized under the aegis of Indian Academy of Pediatrics

Short term training

A total of 57 short term trainees were trained in different superspecialities in the department.

Pediatric Neurology	20
Genetics	11
Neonatology	9
Nephrology	7
Nurses:	3
Nutrition & Dietetics	6
Pediatric Pulmonology and Intensive care	1

CME

The department organized 17 seminars/ workshops or training courses:

- 1 IPOKRATES Seminar of Neonatal Neurology on 21-23rd November 2007, for Teaching of Teachers organized by Division of Neonatology.
- 2 National movement for disseminating knowledge of rational Neonatal Ventilation practices by conducting country wide Workshops at Hyderabad - April 2007, Delhi – July 2007, Aurangabad– October 2007, Calcutta – December 2007, Trivandrum – February 2008. Organized by Division of Neonatology.
- 3 Thesis Writing and Research Methodology Workshop for young faculty members from Medical Colleges, 12-15th November 2007 at AIIMS, New Delhi organized by Division of Neonatology
- 4 Neonatal resuscitation workshop for postgraduates and practioners. AIIMS, New Delhi, September 2, 2007. Organized by Division of Neonatology.
- 5 Breastfeeding workshops for nurses. August 6, September 2007, October 4, AIIMS, New Delhi. Organized by Division of Neonatology.
- 6 Neonatal ventilation workshop. India International Centre, New Delhi. July 5-8, 2007 Organized by Division of Neonatology.
- 7 VI-National CME in Neonatology, AIIMS, New Delhi, Feb 15-17, 2008 Organized by Division of Neonatology.
- 8 Neurodevelopmental Support and Early Intervention in NICU. 16th September, 2007. Organized by Division of Neonatology.
- 9 Monthly meeting of National Neonatology Forum, New Delhi on October 25, 2007. Organized by Division of Neonatology.
- 10 Workshop on “IAP State Level Workshop on Acceleration of Implementation of Pre-Service IMNCI, 2007. Organized by Division of Neonatology.
- 11 Essential Newborn Nursing Courses at Gujarat (Surat – June 2007; Jamnagar July 2007; Ahmedabad –December 2007). Organized by division of Neonatology
- 12 Third Pediatric Nephrology Training Course on 2-3 February 2008 at AIIMS, New Delhi Organized by Division of Nephrology.
- 13 Workshop on Data Analysis for Clinical Trials, February 2008. Organized by Division of Gastroenterology
- 14 7thWorkshop on “Prenatal & Postnatal Diagnosis of Genetic Disorders using Molecular Methods” from 10th -17th April 2007 organized by Departments of Anatomy, Pediatrics (Genetics) & Hematology, AIIMS.
- 15 Lab workshop funded by DBT March 2008 Organized by Division of Genetics
- 16 Poster competition for Nutrition students and practicing Dietitians.
- 17 Educational workshop for parents and patients of Cystic Fibrosis, organized by Pediatric Pulmonology and Intensive Care division from 15-17 Dec 2007

Faculty members delivered a total of 110 lectures in various national and international CME programs.

National and International Conferences

Lectures delivered

The faculty took 84 lectures in international and national conferences.

RESEARCH

Funded Projects

Completed

1. Vitamin D status of exclusively breastfed term healthy infants at a median age of 3 months during summer season and its correlation with maternal vitamin D status. Investigator Dr Vandana Jain, Funding Agency- AIIMS, total funding: Rs 1 lac, Duration: 2007-08.
2. Cloning and Expression of NSP4 Enterotoxin of Rotavirus in *E.coli* and evaluation of NSP4 specific immune responses during natural rotavirus infection in children, Investigator: Dr. Pratima Ray, Funded by DST; Duration: 2004-2007, Funds: 19,90,000.00
3. “Young Infant Sepsis Study” AIIMS-Safdarjung as one of the participating centers. Principal Investigator: Ashok K Deorari, Funding Agency: SEARO office, WHO, Total Funding: US \$ 70,000, Duration of Project: January 2004 to August 2007.
4. Development of Learning Package on Essential Newborn Care for Nurses. Investigator: Dr. Ashok K Deorari, Funding Agency: SEARO office, WHO, Total Funding: US \$ 10,000, Duration of Project: November 2007 to March 2008.
5. Developing the training material for the multisite LBW feeding study Investigators Dr VK Paul, Dr AK Deorari, R Agarwal, J Sankar, and Y Kumar, funding agency: WHO, total duration: 6months, Grants: US \$ 3000.
6. Determination of mesenchymal stem cell concentration in umbilical blood at birth and their correlation with gestation Investigators: R Agarwal, A Jain, VK Paul and AK Deorari, funding agency: AIIMS, INR 100,000, total duration: 2007-2008
7. Serum cystatin C assay for the detection of early renal insufficiency in malnourished children with chronic kidney disease, Investigator: Dr. Pankaj Hari; Funded by AIIMS; 2005-2007, Funds: 70,000.
8. Assessment of psychosocial and neurocognitive outcomes in childhood Leukemia, 2007, Funding Agency: All India Institute of Medical Sciences, Funds: 67,000.
9. Randomized double blind placebo controlled trial of amoxicillin in the treatment of non severe pneumonia with wheeze in children aged 2-59 months of age: A multi centric double blind trial. Supported by INCLEN, 2004-2007, Total funds: 7,60,950.
10. ICMR INDIACLEN COLLABORATIVE TRIAL Effectiveness of 3-day amoxicillin versus 5-day co-trimoxazole in the treatment of non-severe pneumonia in children aged 2-59 months- A multi-centric open labeled trial, funding by ICMR, INDIACLEN, 20005-2007, Total funds: 4,60,264.
11. High dose and low dose azithromycin in cystic fibrosis and interventional study to evaluate effect on disease parameter. Funded by ICMR 1.7.2005- 30.6.2007 (I 453) Total funding Rs, 4,32,559.
12. Capacity building for sweat chloride estimation test by indigenously developed method funded by Solvay Phrama 2006-2008, Total funding RS 1,71,000
13. “Surveillance of Serotype distribution and anti-microbial resistance pattern in Invasive Bacterial Infection (IBIS) caused by *Streptococcus pneumoniae* and *Haemophilus influenzae* in India (IBIS EXTENSION PHASE III)” South Asian Pneumococcal Alliance (SAPNA) funded by Global Alliance for Vaccines and Immunization 2007-2008. N 923. Total funding: 4,00,000.

Ongoing

1. KIGS multinational Growth Survey, Investigator Dr Vandana Jain, Funding Agency-Pfizer Research Division, Total funding Rs 90, 000 per year, Duration:2006-ongoing.
2. Sensitivity and specificity of the Biocard kit in identifying patients of cell disease. PI- Dr Shinjini Bhatnagar, Duration: 2006-2008, No Funds. Kits are provided.
3. Etiological significance of microscopic colitis in chronic diarrhea in children and its pathogenesis, Funding Agency: ICMR, Name of Investigator: Dr. Shinjini Bhatnagar, Co-PI Dr. Siddhartha Datta Gupta (Pathology), Duration: 2003 – 2007, Total funding: 2,350,580
4. 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. Funding Agency DBT, Investigator: Dr. Shinjini Bhatnagar, Co-PI Dr. S.K. Kabra, Duration: 2005-2008, Total funding:87,64,000
5. Specific targeted research or innovation project – Funded by University of Bergen, Norway, European Union Investigator: Dr. Shinjini Bhatnagar Co-PI Dr. S.K. Kabra, Duration:2005-2008, Total funding,7,215,299
6. Efficacy of zinc in the treatment of severe and very severe pneumonia in hospitalized children 2-24 months of age, Funding Agency: Johns Hopkins Hospital and Health System, Investigator: Dr. Shinjini Bhatnagar Duration: 2006-2009, Total funding: 5,384,284
7. Efficacy of zinc in the treatment of severe and very severe pneumonia in hospitalized children 2-24 months of age, Funding Agency: WHO, Investigator: Dr. Shinjini Bhatnagar, Co-PI Dr. S.K. Kabra, Duration:2006-2009 Total funding:7,553,367
8. 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, Funding Agency: DBT, Investigator: Dr. Shinjini Bhatnagar: Co-PI Dr. H.K. Prasad, Duration:2007-2009, Total funding: Rs. 4,034,000
9. Efficacy of Stem cell in improvement of left ventricular function in patients with acute myocardial infarction. Funding Agency: DBT, Investigator, Dr. Shinjini Bhatnagar, Duration:2006-2009, Total funding: Rs. 10,042,00
10. Characterization of rotavirus strains from a multicentric Rotavirus study at AIIMS, Chief Investigator: Dr. Pratima Ray, Funded by DBT; Duration: 2005-2008, Funds: Rs. 31,97,000.00
11. The Indo-US collaboration to develop rotavirus vaccine, Chief Investigator: Prof. M.K. Bhan/ Dr. Pratima Ray, Funded by NIH; Duration: 2003-2008, Funds: Rs. 2,13,43,185.00
12. Safety & Immunogenicity of 116E rotavirus vaccine candidate, Chief Investigator: Prof. M.K. Bhan/ Dr. Pratima Ray, Funded by DBT; Duration: 2000-2008, Funds: Rs. 27,54,000.00.
13. Model Injection Centers (MIC): A Program to Improve Injection Practices in the Country, Funding Agency: INCLN & USAID, Dr. Narendra K. Arora, 2005-2008, Funds: Rs11,501,866.
14. Integrated Management of Neonatal & Childhood Illnesses. Baseline assessment of childhood morbidity, mortality in selected districts in India. Funding Agency: UNICEF, Investigator: Dr. Narendra K. Arora, Duration: 2005-2008, Total funding: Rs. 2,47,31,179.
15. Neuro Developmental Disabilities among children in India – An INCLN Study, Funding Agency: INCLN, AUTISM SPEAKS & National Trust & Ministry of Social Justice & Empowerment, Investigator: Dr. Narendra K. Arora, Duration: 2006-2008, Total funding: Rs. 2,25,00,000.

16. Achieving MDG-5: INSIGHTS INCLEN Program Evaluation Network Study Into Governance of Health Systems (Pilot Study In Ethiopia), Funding Agency: DRC, Canada, Investigator: Dr. Narendra K. Arora, Duration: 2007-2008, Total funding: Rs. 54,00,000.
17. Measurement & Determinants of Childhood Obesity in 30 Countries: An INCLEN- McMaster University Collaborative Program, INCLEN – Funding Agency: ICMR, Investigator Dr. Narendra K. Arora, Duration: 2007-2012, Total funding: Rs. 400,00,000
18. 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, Investigator: Madhulika Kabra, Funding Agency: SAFE Duration:2005 onwards, Total Funding: Euro 10,000
19. Economic modeling study Non-invasive (NI) RhD testing in Europe & Asia Investigator: Madhulika Kabra, Funding Agency: SAFE, Duration: May 2006-October 2008, Total Funding Euro 20,000.
20. Center of Excellence (COE) - Program Support Project, Investigator: Madhulika Kabra, Funding Agency DBT, Duration: Funds Rs 3.53 Crore for five years, Duration: 2007-2012.
21. Evaluation of MLPA and Array CGH for the detection of cryptic subtelomeric rearrangements in idiopathic mental retardation, Principal Investigator: Madhulika Kabra, D. Ghosh, Neerja Gupta, Funding agency DBT Total Funds: 26.94 lacs. Duration: 2007-2010.
22. Molecular genetic studies in Steroid resistant Nephrotic syndrome, Principal Investigator: Arvind Bagga, Madhulika Kabra, Pankaj Hari, Funding Agency DBT, Total funding: 4.70 lacs. Duration: 2007-2010.
23. Validation of Strategies for Rapid Prenatal Detection of Aneuploides 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 Project Investigator: Madhulika Kabra, Deepika Deka, Rashmi Shukla, Funding Agency: DBT Total funding: 17.79 lacs Duration: 2007-2010.
24. 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, Project Investigator: Madhulika Kabra, N. Raghuram, Madhumita Roychowdhury, Deepika Deka, Funding Agency: DBT, total funding: 14.92 lacs. Duration: 2007-2010.
25. Identification of Novel Genes for non-syndromic hearing loss in the Indian Population, Project Investigator: Madhulika Kabra, Manju Ghosh, Funding Agency: DBT, Total funding: 54.28 lacs. Duration: 2007-12.
26. Newborn screening for congenital Hypothyroidism and congenital Adrenal Hyperplasia - A multicentric study, Prof. Veena Kalra, Prof V.K. Paul, Prof AK Deorari, Dr. Madhulika Kabra, Dr. Sheffali Gulati, Dr. Ramesh Aggarwal, Dr. Vandana Jain, Dr. Suman Vashisht, ICMR, 15 lacs. Duration: 2007-2010.
27. WHO Multi-site Study: Feasibility, requirements and effects of their implementation in health facilities, Principal Investigator: Dr. Vinod Paul, Funding Agency: WHO Geneva, total funding: US \$ 29000, Duration: March 2007-March 2008.
28. WHO South East Asia Neonatal Perinatal Data base Network, Principal Investigator: Dr. Vinod Paul, Funding Agency: SEARO Office, WHO, Total funding: US \$ 15000, Duration: March 2007-June 2008.

29. Enhancing networking capacity for advancing newborn health in South East Asia, Principal Investigator, Dr. Vinod Paul, Funding Agency: Saving New born Lives, Save the Children US Total funding: US \$ 4500 Duration 2006-09
30. Development and testing low cost diapers for low birth weight babies, Principal Investigator: Dr. Vinod Paul, Funding Agency: DBT, Total Funding: Rs. 25 lacs, Duration: March 2007-June 2007.
31. Antibiotic prophylaxis in the management of vesicoureteric reflux: a randomized double blind placebo controlled trial Investigator: Dr. Pankaj Hari; Funded by ICMR; 2006-2009, Funds: 11,41815
32. Daily corticosteroids to prevent infection associated relapses in patients with frequently relapsing nephritic syndrome, Investigator: Dr. Arvind Bagga; Funded by ICMR; 2006-2009, Funds: 9,22,020
33. Dose-ranging study to evaluate the safety and efficacy of olmesartan medoxomil in children and adolescents with hypertension, Investigator: Dr. Arvind Bagga; Funded by Sankyo Pharma; 2006-2008, Funds: 7,60,734.
34. A multicenter double blind, randomized, parallel group evaluation of 12 weeks of valsartan compared to enalapril on sitting blood pressure in children 6-17 years of age with hypertension. Investigator: Dr. Arvind Bagga; Funded by PPD Pharmaceutical Development India Ltd.; 2007-2009, Funds:3,30,270
35. A randomized double blind multicenter 6 week study to evaluate the dose response of valsartan on blood pressure in children 1-5 years old with hypertension followed by a 2 week placebo withdrawal period. (Chief Investigator: Dr. Arvind Bagga; Funded by PPD Pharmaceutical Development India Ltd.; 2007-2009, Funds: 7,60,734
36. Evaluation of Anthracycline induced myocardial cardiotoxicity in children with Cancer: A comparative study with echocardiography and MUGA, Investigator-Dr Rachna Seth, Funding Agency-All India Institute of Medical Sciences, New Delhi, Duration-one year, Funds - Rs 40,000/-
37. To understand the deviation in cell signaling pathway of Autism through neurotrophic factors (Insulin like Growth Factor-1) & undertake a randomized blinded trial with Olanzapine to evaluate its effect on Insulin like Growth Factor-1 (IGF-1), clinical symptoms of autism rating scales-2006-09, Rachna Seth, Savita Sapra, Suman Vashisht, DST,4,08,000 Duration: 2006-2009.
38. Development of CME on use of antiretroviral in HIV/ AIDS. Collaborative project with UCLA, Investigator SK Kabra, Funded by NIH Total funds: US \$20,773, Duration:2005-2008.
39. Strengthening of CF services at AIIMS. Funded by Cystic Fibrosis Worldwide (CFW), Investigator S K kabra, total funding Rs: 3,10,525, duration 2006-2008
40. "Zinc supplementation in childhood tuberculosis patients in Delhi, India." Funded by Norwegian Programme for Development, Research and Education (NUFU), Investigator S K kabra, 2007-2009. Total funding: US\$ 1,31,000.
41. A Randomized Controlled Trial to Evaluate the Effect of Normal Saline in 5% Dextrose at Standard Maintenance Rate, Reduced Volume (2/3 Maintenance rate) of N/5 Saline in 5% Dextrose and N/5 Saline in 5% Dextrose at Standard Maintenance Rate on the Incidence of Hyponatremia in Hospitalized Children. Investigator Rakesh Lodha; Funding Agency: AIIMS, Duration: 2007-2008 Total funding: Rs. 1,00,000.

Departmental Projects

Endocrinology

1. Comparison of serum, intraerythrocyte and dietary magnesium in obese and none obese children and relation to insulin resistance.
2. Study of factors associated with precipitation of diabetic ketoacidosis in previously diagnosed patients with type 1 diabetes mellitus.
3. Basal and stimulated cortisol levels in preterm and very low birth weight infants with and without shock: a case control study.
4. Implementation and evaluation of Structured Clinical Case Presentation for the end of posting practical assessment of 4th and 5th semester undergraduate students posted in Pediatric Outpatient Department at AIIMS: A curriculum innovation project.

Genetics

1. Celiac disease in Down Syndrome
2. Molecular studies for Wilsons Disease
3. Mutational Spectrum of Osteogenesis Imperfecta in Indian patients (CSIR, fellow- Dr Neerja Gupta)
4. Chromosomal breakage syndromes (CSIR fellow- Dr Rashmi Shukla)
5. Molecular genetic studies in Rett Syndrome, Ms Rajni Khajuria (Ph D Student). ICMR fellowship
6. Cytogenetics and Molecular studies in Chromosomal Breakage syndromes (CSIR) Dr. Madhulika Kabra, CSIR, CSIR Fellowship (Dr. Rashmi Shukla), Five Years.
7. Molecular Genetic Studies in Osteogenesis Imperfecta, Dr. Madhulika Kabra, Ms Pallavi Shukla (Ph.D student), UGC Fellowship
8. Genetic polymorphisms and expression of MTHFR & RFC-1 genes in NTD and CAD molecular Genetic studies in Cystic fibrosis Madhulika Kabra, Dr. Shivram S, Shastri, CSIR fellowship.

Neonatology

1. Comparison of LED vs CFL phototherapy in treatment of Jaundice – randomized control trial.
2. Predictors of CPAP failure in respiratory distress in newborn.
3. Evaluation of phototherapy units used for treatment of neonatal Jaundice.
4. Hypoxemia in Young Infants a predictor of severity of illness.
5. Impact of transcutaneous bilirubinometry by multiwavelength reflectance method (bilichek) compared to visual inspection assessment of jaundice of the need for blood sampling for confirmation of total serum bilirubin in healthy term and near-term neonates in first week of life
6. Correlation of cord serum retinol level in preterm very low birth weight infants weight maternal serum retinol level at delivery
7. Knowledge and skills acquisition by nurses through telemedicine and conventional in-person classroom teaching: A randomized trial
8. Mesenchymal stem cell concentration in umbilical cord blood at different gestation
9. Use of bubble and conventional CPAP to facilitate extubation in preterm very low birth weight infants: A Descriptive Study
10. Neuro-sensory outcomes of very low birth weight neonates at 18 months of age

11. Comparison of glomerular and tubular functions and kidney growth in normal and growth restricted neonates: A prospective cohort study
12. Efficacy of zinc in reducing hyperbilirubinemia among High risk neonates
13. Basal and stimulated cortisol levels in preterm very low birth weight infants with and without shock: A case-control study
14. Behavior and feeding performance on paladai feeding in preterm neonates
15. Rate of rise in transcutaneous bilirubin levels during first 48 hour in healthy near term and newborns

Nephrology

1. Effect of vitamin D3 supplementation on bone disorders in children with chronic kidney disease
2. Randomized controlled trial on efficacy and safety of cyclosporine versus tacrolimus in children with steroid resistant nephrotic syndrome
3. Efficacy of sevelamer versus calcium acetate in patients with chronic kidney disease stage 3 and 4: An open label, randomized study
4. Non-invasive screening for early atherosclerosis in children with nephrotic syndrome using high resolution ultrasonography
5. Outcome of lupus nephritis in Indian children
6. Prevalence of dyslipidemia in children with chronic kidney disease and measurement of carotid intima-media thickness and flow mediated vasodilatation.
7. Glomerular filtration rate estimation in children using prediction equation from plasma creatinine and height
8. Incidence of acute kidney injury in sick, hospitalized children: A prospective observational study
9. Efficacy of rituximab for patients with steroid resistant nephrotic syndrome
10. A prospective, randomized controlled trial comparing the efficacy of intravenous cyclophosphamide and alternate day prednisolone *versus* tacrolimus and alternate day prednisolone for patients with steroid resistant nephrotic syndrome
11. Complement abnormalities in patients with atypical hemolytic uremic syndrome

Neurology

1. A double blind placebo controlled trial to study the efficacy of Baclofen in reducing tone in children with spastic Cerebral palsy 2-5 years of age.
2. To study the role of creatine in Duchenne Muscular dystrophy using Magnetic resonance spectroscopy.
3. A randomized control trial of IV Valproate versus IV Phenytoin in status epilepticus after initial midazolam bolus
4. Study of etiological risk factor profile in pediatric strokes
5. Evaluation of ketogenic diet as add-on therapy in infants and young children with refractory epilepsy.
6. Blood Ammonia levels in two dose ranges of valproic acid monotherapy.
7. Immunodiagnosis of childhood tubercular meningitis by detection of antigens in cerebrospinal fluid using ELISA
8. Noninvasive screening for early preclinical atherosclerosis in children on phenytoin or carbamazepine monotherapy for more than 18 months.

9. Intranasal versus intravenous midazolam for control of acute seizures in children: prospective open-labelled randomized equivalence trial.
10. Effect of low dose folic acid supplementation on phenytoin induced gingival overgrowth: a randomized double blind controlled trial.
11. Randomized open label comparative trial of 4:1 versus 2:1 ratio of ketogenic diet in refractory childhood epilepsy.
12. Efficacy of modified constraint induced movement therapy on upper extremity in cerebral palsy children with asymmetrical motor impairment: a randomized control trial.
13. Effect of Donazepil on IQ in children with Fragile X syndrome.
14. Evaluation of cardiac dysfunction in children with Duchenne muscular dystrophy
15. Comparison of recurrence of seizures in neurocysticercosis: calcified versus non-calcified healed lesions.

Oncology

1. Clinical profile of autistic children in India.
2. Role of Olanzapine in modifying some of the core features of autism
3. Role of IGF-1 in modification of core symptoms of autism and autism rating scales
4. Neurocognitive and psychosocial issues in children with acute leukemia and survivors of acute leukemia
5. Arsenic versus ATRA in Acute Promyelocytic Leukemia.

Pulmonology and Intensive Care

1. 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
2. Oral Mucosal Decontamination with Chlorhexidine for Prevention of Ventilator Associated Pneumonia in children – A Randomized Controlled Trial.
3. Changes in CD4 count with antitubercular therapy in HIV infected children with tuberculosis.

Collaborative Projects

Endocrinology

1. Body fat and its relationship with metabolic syndrome indicators in overweight pre-adolescents and adolescents. (Clinical Pharmacology Division, Department of Medicine, Funding agency- IAEA, Vienna).
2. Efficacy of Flutamide in reducing tumor size and vascularity in nasopharyngeal carcinoma. (Department of ENT).

Genetics

1. An Integrated approach for mutation analysis and identification of new gene(s) for X-linked Mental Retardation in collaboration with Dr. B.K. Thelma, Delhi University, South Campus, funded by DBT, duration 2005-2008. Total funding Rs 14 lacs
2. CFTR mutations in congenital absence of Vas deference Departmental project in collaboration with Department of Urology AIIMS
3. A Study of chronic pancreatitis and other risk factors for the development of cancer of the pancreas. In collaboration with Department of Gastroenterology PhD Thesis

4. Fibrillin gene mutations in TOF. In collaboration with department of CTVS AIIMS
5. Molecular Genetic Studies in Patients with Leukodystrophy.
6. Molecular Genetic Studies in Indian Children with Rett Syndrome.
7. Molecular Genetic Studies in Indian Children with Steroid Resistant Nephrotic Syndrome

Neonatology

1. Effect of early versus delayed feeding in preterm neonates with reversed or absent end diastolic flow: a RCT. 4 centre multisite study. (Nangia S, Paul VK, Deorari AK, Agarwal R on behalf of AIIMS)

Neurology

1. Comparative evaluation of expression of dystrophin, utrophin and n-NOS in muscle and skin biopsy of patients with dystrophinopathies in collaboration with Department of Pathology
2. Molecular detection of Campylobacter jejuni by PCR and it's subtyping using PCR-RFLP and PFGE in collaboration with Deptt. Of Microbiology
3. Development and validation of high throughput assays for the rapid diagnosis of Tuberculosis in collaboration with Department of Biotechnology
4. Screening for CMV infection by PCR with department of Microbiology.

Oncology

1. Detection of minimal residual disease (MRD) in B cell lineage acute lymphoblastic leukemia (ALL) at the end of induction by flowcytometry. In collaboration with Laboratory Oncology, IRCH.
2. Role of Paclitaxel in the management of Retinoblastoma In collaboration with RPC.
3. Evaluation of expression of P-glycoprotein (P-gp) in retinoblastoma in collaboration with RPC.
4. Evaluation of myocardial function in pediatric cancers and pediatric cancer Survivors In collaboration with Cardiology.
5. Evaluation of anthracycline toxicity in childhood cancers; A comparative study with echocardiography and MUGA in collaboration with Cardiology & Nuclear medicine.

Pulmonology and Intensive care

1. Multiplex –RT PCR for detection of viruses causing lower respiratory tract infections viz human respiratory syncytial viruses (hRSV), human para influenza viruses (h PIV), Influenza virus (FLU) and human Metapneumovirus (hMPV) and Real time RT-PCR for the detection and quantification of h RSV. In collaboration with Microbiology department
2. Detection genotyping and immune response study of human metapneumovirus. In collaboration with Microbiology department
3. Role of human Meta pneumo virus in acute respiratory infection, In collaboration with Microbiology department, Funded by NIH, USA
4. Diagnosis of symptomatic visceral leishmaniasis by use of polymerase chain reaction on peripheral blood samples in collaboration with Microbiology
5. Antigenic and molecular characterization of Influenza Virus strains from acute respiratory infection. In collaboration with Microbiology department
6. A prospective study on nosocomial infections in a Pediatric high risk unit with special reference to device associated infections with Microbiology department.

7. Development of taqman based real timer quantitative polymerase chain reaction assay for detection of pneumocystis carinii/ jerovacci pneumonia. With Microbiology department

PUBLICATIONS

Indexed journals

1. Afzal K, Bagga A, Menon S, Hari P, Jordan SC. Treatment with mycophenolate mofetil and prednisolone for steroid-dependent nephrotic syndrome. *Pediatr Nephrol* 2007; 22: 2059-65.
2. Agarwal R, Deorari AK, Paul VK. Patent ductus arteriosus in preterm neonates. *Indian J Pediatr* 2008; 75: 277-80.
3. Agarwal R, Jain A, Deorari AK, Paul VK. Post-resuscitation management of asphyxiated neonates. *Indian J Pediatr* 2008; 75: 175-80.
4. Alam MA, Husain SA, Narang R, Chauhan SS, Kabra M, Vasisht S. Association of polymorphism in the thermolabile 5, 10-methylene tetrahydrofolate reductase gene and hyperhomocysteinemia with coronary artery disease. *Mol Cell Biochem* 2008; 310: 111-7.
5. Arachchi HS, Kalra V, Lal B, Bhatia V, Baba CS, Chakravarthy S, Rohatgi S, Sarma PM, Mishra V, Das B, Ahuja V. Prevalence of duodenal ulcer-promoting gene (dupA) of *Helicobacter pylori* in patients with duodenal ulcer in North Indian population. *Helicobacter*.2007; 12: 591-7.
6. Bagga A, Bakkaloglu A, Devarajan P, Mehta RL, Kellum JA, Shah SV, Molitoris BA, Ronco C, Warnock DG, Joannidis M, Levin A; Acute Kidney Injury Network. Improving outcomes from acute kidney injury: report of an initiative. *Pediatr Nephrol* 2007; 22:1655-8.
7. Bagga A, Menon S, Hari P, Mantan M, Dinda A. Nephrotic syndrome preceding psoriasis in children. *Pediatr Nephrol* 2007; 22: 1373-6.
8. Bagga A, Sinha A, Moudgil A. Rituximab in patients with the steroid-resistant nephrotic syndrome. *N Engl J Med* 2007; 356: 2751-2.
9. Bagga A, Sinha A. Evaluation of renal tubular acidosis. *Indian J Pediatr* 2007; 74: 679-86.
10. Bagga A. Management of steroid sensitive nephrotic syndrome: revised guidelines. *Indian Pediatr* 2008; 45: 203-14.
11. Bajpai A, Kabra M, Gupta N, Sharda S, Ghosh M. Intravenous pamidronate therapy in osteogenesis imperfecta: response to treatment and factors influencing outcome. *J Pediatr Orthop* 2007;27:225-7
12. Bajpai A, Pandey RM, Kabra M, Menon PS. Growth pattern and final height in 21-hydroxylase deficiency. *Indian Pediatr* 2007; 44: 771-3.
13. Balakrishnan P, Ganesan K, Bhima Shankar PR, Kabra M. Gene symbol: FBN1. *Hum Genet* 2007; 120: 917.
14. Balakrishnan P, Kabra M, Arora NK, Kalra V. Gene symbol: ATP7B. *Hum Genet* 2007;120:917.
15. Balakrishnan P, Kabra M, Arora NK, Kalra V. Gene symbol: ATP7B. *Hum Genet* 2007 ; 120: 909.
16. Balakrishnan P, Kabra M, Arora NK, Kalra V. Gene symbol: ATP7B. *Hum Genet* 2007; 120: 908.
17. Bhandari N, Sharma P, Glass RI, Ray Pratima, Greenberg H, Taneja S, Saksena M, Rao CD, Gentsch JR, Parashar U, Maldonado Y, Ward RL, Bhan MK. Safety and Immunogenicity of Two Live Attenuated Human Rotavirus Vaccine Candidates, 116E and I321, in Infants: Results of a Randomised Controlled Trial. *Vaccine* 2006; 24: 5817-23.

18. Bharaj P, Chahar HS, Pandey A, Diddi K, Dar L, Guleria R, Kabra SK, Broor S. Concurrent infections by all four dengue virus serotypes during an outbreak of dengue in 2006 in Delhi, India. *Virology* 2008 Jan 9; 5: 1.
19. Bhargava A, Deorari AK. What's the link between the interconnected nature of the world and population health? *BMJ (Student)*, 2008; 16: 14- 5.
20. Bhatnagar S, Aggarwal R. Lactose intolerance; should we worry about it? *Brit Med J* 2007;334:1331-2
21. Bhatnagar S, Lodha R, Choudhury P, et al. IAP Guidelines 2006 on Hospital Based Management of Severely Malnourished Children (Adapted from the WHO Guidelines). *Indian Pediatr* 2007; 44: 443- 461.
22. Bhatnagar S, Lodha R, Choudhury P, Sachdev HPS, Shah N, Narayan S, Writing committee. IAP guidelines 2006 on Management of Acute Diarrhea. *Indian Pediatr* 2007; 44: 380-89.
23. Bhatnagar S, Lodha R. Probiotics and diarrhea: *Indian Pediatr* 2007; 44; 873.
24. 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.
25. Chawla D, Agarwal R, Deorari AK, Paul VK. Retinopathy of prematurity. *Indian J Pediatr* 2008; 75:3-6.
26. Chawla D, Agarwal R, Deorari AK, Paul VK. Fluid and electrolyte management in term and preterm neonates. *Indian J Pediatr* 2008;75:255-9.
27. Chawla D, Deorari AK, Saxena R, Paul VK, Agarwal R, Biswas A, Meena A. Vitamin K1 versus Vitamin K3 for Prevention of Subclinical Vitamin Deficiency: A Randomized Controlled Trial. *Indian Pediatr* 2007 Nov 2007; 44: 817-22.
28. 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.
29. Deorari AK, Agarwal R, Paul VK. Management of infants with intra-uterine growth restriction. *Indian J Pediatr* 2008; 75: 171-4.
30. Deorari AK, Chellani H, Carlin JB, Greenwood P, Prasad MS, Satyavani A, Singh J, John R, Taneja DK, Paul P, Meenakshi M, Kapil A, Paul VK, Weber M. Clinicoepidemiological profile and predictors of severe illness in young infants (<60 days) reporting to a hospital in North India. *Indian Pediatr* 2007; 44: 739-48.
31. Deorari AK, Paul VK. The Young Infants Clinical Signs Study Group (Incl: Deorari AK, Paul VK.) Clinical signs that predict severe illness in children under age 2 months: a multicentre study. *Lancet* 2008; 371:135-47.
32. Dubey S, Kabra M, Bajpai A, Pandey RM, Hasan M, Gautam RK, Menon PS. Serum leptin levels in obese Indian children relation to clinical and biochemical parameters. *Indian Pediatr* 2007; 44: 257-62.
33. Dutta T, Agashe HB, Garg M, Balakrishnan P, Kabra M, Jain NK. Poly (propyleneimine) dendrimer based nanocontainers for targeting of efavirenz to human monocytes/macrophages in vitro. *J Drug Target*. 2007;15:89-98.
34. Gulati S, Saxena A, Kalra V. Cardiac Involvement determines the prognosis of Duchenne muscular dystrophy: *Indian J Pediatr* 2007; 74:210-211
35. Gupta N, Kabra M. Maffucci syndrome. *Indian Pediatr* 2007; 44: 149-50.

36. Gupta N, Kabra M. Recent advances in approach to treatment of genetic disorders: clinician's perspective. *Indian Pediatr* 2007; 44: 361-9.
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PATIENT CARE

Outpatient Services

Department of Pediatrics provides general OPD services daily from 9 a.m. in Pediatrics OPD. There are 15 superspeciality services provided by department, which are as follows:

Name of Service	New Cases	Old cases	Total Attendance
General OPD	29,574	37,698	67,272
Pediatric Neurology Clinic	1545	3378	4923
Myopathy Clinic	292	501	793
Pediatric Gastroenterology Hepatology and Nutrition	1241	4110	5351
Well Baby Clinic	492	562	1054
High Risk Neonatology Clinic	202	764	966
Pediatric Nephrology Clinic	442	3028	3460
Pediatric Chest Clinic	452	3388	3840
Pediatric Tuberculosis Clinic	264	2097	2361
Pediatric Rheumatology Clinic	137	1293	1430
Genetics and Birth Defects Clinic	1538	1050	2588
Pediatric Oncology Clinic	113	3223	3110
Pediatric Cancer Survivor Clinic	115	205	320
Pediatric Endocrine and Metabolism Clinic	800	1200	2000
Development Clinic	565	587	1152
Grand Total	37,772	63,084	1,00,620

In addition Cystic fibrosis and Pediatric HIV services were provided in Pediatric Chest clinic.

Physiotherapy Services were provided to the patients in Neurology clinic, Myopathy clinic, Genetics clinic, Development clinic, Pediatric Chest Clinic, Rheumatology clinic and OPD services

Dietetics services were provided to patients attending Pediatric Gastroenterology, Hepatology and Nutrition clinic, Pediatric Chest clinic and general OPD services

Indoor Services

Indoor services include admission facilities in general wards, day care facility, oral rehydration unit and pediatric 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 Pediatric Intensive care unit which is well equipped to provide care to critically ill children.

Admissions in ORU	1500
Long admissions in Pediatric wards	1840
Admissions in Day care facility (Short admission)	2700
Patients admitted in PICU	266

Special investigations/ procedures

Endocrinology Division

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 Division

Upper Gastrointestinal Endoscopy	505
EST	272
Colonoscopy	40
Intestinal Biopsies	260
Stricture dilation	30
D-Xylose	40
24 hrs. Fecal Fat Estimation	40
Immuno-Fluorescence Assay (IFA) to Detect Anti Endomysial Antibodies (AEA) And Tissue transglutaminase ELISA for Diagnosis of Celiac	2000
Nitro-blue tetrazolium test for CGD	70
Serum Zn estimation	1500
Serum Cu estimation	1200
HBsAg:	61
Hbe/antiHBe:	40
Urinary Succinyl Acetone (Tyrosinemia):	25

Genetics Division

Developmental / Behavioural evaluation and intervention: were provided developmental assessment, early stimulation and behavioural intervention.	1435
<i>Cytogenetics Lab.</i>	
Peripheral Blood Cultures	550
Cord Cultures for Karyotyping	38
Chromosomal Breakage studies	21
<i>Biochemical Lab.</i>	
Urine and Plasma for disorders of aminoacid metabolism	386
Disorders of mucopolysaccharidosis (Spot test)	75
Galactosemia	11
Prenatal diagnosis for high risk pregnancies by Triple test	1612
MSAFP	1666
B hcG	1640
Estriol	1612
Homocystenuria test	48
Other Urine chemical tests	1235
Plasma Ammonia	515

Enzyme assays	
<i>Molecular lab.</i>	
Thalassemia family studies	101
Thalassemia prenatal diagnosis	96
Duchenne muscular dystrophy family studies	100
Duchenne muscular dystrophy prenatal diagnosis	16
Cystic fibrosis family studies	48
Cystic fibrosis prenatal diagnosis	4
Spinal muscular atrophy family studies	69
Spinal muscular atrophy prenatal diagnosis	13
Hemophilia A family studies	14
Hemophilia A prenatal diagnosis	3
Hemophilia B family studies	2
Hemophilia B prenatal diagnosis	3
Fragile X screening	89
Fragile X Prenatal diagnosis	5
Xmn polymorphism studies	5
Amniotic fluid Rh genotyping	20
Intersex cases for genotyping	32
Skeletal dysplasia mutations	17
Skeletal dysplasia prenatal	1
MTHFR	25
RhD Genotyping	5
Nephrology Division	
Hemodialysis	510
Acute peritoneal dialysis (including automated peritoneal dialysis)	120
Continuous ambulatory peritoneal dialysis	12
Plasmapheresis	70
Temporary hemodialysis catheter placement: (internal jugular, subclavian, femoral)	124
Renal biopsy	120
Renal transplantation	3
Neurology division	
Electroencephalography:	1155
Electrophysiological studies (EMG, NCV, BERA, VER)	68
Blood lead estimations	15
Arterial Lactate	350
CSF Lactate	130
Muscle biopsies	203
Nerve biopsies	8
Skin biopsies	10

Oncology Division

Bone marrows aspirations/ biopsies	500
CSF examinations for malignant cells	300

Pulmonology and Intensive care Division

Sweat Chloride estimation	567
Fibre- optic bronchoscopy	221
Spirometry	552
Allergy skin testing	20
Mechanical Ventilation	225
Arterial Blood Gas Analysis	12025
Electrolyte estimation	10560

Rheumatology Division

Intraarticular steroid injections	32
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Community Service & camps

1. Volunteered professional services through Pulse Polio Initiative, Spastic Society of North India, Inner Wheel (Rotary), Prayas many other NGO's
2. "Childhood Cancer meet" organized by Oncology Division, 1st May 2007.
3. "1st Childhood Diabetes meet" organized by Endocrinology division 26th June 2007
4. "2nd Childhood Diabetes meet" organized by Endocrinology division 22nd November 2007.
5. 3rd Childhood Diabetes-celiac meet" organized by Endocrine and Gastroenterology, Hepatology and Nutrition Division 11th March 2008.
6. "Gluten Guilt " By Anuja Agrawala In: Times Life Supplement, Times of India: (ed); Asha Chowdhary; 23rd September 2007, Pg 2.
7. Tuberculosis clinic provides free ATT through NGO (IC Trust) to all poor patients
8. Support for children suffering from Cancer in collaboration with Cancer Patients Aid Association. The association provided services in form of counseling, nutritional support, medicinal support, support for accommodation etc. During year 2007-2008, 123 new patients were enrolled.
9. Following celebrations were done for children suffering from cancer in collaboration with Cancer Patients Aid Association: Holi celebration, Rakhi celebration, Rose day celebration, Diwali celebration, Children's day celebration, Christmas celebration. During these celebrations sweets and toys were distributed to children. In addition children with cancer were taken to movie, and drama
10. A play room is being maintained by Cancer Patients Aid Association in Pediatric wards. Their volunteer maintain the room, provides toys and educational material.
11. Children with disability are provided comprehensive care in collaboration with Action for Ability Development and Inclusion (AADI).

AWARDS AND HONOURS**Dr V. K. Paul**

Member, International Editorial Board, Journal of Perinatology; International Pediatric Association Scientific Committee for the International Pediatric Congress, 2010.

Dr Arvind Bagga

Councilor, International Pediatric Nephrology Association (2001-07); Member, Pediatrics Board, Medical Council of India (2007-08); Member, Expert Group on Classification of Childhood Vasculitides, European League Against Rheumatism (2005-08); Member Expert Group, Acute Kidney Injury Network (2005-08); 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

Editor Indian Journal of Pediatrics; Chairman Taskforce on HIV research of Indian Council of Medical Research

Dr Pankaj Hari

Awarded Fellowship of International Society of Nephrology at Cedars Sinai Medical Center, Los Angeles, USA; Honorary Secretary, Indian Society of Pediatric Nephrology; Member Disease Outbreak Response Cell (DORC); Reviewer for Pediatrics, and American Journal of Kidney Disease

Dr Sheffali Gulati

Served as Expert for Neurology projects for Indian Council of Medical Research and National Trust; Editorial Consultant of Indian Journal of Pediatrics and Executive board member of Editorial board of Indian Pediatrics.

Dr Rakesh Lodha

Associate Editor of Indian Pediatrics, the official journal of Indian Academy of Pediatrics

Dr Vandana Jain

Selected for the prestigious fellowship of Foundation for Advancement in Medical Education and Research (FAIMER) Philadelphia 2007-9; The International Scholars Award 2008 of the Lawson Wilkins Pediatric Endocrine Society of North America.

Dr Ramesh Agarwal

NNF Gold medal for the research paper, 'Comparison of transcutaneous bilirubinometry and visual assessment of level of jaundice in term and near term neonates for deciding the need for blood sampling: a randomized trial and economic evaluation' on neonatal jaundice?' at the 26th Annual Convention of National Neonatology Forum (NNF), Pune, Dec 2008 (Along with Drs. S. Mishra and D. Chawla)

Dr Shinjini Bhatnagar

Elected a Fellow of the National Academy of Sciences, India, 2007

Dr Pratima Ray

Awarded ICMR International fellowship for senior biomedical scientist 2007; Elected life member of American Society of Virology; Reviewer for Infection Genetics and Evolution, Ind J Pediatric, Pediatric Infectious Diseases Journal.

Ms Savita Sapra

Received Asha Nigam award for her contribution in the field of Child Psychology in 35th National annual conference of Indian Association of Clinical Psychologists on Feb. 2008.

SIGNIFICANT EVENTS

Department

- Department of Pediatrics was judged as Best Department of Pediatrics in the country by 'The Week' magazine for the year 2007.
- The Department continues to host the WHO Collaborating Centre for Training and Research in Newborn Care for the South East Asia Region.
- The Department continues to host the WHO Collaborating Centre for Training in Clinical and Laboratory Genetics in Developing Countries for the South East Asia Region, and is recognized as a Centre of Excellence by the Department of Biotechnology, Government of India.
- Neonatology division is the nodal center for National Neonatal Perinatal Database for five countries in SE Asia region namely Nepal, Bangladesh, Sri Lanka, Thailand & Indonesia.
- Team of Doctors & Nurses in neonatology division have 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.
- Division of Neonatology continues to maintain highly popular websites on neonatal health, namely, www.newbornwhocc.org, and on Kangaroo Mother Care, namely, www.kmcindia.org. These websites highlight the activities of our Division and provides free access to learning resource materials developed by Neonatology Division.
- A premature neonate weighing only 580 g at birth survived in the neonatal unit. This is among the lowest birth weight survivors ever in the country. He was also perhaps the lowest weight neonate in India who underwent a major surgical procedure to excise a lung cyst.

Dr Veena Kalra

Expert for Science and Society Division of DST for review of health projects; External Expert to select candidates for faculty positions in different Specialities at Sher-i-Kashmir International Convention Complex, Srinagar; External Examiner for final year M.B.B.S. clinical examination in Paediatrics at Government Medical College Srinagar, Government Hospital for Children, Srinagar. External Expert for faculty selections at PGIMER, Chandigarh; Appointed by the Govt. Medical College, Ajmer, as External Examiner in MD (Pediatrics); Nominated by Medical Council of India for Inspection of Krishna Institute of Medical Sciences, Karad for increase of seats in M.D. (Paediatrics) and D.C.H. courses.

Dr V K Paul

Nominated as the member of the Board of the global Partnership for Maternal, Newborn and Child Health, WHO Geneva; Expert member, of the International Advisory Panel of the National Rural Health Mission; Member, Advisory Group of the American Academy of Pediatrics on Neonatal Resuscitation; Advisor, WHO/SEAR on newborn health for the WHO child health focal points in South East Asia Region; Member of the following committees of the Ministry of Health and Family Welfare, Government of India: a) Pre-service IMNCI scale up, b) Home-based newborn care through

ASHAs, c) National Child Health Policy, and d) incorporating malaria treatment guidelines in IMNCI, National Coordination Group for National Action Plan for Children, Ministry of Women and Child development, Government of India; Technical advisor to the Norway-India Partnership Initiative (NIPI); Member of the Indo-US Joint Working group (NIH-ICMR) on MCH research; Expert Reviewer, Department of Biotechnology, Government of India, for research on recombinant surfactant; Member, International Scientific Advisory Council, Bill and Melinda Gates Foundation Project on Prevention of Prematurity and Stillbirths, University of Washington, School of Medicine, Seattle, US; Member of the technical / academic advisory panels of: a) SURE Start (PATH / Gates Foundation, b) International Institute of Population Sciences, Mumbai, c) SNEHA Mumbai, d) USAID funded project on MCH PAIMAN, Pakistan, and d) Saving Newborn Lives, Save the Children, US.

Dr N K Arora

Member Technical Committee for Finalization of Technical Specification of ILRs, Deep-freezers and Insulated delivery vaccine van. Ministry of Health & Family Welfare/UIP, New Delhi; Nominated Member for “Maternal & Child Health”, Division of Reproductive Health & Nutrition (Task Force & AdHoc), ICMR – PRG, New Delhi; Member, Scientific Advisory Board, ICMR, New Delhi.

Dr A K Deorari

Served as WHO consultant to DPR Korea for promoting Essential Newborn Care, October-November 2007 and SEARO-WHO for essential newborn care package meeting at Bangkok, September 2007. Member Technical Committee for Finalization of Technical Specification of ILRs, Deep-freezers and Insulated delivery vaccine van. Ministry of Health & Family Welfare/UIP, New Delhi April 16th, 2007); Nominated Member for “Maternal & Child Health”, Division of Reproductive Health & Nutrition (Task Force & AdHoc), ICMR – PRG, New Delhi (April 18th, 2007); Member Scientific Advisory Board, ICMR, New Delhi (May 4th, 2007).

Dr Madhulika Kabra

Genetic subdivision was given Center of Excellence Program by the department of Biotechnology Government of India under leadership of Dr Madhulika

Dr Rakesh Lodha

Member, WHO Technical Reference Group, Pediatric HIV-Care and treatment; Member, Pediatric Working group, National AIDS Control Organization; Associate Editor of Indian Pediatrics.

Dr Rachna Seth

Elected as a member of the ‘International Society of Pediatric Oncology’; Elected life member to the Pediatric Hematology Chapter, IAP; Attended the Integrated Management of Neonatal & Childhood illness TOT workshop of Physicians and the facilitator program at Safdurjung Hospital. Represented INCLIN at the ‘Child Anemia Workshop’ held at the National Institute of Health & Family Welfare.

Dr Vandana Jain

Founder member of the “Indian Society for Pediatric and Adolescent Endocrinology”. ‘Vitamin D levels in exclusively breastfed winter born babies and their mothers’ has been selected for presentation at the prestigious Pediatric Academic Society (PAS) meeting, May 2008 at Hawaii.

Dr Shinjini Bhatnagar

Nominated National Convener by Indian Academy of Pediatrics for implementing pre-service IMNCI in medical colleges; Member Expert Group, Department of Biotechnology, GOI for setting up MSc & PhD programme in medical institutions and universities in Nutritional Sciences; Invited as Technical Advisor by World Health Organization for discussions on scaling up of pre-service IMNCI at WHO, Geneva.

Dr. Pratima Ray

Visiting scientist, Center for Disease Control and preventions, Atlanta, USA and Emory Vaccine Center, Emory University, Atlanta, USA; Examiner PhD thesis, Swinburn University of Technology, Victoria, Australia

Ms. Anuja Agarwala

Appointed as Spokesperson and Leader of Indian Dietetic Association by National Executive Committee members of Indian Dietetic Association on 21st July 2007 to form Dietetic Council of India; Invited as Member Jury for countrywide Lead India Campaign of Times of India to judge the semi finalists at IIT campus, New Delhi on 6th October 2007; Invited to attend “Nestle Nutrition Institute Workshop” as Special guest for presenting the latest science in Nutrition Education organized by Nestle India at Hyatt Regency, New Delhi on 17th November 2007.

Residents and research staff

Dr Ashima Gulati (Research Associate) and **Dr Sidharth Sethi** (Research Officer) awarded best poster and oral research presentations, National Conference of Pediatric Nephrology (Hyderabad) November 2007

Dr Meghana R. Sebastian, Jr. Resident, received ICMR grant for her thesis: “Oral Mucosal Decontamination with Chlorhexidine for prevention of ventilator associated Pneumonia in children – A Randomized Controlled Trial”.

Dr Sunil Kumar Gupta, Jr. Resident: received ICMR grant for his thesis: “Detection of Minimal Residual Disease in B-cell Acute Lymphoblastic Leukemia at end of induction by slow cytometry”

Dr. Bipin Jose, Jr. Resident: received ICMR grant for his thesis: “Comparison of Dietary and blood Magnesium levels in obese and Lean Children and their Association with Insulin resistance”

VISITING SCIENTISTS

1. Dr Hary Haizerman, Pulmonologist, CF center, HagaZiekenuis, The Hauge, The Netharlands.
2. Dr Niranjan “Tex” Kissoon, Senior Medical Director, Acute and Critical Care Programs, British Columbia Children’s Hospital, University of British Columbia, Vancouver, British Columbia, V6H 3V4, Canada
3. Dr Peter Rimensberger. University Children’s Hospital of Geneva Pediatric and Neonatal ICU 6, Rue Willy-Donze CH-1211 Geneva Switzerland
4. Dr Jay Deshpande, Monroe Carell Jr. Children’s Hospital, Vanderbilt University, USA
5. Ms Rebekah Nesbitt, RN, Monroe Carell Jr. Children’s Hospital, Vanderbilt University, USA

9.26 Paediatric 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 inclusive 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 in the ward of BSc and MSc Nursing students

Short- and long-term training

Four trainees from various countries (Israel-1, Ireland- 2)) underwent short-term training/ observership at the department.

CONTINUING MEDICAL EDUCATION

Organized by the department

- International symposium on fetal interventions and genetic counseling for major congenital malformations, AIIMS, New Delhi, October 3, 2007
- International symposium on recent advances in Pediatric Oncology, AIIMS, New Delhi, October 29, 2007

Lectures delivered

Professor D.K. Gupta

- Lectures during International Symposium on Fetal Therapy and Genetic Counseling in Major congenital anomalies AIIMS, New Delhi, October 2007
 - Chairman's speech – challenges in diagnosis and management.
 - Role of stem cell in major congenital malformations
- 17th Imre Pillaszovich visiting Professorship Lecture at the University of PECS, Hungary, Management of Complicated Esophageal atresia and Tracheoesophageal fistula, 20 May 2007
- Spectrum, Etiology, clinical Presentation and Management of Intersex children, at the University Children Hospital, Vienna, Austria on May 22, 2007
- Lectures and demonstrations in the Live Operative Workshop on Esophageal replacement, Niloufer Children Hospital, Hyderabad, August 21-22, 2007

- Lecture on Epidemiologic differences in the causes of the Corrosive Strictures of the esophagus in India and moderated the panel discussion on the subject
- Esophageal replacement – A 27 year experience at AIIMS, during the Symposium of Esophageal replacement held in honor of the superannuation of Prof Karl Waag, University of Mannheim, Germany, June 16-18, 2007
- Inguino scrotal swelling in Children, Jodhpur Rajasthan, August 28, 2007
- Inaugural Speech on the Magnitude of the Problems of Pediatric Cancer in India, International symposium on oncology, AIIMS, 27 October 2007
- Challenges of Global Child Health in developing Nations to Ekal Vidhalaya Foundation of India–Health Care Education for Empowerment of Tribal and Rural Bharat, 9 December 2007
- Pediatric Pyeloplasty–How to minimize complications, Workshop on Pediatric Urology, Mumbai January 12-13, 2008
- Intersex disorders in Children and TEF and OA–New Insights, Department of Pediatrics and Pediatric surgery, King Fahd Armed Forces Hospital, Jeddah, March 2008.

Professor V. Bhatnagar

- Management strategies in vesico-ureteral reflux in children. Consensus Meeting on Management of VUR, Indian Association of Pediatric Surgeons & Pediatric Nephrology Chapter of Indian Academy of Pediatrics, New Delhi, March 11, 2007.
- Rationalisation of preservation of congenital pouch colon and coloplasty as part of staged reconstruction of congenital pouch colon. Consensus Meeting on management of congenital pouch colon, Indian Association of Pediatric Surgeons, New Delhi, March 12, 2007.
- Prenatal diagnosis: its impact on pregnancy and detection and management of congenital malformations. National Seminar on Teratology and Genetic Disorders, Varanasi, 8-9 February, 2008.
- Donor safety and selection in LRLT. Pre-conference Symposium on Liver Transplantation. XVII National Conference of the Indian Association of Surgical Gastroenterology. New Delhi, September 29 – October 1, 2007.

Professor M. Bajpai

- Clinical presentation, pathology, genetics and decision making in the management of true hermaphrodites: CME on Intersex disorders held in B.J. Wadia hospital, Mumbai on April 13, 2008.

Dr. S. Agarwala

- ‘Foreign bodies in the airways’, CME on essentials of chest surgery for general surgeons, ASICON surgical research and education foundation of ASI, Delhi state chapter, 24 March 2008, New Delhi.

National and International Conferences

Lectures delivered

Professor D.K. Gupta

- Complicated TEF : management strategies, Training in Pediatric surgery – an Indian Scenario and Intersex in Children – an Indian experience, 2nd Annual Conference, Saudi Association of Pediatric Surgeons, Taif, Saudi Arabia, June 12-15, 2007

- M.S Ramakrishnan Oration, 33rd Annual conference of the Indian Association of Pediatric Surgeons, Jaipur, 2007 on – Esophageal substitution in Neonates – An alternative approach
- Role of Myectomy for Hirschsprung’s disease and Management of complicated Hirschsprung’s disease, 2nd World Congress of the World Federation of the Association of Pediatric Surgeons, held in Buenos Aires, Argentina, September 2007
- Neuroblastoma in Children during the 44th Annual Meeting of the Japanese Society of Pediatric Surgeons, Tokyo, Japan from May 31- June 2, 2007
- 2nd Congress of the International Society for Hypospadias and Intersex Disorders, Rome, Italy November 16-18, 2007 and deliver the speech during the inaugural function.
- Wilms’ Tumor – Including bilateral tumors and IVC extension and Stem Cell Research – related to Pediatric malformation during 3rd Saudi Scientific Association of Pediatric Surgeons, Dammam, Saudi Arab November 27-28, 2007
- Hormonal manipulations in Intersex disorders in children and Role of hCG in cryptorchidism, International Conference on Molecular and Clinical Aspects of Gonadal and Non-Gonadal actions of gonadotrophins, New Delhi. February 7-9, 2008
- Stem Cells in Regenerative Medicine – Hope and Scope, 3rd International Neonatology Conference, Jeddah, Saudi Arab, February 17-20, 2008
- 7th Conference of the Nepal Pediatric Society with 3rd Conference of the SAARC region, Kathmandu, Nepal, March 28-30, 2008 on Stem Cell therapy in children – Hope and Scope

Professor M. Bajpai

- Long term results of bladder exstrophy repair without osteotomy: Annual conference of IAPS, Jaipur, 2007
- Management concerns in Vesico-ureteric reflux: Annual meeting of the Indian Society for Paediatric Nephrology, held at AIIMS, 2007

Dr Sandeep Agarwala

- ‘Guidelines for treatment of hepatoblastoma for resource challenged nations (RCN Guidelines)’ at annual meeting of SIOPEL held at Mumbai, October 2007.

RESEARCH

Funded projects

1. N-myc gene amplification by polymerase chain reaction in neuroblastoma and tumor surveillance by detecting tyrosine hydroxylase protein using RT PCR. D.K. Gupta. Funded by DBT from 2005 to 2007. Funds: Rs 19.5 lakh.
2. A concept Model: Role of Autologous and Human stem cell in an Experimental model of Biliary atresia in rats, in collaboration with Department of Stem Cell facility, Pathology, AIIMS, 2008 Funded by ICMR (IRIS ID-2007/06040). Funds: Rs 4,77,656.
3. Melanocyte cell culture and transplantation in albinos- An National Institute of Immunology, Funded by DST joint research Project with AIIMS, as co-investigator (only technical support).
4. A study on clinical and molecular markers of the chronic interstitial nephropathy in congenital unilateral ureteropelvic junction obstruction Funded by DST, 3 years (2008-11). Funds: Rs 30 lakhs
5. 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), microalbuminuria, ngiotensin II and plasma renin activity in the early diagnosis of renal damage. M. Bajpai. Funded by DST for 3 years (2006-2009). Funds: Rs 23 lakh.

Departmental projects

Completed

1. Outcome of patients with antenatally diagnosed unilateral pelviureteric junction obstruction managed conservatively and surgically

Ongoing

1. Effect of intralesional injection sclerotherapy using sodium tetradecyl sulphate in vascular malformations
2. Mucous production in the neobladder after augmentation colocolocystoplasty
3. Bladder and urethral function evaluation by uroflowmetry in Patients operated for hypospadias
4. Assessment of associated anomalies with the Cystoscopy and uroflowmetry in patients with hypospadias
5. A randomized and controlled study to evaluate the incidence of leaks with the early institution of expressed breast milk feeds through the nasogastric tube after repair of TEF
6. 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
7. Results with the use of platinum based regimes in the treatment of pediatric malignant germ cell tumors
8. Prospective study of treatment of children with Wilms' tumour on treatment with National Wilms Tumor Study Group-5 regimen
9. Prospective study of treatment of children with rhabdomyosarcoma on treatment with International Rhabdomyosarcoma Study Group-5 regimen
10. Prospective study of treatment of children with hepatoblastoma on treatment with Cisplatin and Doxorubicin regimen
11. Prospective study on five drug regimen for the management of clear cell sarcoma of the kidney
12. Clinical and urodynamic changes after valve ablation and their correlation with radiological anatomy of the urinary tract before and after pharmacotherapy.
13. A study on systemic and local effects of Gastrocystoplasty in bladder exstrophy.
14. Study on oral vs intravesical efficacy of anticholinergic agents in neurogenic bladder

Collaborative Projects

Completed

1. Role of FDG-PET-CT in staging and evaluation of early response to chemotherapy in children with neuroblastoma and rhabdomyosarcoma (with Nuclear Medicine)
2. Histological changes occurring after colonic diversion in rat: A study to test beneficial effects of various agents (with Anatomy)
3. Comparison of efficacy and safety of oral antibiotics (amoxycillin-clavulinic acid and ofloxacin) with intravenous combination (ceftriaxone and amikacin) in outpatient setting in pediatric patients of low risk febrile neutropenia (with Medical Oncology)
4. Telomerase estimation in patients with Wilms' tumour and hepatoblastoma as a marker for prognosis (with Pathology)

5. Evaluation of lymphocytic infiltration in Wilms' tumour and adjoining normal renal parenchyma and its relation to recurrence and outcome (with Pathology)
6. Whole body MR imaging for detection of skeletal metastases in pediatric patients of small cell neoplasms: Comparison with skeletal scintigraphy and FDG-PET CT scan (with Medical Oncology, Radiodiagnosis and Nuclear Medicine)
7. To compare efficacy of total gut irrigation using normal salins vs polyethylene glycol for children undergoing corrective colo-rectal surgeries (with College of Nursing)
8. Comparison of imaging modalities in the evaluation of neonatal cholestasis (Radio-diagnosis).
9. Long term follow-up of patients after augmentation cystoplasty (Endocrinology & Metabolism)

Ongoing

1. Antibiotic prophylaxis in the management of vesicoureteric reflux: A multicentric randomized double-blind placebo-controlled trial (with Paediatrics)
2. Comparison of efficacy of continuous epidural infusion of morphine, fentanyl and combination of morphine and fentanyl with bupivacaine for post-operative analgesia in children. (with Anaesthesiology and Intensive Care)
3. Therapeutic use of stem cells in various congenital malformations. (with Department of Stem Cell facility, pathology, anesthesiology, interventional radiology and Medical Oncology)
4. Use of stem cell therapy in children with renal dysplasia and end stage renal disease. (with Stem Cell facility, pathology, interventional radiology and Medical Oncology)
5. To study the role of autologous stem cell therapy in patients with Intersex disorders and infertility. (with Stem Cell facility, anesthesiology, pathology, and Medical Oncology)
6. Antibiotic prophylaxis in the management of vesicoureteric reflux : a multicentric randomized double blind placebo controlled trial (Pediatrics).
7. Comparison of imaging modalities in the evaluation of portal hypertension (Radio- diagnosis).
8. Volumetric analysis of the spleen in portal hypertension (Radio-diagnosis).
9. Conservation of circulating blood volume in portal hypertension (Hematology, Nuclear Medicine).
10. The role of nitric oxide in portal hypertension (Biochemistry).
11. Long term results of esophageal replacement by reverse gastric tube (Radio-diagnosis, Nuclear Medicine).
12. Long term results following Kasai's procedure for biliary atresia .
13. Long term results following tubularisation of pouch colon for pull through (Radio- diagnosis).
14. An evaluation of cardiotoxicity related to adriamycin in children with solid tumours (with Nuclear Medicine)
15. Evaluation of hearing deficiencies in children who have received cis-platinum for treatment of solid tumours (with ENT)
16. 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)
17. Gain of chromosome 17q and its effect on outcome in patients with neuroblastoma (with Anatomy and Pathology)
18. Role of PET scan in evaluation of response to chemotherapy pediatric tumors (with Nuclear Medicine)
19. Evaluation of role of adjunctive therapy with ¹³¹I MIBG therapy for advanced non-responsive, relapsed and metastatic neuroblastoma (with Nuclear Medicine)

PUBLICATIONS

Journals

1. Agarwala S, Bakhshi S, Bajpai M, Bhatnagar V, Gupta AK, Dattagupta S, Iyer VK, Gupta DK. Validation of PRETEXT staging system and risk categorization for prognostication and outcome in hepatoblastoma- Results from AIIMS-HB 94 trial. *Pediatric Blood and Cancer* (abstr) 2007;49:401.
2. Agarwala S, Bakhshi S, Srinivas M, Bajpai M, Bhatnagar V, Iyer VK, Mohanti BK, Bhasker S, Dattagupta S, Gupta AK, Gupta DK. Prospective study comparing simple nephroureterectomy with radical nephroureterectomy in the treatment of wilms' tumor- Outcomes of AIIMS-WT 99 study. *Pediatric Blood and Cancer* (abstr) 2007;49:407.
3. Arun R, Lodha R, Sharma R, Kabra SK, Agarwala S. Gastropleural fistula as a complication of empyema thoracis. *Ind J Pediatr* 2007;74:301-303.
4. Bajpai M, Bal CS, Tripathi M, Kalaivani M, Gupta AK. Prenatally diagnosed unilateral hydronephrosis: prognostic significance of plasma renin activity. *J Urol.* 2007;178(6):2580-4
5. Bajpai Minu, Bal C.S., Kalaivani M., Gupta AK. Plasma renin activity for monitoring vesicoureteric reflux therapy: Mid-term observations. *J Pediatr Urol.* 2008;H(1):60-64.
6. Chandrasekharam V.V.S.S., D.Talwar, V.Bhatnagar. Evaluation of the vascularity of an isolated bowel segment using fluorescein angiography in rats. *Journal of Indian Association of Pediatric Surgeons* 2007;12:65-67.
7. Chhabra A, Arora MK, Gupta A, Dharan M, Agarwala S. Intraoperative anaphylaxis with a complicated pulmonary hydatid cyst. *Pediatr Anaesthesia* 2007;17:195-7.
8. Gupta DK, Editorial comment on article Corporal punishment related ocular injuries in Nigerian Children. *Journal of Indian Association of Pediatric Surgeons.* 2007;12:79.
9. Gupta DK, Editorial. Child Abuse – an ongoing stigma for the civilized society. *Journal of Indian Association of Pediatric Surgeons.* 2007;12:79-80.
10. Gupta DK, Editorial. The much awaited Baby is born with a smile. *Journal of Pediatric Surgical Specialties* 2007;1:3.
11. Gupta DK, Sharma S, Arora MK, Agarwal G, Gupta M, VP Grover. Esophageal Replacement in the Neonatal Period in Infants with Esophageal Atresia and Tracheoesophageal Fistula. *J Pediatr Surg.* 2007; 42: 1471-77.
12. Gupta DK, Sharma S, Venugopal P, Kumar L, Mohanty S, Dattagupta S. Stem cells as a therapeutic modality in pediatric malformations. *Transplant Proc.* 2007;39:700-2.
13. Iyer VK, Agarwal Shipra, Nayak Anupama, Agarwala S, DattaGupta S, Verma K. Evaluation of fine needle aspiration cytology and apoptotic gene expression in characterization and prognostication of Wilms' tumor. *Pediatric Blood and Cancer* (abstr) 2007;49:422.
14. Jain V., Singal A.K., Gupta A.K., Bhatnagar V. Transmural intra-thoracic lipoma with intraspinal extension. *Journal of Pediatric Surgery* 2007;42:2120-22.
15. Jindal B, Bal V, Bhatnagar V. Role of renal function reserve in children with hydronephrosis. *J Ind Assoc Pediatr Surg* 2007;12:196-201
16. Jindal B, Grover V.P, Bhatnagar V. Assessment of lower urinary tract function in children before and after Swenson's pull through for Hirschsprung's disease. *Journal of Indian Association of Pediatric Surgeons* 2007;12:72-75.

17. Ragavan M, Bhatnagar V. Peritoneal penetrating pencil injury. *Tropical Gastroenterology* 2007;28:85-86.
18. Sharma S, Gupta DK, Dinda AK. Are therapeutic Stem Cells justified in Bilateral Multicystic Kidney Disease ? A review of Literature with insights in to the Embryology. *Pediatr Surg Int* 2007;23; 801-806
19. Sharma S, Jain Rani, Singh MK, Gupta DK, A case of congenital diaphragmatic hernia with a hernia sac attached to the liver: hints for an early embryological insult, *J Pediatr Surg.* 2007;42:1761-3
20. Sivanandan S, Lodha R, Agarwala S, Sharma M, Kabra SK. Inflammatory myofibroblastic tumor of the trachea. *Pediatr Pulmonol* 2007;42:847-50.

Chapters in books

1. Choledochal cyst. S. Agarwala. *GI Surgery Annual (Supplement)* 2007;14:22-29.

PATIENT CARE

Attendance in OPD and specialty clinics

	New cases	Old cases	Total
General OPD	6,378	12,589	18,967
Specialty clinics			
Hydrocephalus	29	209	238
Intersex	21	207	228
Craniosynostosis	9	17	26
Pediatric urology	344	2,797	3,141
Pediatric solid tumor	130	1468	1,598
CRHSP, Ballabgarh	602	–	–
OPD Minor procedures	2,800	–	–
Admissions			
AB-5 ward	2396		
AB5-ICU	163		
Surgical procedures			
Major	1063		
Minor	541		
At CRHS, Ballabgarh	346		
Special investigations			
Urodynamic evaluation	373		
Uroflometry	763		
Ano-rectal manometry	46		
Oesophageal manometry	12		

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Professor D.K. Gupta delivered the MS Ramakrishnan Oration of the Indian Association of Pediatric surgeons -2007; Re-elected as the President, Federation of SAARC Association of Pediatric Surgeons for 2007-9; Re elected as the Executive council Member, World Federation of Association of Pediatric Surgeons (WOFAPS) for 2008-2010; Re elected as the Hony Secretary of the International society of the Intersex and hypospadias 2008; invited as the President of the Asian Association of Pediatric

Surgeons and the SAARC Association of Pediatric Surgeons and the Secretary of the Internal Society on Hypospadias and Intersex disorders to deliver welcome address, plenary/Guest lectures, conduct scientific meetings in Rome, Germany, Buenos Aires, Japan, Saudi Arab and Nepal; Nominated as the Congress President of the 3rd World Congress of Pediatric Surgery, by the Asian Association, SAARC Association and the Indian Associations of Pediatric Surgeons, New Delhi in 2010; invited to participate on the LIVE Program at Doordarshan for the promotion of health in General public on- Total Health- Congenital anomalies April 8, 2007-12-23 and cancers in children, on February 10, 2008; Invited as the Inspector for the MCI Inspection, Pt BD Rohtak Medical College, –December , 2007; Invited as an external examiner for M.Ch in Pediatric surgery, SMS College, Jaipur, 2007; Invited as an expert for the CSIR selection of the pool officers – November 2007; Invited as Chairman of the Committee to prepare the curriculum for the undergraduates in medicine and the Postgraduates in Pediatric Surgery by the Medical Council of India, New Delhi , December 9, 2007; Hosted the Meeting with the Indo - Swiss Group visiting India on promotion of science and technology under the Bilateral exchange Program from the University of Lausanne, Switzerland, April 27, 2007; Served as the Editor in Chief, Journal of Indian Association of Pediatric surgeons for a period of 3 years 2005-07; Continues to be reviewing Editor for the following Indexed Journals- Journal of pediatric surgery, Ped surgery International, Indian Journal of Pediatrics, Journal of Cell Proliferation; Continued to be the Consultant Editor for the following Journals- Journal of Pediatric Surgical Specialties, Polish Journal of Pediatric Surgery; Nominated as the Editorial Consultant of the following International Journals- Gold Journal of Urology– Pediatric Urology section, only one outside USA, Pediatric Surgery International, only one from India, African Journal of Pediatric Surgery, only one from India, Journal of Emergency Medicine, Trauma and Shock;

Professor V. Bhatnagar won the U.C.Chakravarty award of the Indian Association of Pediatric Surgeons at the 33rd Annual Conference at Jaipur, October 4-7, 2007 for the paper “Role of renal function reserve in children with hydronephrosis. B.Jindal, C.S.Bal, V. Bhatnagar.”

Professor M. Bajpai is Member- Reviewer for American Urology Association for the meeting held in Anaheim, California, USA in May 19-24, 2007; Member- Reviewer for American Urology Association for the meeting to be held in Orlando, Florida, USA in, 2008; Moderator for poster session at the annual meeting of the American Urology Association for the meeting held in Anaheim, California, USA in May 19-24, 2007; Member on the Board of studies in Paediatric Surgery from 29.10.07 for two years at Banaras Hindu University, Varanasi; Member Expert Committee on Tissue Engineering: Department of Biotechnology, Ministry of Science and Technology, Government of India- September 28, 2007; 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; Internal Examiner for MCh: AIIMS, New Delhi; External Examiner/Expert for Faculty Selection Committee: Banaras Hindu University, Varanasi- August 2007; Expert for Medical Council of India for recognition of MCh training programme in the country; Expert for MCh curriculum: Delhi University-appointed in 2008

VISITING SCIENTISTS

Gordon Mackinlay, Edinburgh; Richard Azizkhan, USA; Amulya Saxena, Austria; P. Reddy, USA; Timothy Cromblehome, USA; Pramod Rastogi, Switzerland; Penelope Brock, UK; Gill Levitt, UK; Derek Roebuck, UK; Mark Gaze, UK.

9.27 Pathology

Professor and Head

Subrat K. Panda

Professors

Chitra Sarkar
S. Datta Gupta
V.K. Arora

M. Vijayaraghavan
Rajni Safaya
A.K. Karak

Manoj K. Singh
Ruma Ray

Additional Professors

A.K. Dinda

Associate Professors

M.C. Sharma
(On deputation)

Venkateswaran K. Iyer

Manju Aron (on-leave)

Assistant Professors

Sandeep R Mathur

Vaishali Suri

Kabita Chatterjee
(Blood Bank)

EDUCATION

Undergraduate

MBBS Students

Postgraduate

MD students: 20 Senior Residents: 10

PhD students: 6 Pool Officer: 2

Short term and Long term training

1. Mohd. Naushad from Amity University, Uttar Pradesh underwent summer training for one month.
2. Mr. Atindra Upadhyaya underwent training for 6 months from 2/1/2007- 30/6/2007.
3. Dr. Shyamali Dutta and Dr. Bhushan Asthana, DM Hematopathology Department, AIIMS underwent training for one month in Histopathology Section from 1/9/2007 – 30/9/2007.
4. Trained young technicians for 3-4 weeks in histopathology and histochemistry from Indian Veterinary Research Institute, Izatnagar
5. Dr. Namrata Sinha from Amri Hospitals, Salt Lake, Calcutta underwent training for 3 months from 6/8/2007 – 5/11/2007
6. Dr. Rupal Mehta from USA underwent training for 4 weeks from 3/10/2007 to 29/10/2007.
7. Dr. Pragya Verma and Dr. Rojan Ghimiree from BPKIHS, Dharan, Nepal underwent training for one month from 1/2/2008 to 29/2/2008.
8. Dr. Nitin Kumar Upadhyay, Ministry of Defence, Institute of Physiology, Timarpur underwent training for one week from 17/9/2007 to 22/9/2007.
9. Dr. Harpreet Kaur, Professor of Pathology, Dayanand Medical College & Hospital, Ludhiana underwent training for two weeks from 31/3/2008 to 12/4/2008.

10. Dr. Namrata Sinha, Junior Consultant from National Neurosciences Centre, Kolkata came for Neuropathology training for three months.
11. Ms. Anjana Sharma, M.Sc. (Bioinformatics) student came for training for six months in laboratory techniques.

CONTINUING MEDICAL EDUCATION

Conferences, seminars, workshops organized by the department

1. Indian Association of Pathologists & Microbiologists (IAPM), Delhi Chapter Annual Conference in April 2007
2. Prof. S.K. Panda organized “Guha Research Conference” - 2007 held on 18-22/12/2007 at Sunder Bans, West Bengal.
3. 1st National Course in Renal Pathology, organized by Pathology Study Society, Department of Pathology on 18 – 19 August, 2007 at AIIMS.

Lectures delivered

Professor S.K. Panda

- Replication of HEV: the localization at sub-cellular site, Indian Institute of Chemical Biology, Calcutta in July 2007.
- Vaccine for HEV–Current Status, Conference of Indian National Assoc. for Study of Liver, 7-9 March, 2008

Professor Chitra Sarkar

- Neuronal and Mixed Neuronal Glial Tumors: Current Perspectives. International Neuropathology Symposium held at Niigata, Japan, October 2007.
- Histopathological Changes Following Radiosurgery. First National Radiosurgery Update. Organized by Gamma Knife Unit, Dept of Neurosurgery, and Radiation Oncology, AIIMS. New Delhi, April 2007.
- Approach to Diagnosis of Malignant Small Round Cell Tumors of the Brain and Pathology of CNS Infections, Summer CME, GNRC Institute, Guwahati in July 2007
- Pathology of CNS tumors, August 2007 and Pathology and genetics of embryonal tumors, February 2008, Seminars for PG students, IRCH, AIIMS:
- Approach to Diagnosis of Muscular Dystrophies, Embryonal tumors: Pathology and differential diagnosis and Approach to Diagnosis of Meningeal Tumors, CME in Pathology, Christian Medical College and Brown Medical College, Ludhiana, October 2007.
- Spectrum of Pediatric Brain Tumors & Status of Brain Tumor Banking in India. Neuro-Update 2007, Fortis Hospital, NOIDA, December 2007.
- Incorporation of recent discoveries regarding glioma molecular Biology into clinical practice: Feasibility & cost benefit analysis. Neuro-Update 2007, Fortis Hospital, NOIDA, December 2007.
- Incorporation of molecular tools in clinical management of gliomas. Neurosciences Update at the 10th Anniversary Celebrations of National Neurosciences Centre. Kolkata, December 2007.
- Molecular Genetics in Gliomas: Use in Clinical Practice. CME at the Annual Conference of Delhi Neurological Association, Delhi. February 2008.

Dr Rajni Safaya

- Slide seminar in “Update in Surgical Pathology 2007”, held in Tata Memorial Hospital, Mumbai, India, from 31st Aug. to 2nd Sept., 2007.
- National Conference on Medical, Education 2007, “Building Capacity in Medical, Education – A National Perspective”, held in AIIMS from 15-17th November, 2007.

Dr S. Datta Gupta

- Panel discussion on “Metastatic Ovarian Tumours” at The symposium on Ovarian Cancer, All India institute of medical Sciences, New Delhi 13-14 April 2007
- Conducted a Clinico-Pathological Conference (CPC) on “Necrotizing Sarcoidosis” at the XVII Annual CME of the Association of Physicians of India, Delhi State Chapter, on 04 November 2007.

Dr A. K. Dinda

- CME on Renal Pathology organized by Indian Society of Renal and Transplantation pathology on 12th December 2007 at Sir Ganga Ram Hospital, Rajinder Nagar, New Delhi, guest lecture entitled, “Podocytes and molecular markers in idiopathic nephrotic syndrome”.
- Pre-conference CME, 56th Annual Conference of Indian Association of Pathologists and Microbiologists, 26th December, 2007, Post Graduate Institute of Medical Education and Research, Chandigarh, invited lecture, “Recent advances in imaging and image analysis”.

Dr V. K. Iyer

- Role of fine needle aspiration cytology in the management of pediatric renal and liver tumors. International symposium on recent advances in pediatric oncology. AIIMS New Delhi (2007)

Dr S. Mathur

- Delivered a lecture entitled “Role of Cytology in management of ovarian cancer” in the symposium on Ovarian Cancer organized by the Dept of Medical Oncology, IRCH at AIIMS on 13th April 2007.

National and International Conferences

Lectures delivered

1. Prof. S.K. Panda presented a poster of Distinction during the 58th Annual Meeting of the American Association for the Study of Liver Diseases (AASLD), 2-6 Nov., 2007, Boston, USA.
2. Sarkar C, Mondal AM, Chattopadhyay P, Mahapatra AK, Sinha S. Astrocytic Tumors: Identification of a new genetic locus and its clinicopathological correlation. Meeting of the Asian Society of Neuropathology and the Workshop of Asian Neuropathology held at Tokyo, Japan, May 2007.
3. Sarkar C. Neuropathology in India. Meeting of the Asian Society of Neuropathology and the Workshop of Asian Neuropathology held at Tokyo, Japan, May 2007.
4. Sarkar C. Approach to Diagnosis of Malignant Round Cell Tumors of the CNS. Annual Conference of Delhi Chapter of IAPM. New Delhi, April 2007.
5. Sarkar C. Impact of Molecular Genetics on Management of Gliomas. Neuro-Oncology Meeting, IRCH, AIIMS, August 2007.

6. Sarkar C. Role of Molecular Diagnostics in the Clinical Management of Gliomas. In: Neuro-Oncology Symposium. Annual Conference of Radiation Oncology Society of India. Chennai, November 2007.
7. Sarkar C. Prognostic and predictive factors in Gliomas. Invited lecture in the 6th Conference on Evidence Based Management of Cancers in India. Tata Memorial Hospital, March 2008.
8. Sarkar C. Morphology of High Grade Gliomas and Importance of their Molecular Markers in Diagnosis. EBM conference on Molecular Diagnostics, Tata Memorial Hospital, March 2008.
9. Sarkar C. Oligodendroglial Tumors: Clinico-pathological & Molecular Genetic Study with special reference to 1p/19q status. 56th Annual Conference of Neurological Society of India. Agra, December 2007.
10. Dr S Datta Gupta delivered a Guest Lecture on “Interpretation of Liver Biopsy” at the XIX Annual Conference of the North Eastern Regional Chapter of the Indian Association of Pathologists and Microbiologists, Agartala, Tripura 09 September 2007
11. Dr S Datta Gupta conducted a Slide Seminar at the XIX Annual Conference of the North Eastern Regional Chapter of the Indian Association of Pathologists and Microbiologists, Agartala, Tripura 10 September 2007
12. Kar M, Deo SS, Kumar V, Sharma U, Jagannathan NR, Dannishad KA, Deo V, Shukla NK, Datta Gupta S, Thulkar S. In vivo proton magnetic resonance spectroscopic (PMRS) evaluation: Emerging tool to solve the diagnostic dilemma in soft tissue sarcoma management. Poster presented at the 2007 ASCO Meeting Annual Meeting, USA, June 2007
13. Dr A. K. Dinda. International conference-cum Workshop on Nanoscience and Nanotechnology at Ansal Institute of Technology, Gurgaon, 19-21 December, 2007, invited lecture entitled, “Nanoparticle and cellular interaction: The issue of nanotoxicity Vs. nanobiocompatibility”.
14. Dr A. K. Dinda. 34th National Conference of Association of Clinical Biochemists of India, New Delhi, 17-20 December, 2007, “Receptor based cellular targeting with multifunctional nanoparticles:A challenge for developing specific biomolecular delivery system”.
15. Dr A. K. Dinda. International Congress on Nanotoxicity 26–28 June, Paris, “Evaluation of macrophage injury and activation by nanoparticles: An essential parameter of nanotoxicology”.
16. Dr A. K. Dinda. International Conference on Nanomaterial Toxicology, Lucknow, 5-7 February 2008, “Exploring Nanobiocompatibility: A Challenge for Nanomedicine”.
17. Dr A. K. Dinda. ASSOCHAM 5th Global Knowledge Millennium Summit, 18-2 September 2007, New Delhi, “Health and safety issues in nanotechnology”.
18. Dr A. K. Dinda. Annual Conference of Indian Association of Pathologist and Microbiologists, Delhi Chapter, 28 April 2007, “Nanotechnology in Diagnostic Pathology”.
19. Dr A. K. Dinda. “Nanotechnology” in 12th refresher course on Environmental Sciences, 18th April, 2007, Jawharlal Nehru University, Delhi.
20. Dr A. K. Dinda. XXIX National Conference of Electron Microscopy, 26-29 November, 2007, Delhi University, “Role of Electron Microscopy in Diagnostic Pathology”.
21. Dr Anita Chopra, Role of DNA ploidy, PCNA labeling index and CK 19 expression in fine needle aspiration cytology of hepatoblastoma. 37 Annual Conference, Indian Academy of Cytologists, Allahabad, 2007.
22. Dr V. K. Iyer, Evaluation of fine needle aspiration cytology and apoptotic gene expression in characterization and prognostication of Wilms tumor. 39 Congress, International Society of Paediatric Oncology, Mumbai (SIOP 2007).

23. Dr V. K. Iyer, FNAC of benign, reactive and non-neoplastic lesions of the soft tissues. 37th Annual Conference, Indian Academy of Cytologists, Allahabad, (2007)
24. Jha P. Sinha S, Chosdol K, Sarkar C. Loss of heterozygosity (LOH) for 1p and 19q in astrocytic and oligodendroglial tumors. Annual Conference of Delhi Neurological Association, Delhi. February 2008.
25. Pathak P. Suri V, Sharma MC, Singh S, Sarkar C. LGMD2A (calpainopathy): Report of three cases with confirmation by western blotting and functional in vitro assay. Annual Conference of Delhi Neurological Association, Delhi, February 2008.
26. Suri V, Sarkar C. Pediatric glioblastomas, a histopathological and molecular genetic study. 56th Annual Conference of Neurological Society of India. Agra, December 2007.
27. Suri V, Sarkar C. Childhood GBMs. Annual Conference of IAPM. Chandigarh, December 2007.
28. Haldipur, PV, Sarkar C, Iyengar S, Mani S. Role of sonic Hedgehog signaling in human cerebellum development. Annual Conference of Indian Academy of Neurosciences (IAN), Varanasi, October 2007.
29. Nadeem, Sharma MC, Suri V, Sarkar C. Skin biopsy: a novel method of diagnosing dystrophinopathies. Annual Conference of Delhi Chapter of IAPM. New Delhi, April 2007.
30. Gupta R, Suri V, Rishi A, Mridha A, Sharma MC, Garg A, Suri A, Gupta A, Sarkar C. Myxopapillary ependymoma: Report of two cases with rare presentation Delhi Chapter IAPM, April 2007.
31. Bhaskar Shukla, V Suri, A Rishi, MC Sharma, C Sarkar, M Singh, A Garg. Rare Case of an Inflammatory Pseudotumor Presenting As A Frontobasal Mass Lesion Delhi Chapter IAPM, April 2007.
32. Rishi A, Jain A, Sarkar C, Suri V, Sharma MC, Garg A, Kale SS, Gupta A. Meningeal Lymphoma Presenting As Meningioma – A Report of Two Cases and Review of Literature. Delhi Chapter IAPM 28th April 2007.
33. Arvind Rishi, A Jain, V Suri, C Sarkar, MC Sharma. Histopathological Spectrum of Fungal Infections of the Central Nervous System: A Clinicopathological study of 40 cases. Delhi Chapter IAPM, April 2007.
34. Agarwal S, Suri V, Rishi A, Satyarathi GD, Sharma MC, Garg A, Sarkar C. Primary intracranial squamous cell carcinoma developing in an epidermoid cyst. Delhi Chapter IAPM, April 2007.
35. Das P, Sharma MC, Rishi A, Suri V, Sarkar C. Childhood Chordomas: Twenty seven years of clinicopathologic experience from All India Institute of Medical Sciences, India. Delhi Chapter IAPM, April 2007.
36. Tayal S, Suri V, Ray R. Myoepithelial tumour of soft tissue with cytologically malignant features, a case report. Delhi Chapter IAPM, April 2007.
37. Shukla B. Aggarwal S, Suri V, Rishi A, Garg A, Sharma MC, Sinha S, Sarkar C. Glioneuronal tumor with neuropil like island : a new entity. 56th annual conference of IAPM, PGIMER, Chandigarh, November 2007.
38. Ahuja A, Rishi A, Suri V, Das P, Sarkar C. Malignant transformation of benign meningiomas after gamma knife radiosurgery: report of two cases. 56th annual conference of IAPM, PGIMER, Chandigarh, November 2007.
39. Das P, Puri T, Sharma MC, Suri V, Sharma BS, Sarkar C. Medulloblastoma: a correlative study of MIB-1 proliferation index along with expression of C-myc, p53 and anti apoptotic

proteins with histological typing and clinical outcome. 56th Annual Conference of IAPM, PGIMER, Chandigarh, November 2007,

40. Jha P, Suri V, Sharma MC, Chosdol K, Chattopadhyay P, Sinha S, Gupta D, Sinha S, Sarkar C. Loss of heterozygosity (LOH) for 1p and 19q in astrocytic and oligodendroglial tumors. Xth annual conference DNA (DNACON-2008).

RESEARCH

Funded Projects

Completed

1. To Study the site of replication of hepatitis E virus (HEV) by inlocalizing the viral replicase (RdRp) into the subcellular compartments by transfection studies using HepG2/Huh7 cells and fusion reporter construct; S. K. Panda; Funded by DST (2004 – 2007);
2. Development of non-radioactive antigen specific reporter release cytotoxicity assay and analysis of cytotoxicity against HEV proteins. S. K. Panda; Funded by DBT for 3 years (2004 – 2007)
3. Development of small interfering RNAs (siRNAs) for Inhibition of Hepatitis E virus (HEV) Replication and Transcription; S. K. Panda; Funded by DBT for 3 years (2004 – 2007).
4. Myopathic disorders: a comparative clinico-pathological and in vitro proton magnetic resonance spectroscopy (MRS) study on muscle biopsies, Dr. Chitra Sarkar, ICMR, Rs. 6 lacs (approx), 3 years (2004-07)
5. Multicentric study of Interferon-Glycyrrhizin combination therapy and Interferon- Ribavirin combination therapy in management of Chronic Hepatitis C. Funded by Indian Council of Medical Research (ICMR) as Chief Investigator of Histopathology Reference Centre with Prof S.K. Acharya (Dept. of Gastroenterology & Human Nutrition, All India Institute of Medical Sciences, New Delhi) as Chief Investigator. (Code No. I 350 / ICMR) [ICMR Funded 2002-2005 Rs.1010790=00]
6. Genomics and molecular studies on the immunopathogenesis of Bronchial Asthma: A multicentric Project. Dr AK Dinda, DBT, Rs 70,00,000, 2005-07.
7. Post Chemotherapeutic Expression of Apoptotic Proteins in Hepatoblastoma. Dr. Venkateswaran K Iyer, Rs 105,000, AIIMS, 2 yrs

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; Funds: Rs 65.85 lakhs; Funded by DBT for three years (2007-2010).
2. Investigation related to mechanism of entry of HEV into the host cells; S. K. Panda; Funds: Rs 84.89 lakhs; Funded by DBT for 3 years (2008-2011).
3. Fund for improvement of S&T infrastructure in Universities and higher Educational Institutions (FIST), Funding Agency: DST, Funds; Rs 2.7 crore duration: Five years
4. Gliial tumors: a correlative clinicopathological study of chromosomes 1p/19q status, epidermal growth factor receptor (EGFR) amplification and p53 expression Gliial tumors: a correlative clinicopathological study of chromosomes 1p/19q status, epidermal growth factor receptor (EGFR) amplification and p53 expression. Dr. Chitra Sarkar, ICMR, Rs 16.5 lakhs (approx), 3 years (2007-10)

5. Ligand based selection from combinatorial libraries for generating recombinant antibodies to the placental (oncofoetal) isoenzymes of alkaline phosphatase: characterization and validation in clinical cancer. Dr. Chitra Sarkar (Co-PI), DBT, Rs 25 lakhs (approx), 2005-08.
6. Acute thalamic involvement in severe head injury-An autopsy study with histopathological correlation. Dr. Chitra Sarkar (Co-PI), AIIMS, Rs 2.2 lakhs (approx), 2006-09.
7. A randomized phase-3 study of enzastaurin versus lomustine in the treatment of recurrent intracranial GBM. Dr. Chitra Sarkar (Co-PI), Eli Lilly, Rs 5 lakhs (approx), 2006-07.
8. An open label prospective multicentric study to evaluate the safety and efficacy of BIOM Ab-EGFR Tm (Nimotuzumab) as induction and maintenance therapy in combination with radiotherapy plus temozolamide (concomitant and adjuvant) in Indian patients with glioblastoma multiforme. Dr. Chitra Sarkar (Co-PI), Biocon, Rs 15 lakhs (approx), 2007-08.
9. A multicentre, 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 alone in the treatment against Anaplastic Thyroid Carcinoma. Dr. Chitra Sarkar (Co-PI), OXiGENE Inc., USA, Rs 5 lakhs (approx), 2007-08.
10. Role of Sonic Hedgehog signaling in Human Cerebellum Development. Dr. Chitra Sarkar (Co-PI), NBRC, DBT, Rs 15 lakhs (approx), 2007-09.
11. 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. Dr. Chitra Sarkar (Co-PI), Antisense Pharma, Germany, Rs 25 lakhs (approx), 2007-10.
12. Study of the role of bone marrow derived mononuclear cells in peripheral nerve repair of adult rats. Dr. Vaishali Suri (PI), AIIMS, Rs 18 lakhs, 2006-09.
13. Development of nanoparticulate system for selective receptor specific macrophage targeting. Dr AK Dinda, DBT, Rs 30,90,000, 2007-09.
14. Evaluation of chromosome 1p and 11p deletions in hepatoblastoma and hepatocellular carcinoma, Dr VK Iyer, Funding Agency: AIIMS, Rs. 325,000, Duration 3 years
15. "p16INK4a and E-cadherin expression profile in pre-cancerous lesions of cervix and cervical carcinomas". Dr Sandeep R Mathur, AIIMS, Rs 1 lakh, 2007-08.

Departmental Projects

Completed

1. Comparative evaluation of expression of dystrophin, utrophin and n-NOS in muscle and skin biopsy of patients with dystrophinopathies.
2. A correlative study of morphological subtype of Focal Segmental Glomerulosclerosis (FSGS) and tubulo-interstitial changes in renal biopsy.
3. An ultrastructural study of glomerular changes in renal biopsy of HIV patients with persistent proteinuria.
4. Study of C4d deposition in peritubular capillaries of renal transplant biopsy and its correlation with morphological features of severity of rejection
5. Wilms' Tumor: Relation of Apoptotic Gene Expression with subtype, chemoresponse and prognosis.
6. Hepatoblastoma: Role of DNA ploidy, cell proliferation and cytokeratin 19 expression in subtyping and prognosis.

7. Morphological and morphometric evaluation of follicular lesions of thyroid on fine needle aspiration cytology
8. Cytological evaluation of extra-gonadal germ cell tumours.

Ongoing

1. Primary and secondary glioblastomas: A study of EGFR amplification, EGFR vIII mutants & p53 expression.
2. GBMs with long term survival – Role of cell cycle regulatory genes.
3. Study of gliomagenesis: Possible involvement of CNS developmental pathway
4. p53, EGFR & HER2 receptor in osteogenic sarcomas
5. Childhood GBMs : A clinicopathological and molecular genetic study
6. Study Of Limb Girdle Muscular Dystrophy (LGMD) Patients In Indian Population Using Calpain-3, Dysferlin And Sarcoglycan Protein Analysis
7. Clinicopathological study of angiogenesis in glioblastoma multiforme.
8. Study of alteration of microvasculature in renal biopsy in chronic renal transplant rejection.
9. Role of macrophage in modulation of renal fibrosis.
10. Ultrastructural study of podocyte changes in immune and non-immune mediated glomerular diseases.
11. Study of endocytosis and fate of calcium phosphate based and gold nanoparticle.
12. Modulation of macrophage function with nanoparticle.
13. Transplant glomerulopathy; An ultra structural, immunohistochemical and morphometric study.
14. Airway remodeling in Bronchial Asthma; A study in experimental mice model.
15. The spectrum of 11p13 and 11p15 deletions in Wilms tumor with histological correlation
16. Immunohistochemical and image analytic characterization of primary and recurrent giant cell tumor of bone
17. Study of cytological features of Solid-pseudopapillary neoplasm of the pancreas.
18. Histopathological and morphometric evaluation of surgically excised specimens of thoracic aortic aneurysms.
19. Role of PET-CT in osteosarcoma for initial staging and chemotherapy response evaluation; comparison with conventional radiological modalities (MRI scan, CT scan, & Bone scan) and histopathological tumor necrosis. Institute Rotary Cancer Hospital (IRCH), AIIMS, New Delhi
20. Prognostic factors in the management of Osteosarcoma: A clinical study. Department of Orthopaedics, AIIMS, New Delhi.

Collaborative Projects

Completed

1. Invasive versus non-invasive meningiomas: comparative study of proliferation index, and expression of VEGF, p53 and cathepsin.- Dept. of Neurosurgery, AIIMS.
2. Morphological features of steatosis in Non-alcoholic steatohepatitis and HCV hepatitis (Gastroenterology)
3. Evaluation of epithelial proliferation in pediatric and adult cholesteatoma (ENT)
4. A study of T cell homing pattern and cytokine profile in tubercular pleural effusion (Dept of HLA & Immunogenetics)
5. Telomerase activity in paediatric renal tumors (with paediatric surgery)

6. A correlative study of Th1 and Th2 upregulation with lepromin challenge in clinically “anergic” cases of leprosy –(JALMA –Agra)
7. A comparative study of VIA, cytodiagnostics, HPV testing and colposcopy as tools for cervical cancer screening. (with Gynaecology)
8. The role of percutaneous vertebroplasty in the management of painful vertebral lesions. (with Radio-Diagnosis)
9. Evaluation of the comparative efficacy of single- and double-freeze technique of cryotherapy in controlling CIN lesions: Multi centre randomised clinical trial”. (with Obstetrics/ Gynae).

Ongoing

1. Advanced Center for Liver Diseases ICMR Project [I-441] comprising of five projects with Prof SK Acharya (Gastroenterology, AIIMS)
2. Immunogenetic analysis and HPV typing of cervical cancer in Indian women; in collaboration (Department of Obstetrics and Gynecology, AIIMS)
3. Development of HPV candidate vaccine/s: preparation of a clinical trial site/ cohort for vaccine testing; in collaboration (Department of Obstetrics and Gynecology, AIIMS)
4. Analysis of immunomodulation property of IFN-g on classical, nonclassical MHC 1 and TGF- β expression in astrocytic tumors and their relevance in immunotherapy – Neurobiochemistry, AIIMS
5. Study of HIC-1 in tumorigenesis and cell response – Dept of Biochemistry, AIIMS
6. Effects of administration of human umbilical cord blood cells (HUCBG) in combination with melatonin versus HUCBG alone in rat with stroke – Dept of Neurology, AIIMS
7. Altered DNA sequences in gliomas: characterization of changes and context sequences with reference to tumor type – Dept of Biochemistry, AIIMS
8. Characterization of the properties of an amplified region of DNA in primary meningeal tumors – Dept of Biochemistry, AIIMS
9. Analysis of FAT gene in glial tumors – Dept of Biochemistry, AIIMS
10. Pilocytic astrocytomas : correlation of clinical features and outcome with proliferation index and angiogenesis – Dept of Neurosurgery, AIIMS
11. Advanced Center for Liver Diseases ICMR Project [I-441] comprising of five projects with Prof SK Acharya, Prof SK Panda as one of the Co-investigators (with Gastroenterology)
12. Etiological significance of microscopic colitis in chronic diarrhea in children and its pathogenesis. Funded by the Indian Council of Medical Research (ICMR). Co-Investigator with Dr Shinjini Bhatnagar (Department of Paediatrics, All India Institute of Medical Sciences, New Delhi) as a Principal Investigator. (with Pediatrics)
13. Multicenter phase III randomized trial comparing Doxorubicin and Cyclophosphamide followed by Docetaxel (AC'T) with Doxorubicin and Cyclophosphamide followed by Docetaxel and Transtuzumab (Herceptin®) (AC'TH) and with Docetaxel, Carboplatin and Transtuzumab (TCH) in the adjuvant treatment of node positive and high risk node negative patients with operable breast cancer containing the Her2 alteration. Funded by the British Cancer International Research Group as one of the co-investigators with Prof PK Julka as the local Co-ordinator and investigator. (with Radiation Oncology)
14. Relationship between genetic polymorphism in drug metabolizing enzymes, CYP1A1 and GSTM1, and risk of developing oral precancer and cancer among consumers of tobacco and

chewing products. Funded by the Indian Council of Medical Research as one of the Co-Investigators with Prof GK Rath, Prof PK Julka, Prof Anurag Srivastava and Dr Ranju Ralhan as the Investigators/ Co-Investigators. (with Biochemistry, Surgery, Radiation Oncology, Surgical Oncology)

15. Histological diagnosis of Celiac disease and its correlation with other markers (Pediatrics)
16. Clinicopathological study of reflux Esophagitis (Gastroenterology)
17. Distinction between Crohns Disease and Tuberculosis in Indian patients (Gastroenterology, Biotechnology)
18. Histopathology of Acute and Subacute Liver Failure (Gastroenterology)
19. Evaluation of molecular markers and anticancer agents in Non-Small cell lung cancer (Biochemistry)
20. A comparison of urease based tests and conventional histology with immunohistochemistry for detection of H pylori in gastric biopsies (Gastroenterology, Microbiology, Nuclear Medicine)
21. A study of molecular markers in oral cancers (Biochemistry, Surgery, Surgical Oncology)
22. A study of molecular markers in cervical cancers (Biochemistry, Obstetrics & Gynecology)
23. Evaluation of efficacy of radiofrequency ablation of primary tumour in early breast cancer (Surgery, Radiation Oncology, Nuclear Medicine, Radio Diagnosis)
24. Emerging parasitic etiologies in malabsorption syndromes (Microbiology, Pediatrics, Gastroenterology)
25. Significance of tumour thickness and molecular margins in cancer of the tongue. (ENT)
26. Effect of Glutamine Supplementation on structure and function of the intestines in patients with Crohn's Disease (Gastroenterology)
27. Clinicopathological features of Microscopic Colitis. (Gastroenterology, Pediatrics)
28. Evaluation of Curcumin in advanced Cervical Cancer (Biochemistry, Obstetrics and Gynecology, Radiation Oncology)
29. Pharmacological and molecular studies on cardioprotective potential of cox-2 inhibitor and indigenous antioxidant drugs in experimentally induced myocardial infarction – Pharmacology
30. Development of tumor targeting with nanogel system. (Center for Biomedical Engineering, IIT, Delhi).
31. Role of macrophage and oxidative stress in airway remodeling (IGIB, Delhi).
32. Effect of blocking of HIF1 α gene expression on macrophage endocytosis and generation of ROS. (JNU, Delhi).
33. Detection and molecular characterization of Pneumocystis jiroveci from patients with clinical diagnosis of interstitial pneumonia (with microbiology)
34. Molecular detection and genotyping of HPV in cervical cancer – a population based study (with biochemistry)
35. Study of genetic polymorphisms of dihydropteroate synthase (DHPS) gene in Pneumocystis jiroveci isolates: correlation with clinical outcome in patients with PCP. (with microbiology)
36. Development of HPV candidate vaccine/s: Preparation of a clinical trial site/cohort for vaccine testing (with Department of Gynaecology)
37. 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 Dept of Radiotherapy.

38. 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 Dept of Medical Oncology.
39. Correlation of HPV DNA testing with residual disease in treated cases of CIN. With Dept of Obstetrics & Gynecology.
40. Histopathology of pulmonary arteries in patients undergoing Ballock – Taussig shunt and intra cardiac repair of Tetralogy of Fallot.
41. A comparative study of Histopathological changes in ascending aorta and the risk factors related to histopathological conditions and aortic dilatation in patients with Tetralogy of Fallot and a functionally univentricular heart.

PUBLICATIONS

1. Paul SB, Sreenivas V, Gulati MS, Madan K, Gupta AK, Mukhopadhyay S, Panda SK, Acharya SK. Incidence of hepatocellular carcinoma among Indian patients with cirrhosis of liver: An experience from a tertiary care center in northern India. *Indian J Gastroenterol* 2007;26:274-8.
2. Kar UK, Satpathy G, Das BK, Panda SK. Characterization of *Streptococcus pneumoniae* ophthalmic, systemic & commensal isolates by pulsed-field gel electrophoresis & ribotyping. *Indian J Med Res.* Feb; 2008; 127(2):171-7.
3. Rehman S, Kapur N, Durgapal H and Panda S K*. Subcellular Localization of Hepatitis E virus (HEV) Replicase. *Virology*; 2008; 370:77-92.
4. Sengupta S, Rehman S, Durgapal H, Acharya SK, Panda SK. Role of surface promoter mutations in hepatitis B surface antigen production and secretion in occult hepatitis B virus infection. *J Med Virol.* Mar; 2007;79(3):220-8.
5. Sarkar C, Das P, Ghosh R. Molecular profiling of tumors by immunohistochemistry. *National Medical Journal of India.* 2007; 20:277-281 (*invited review*)
6. Shankar SK, Mahadevan A, Sundaram C, Sarkar C, Chacko G, Lanjewar DN, Santosh V, Yasha TC, Radhakrishnan VV. Pathobiology of fungal infections of the central nervous system with special reference to the Indian scenario. *Neurol India.* Jul-Aug; 2007;55(3):198-215.
7. Jain A, Sharma MC, Sarkar C, Bhatia R, Singh S, Handa R. Major histocompatibility complex class I and II detection as a diagnostic tool in idiopathic inflammatory myopathies. *Arch Pathol Lab Med.* Jul 2007; 131(7):1070-6.
8. Sharma S, Sharma MC, Johnson MH, Lou M, Thakar A, Sarkar C. Esthesioneuroblastoma - a clinicopathologic study and role of DNA topoisomerase alpha. *Pathol Oncol Res.* 2007; 13(2):123-9.
9. Chander B, Deb P, Sarkar C, Garg A, Mehta VS, Sharma MC. Cerebral blastomycosis: a case report. *Indian J Pathol Microbiol.* Oct 2007; 50(4):821-4.
10. Gupta R, Kumar A, Sharma MC, Sarkar C, Goyal V, Bihari M. Autopsy always teach and tell: neurodegeneration with brain iron accumulation: a case report. *Indian J Pathol Microbiol.* Oct 2007; 50(4):792-4.
11. Ahmad FU, Tripathi M, Padma MV, Gaikwad S, Gupta A, Bal CS, Sarkar C, Gupta S, Wadhawan AN, Sharma BS, Chandra PS. Health-related quality of life using QOLIE-31: Before and after epilepsy surgery a prospective study at a tertiary care center. *Neurol India.* Oct-Dec 2007; 55(4):343-8.

12. Misra A, Chattopadhyay P, Chosdol K, Sarkar C, Mahapatra AK, Sinha S. Clonal mutations in primary human glial tumors: evidence in support of the mutator hypothesis. *BMC Cancer*. Oct 2007; 9(7):190.
13. Arora R, Mathur SR, Aron M, Verma K, Iyer VK, Arora VK, Sharma MC. Oncocytic carcinoid tumor of the lung: a case report of diagnostic pitfall in filter membrane preparation of bronchial washings. *Acta Cytol*. Nov-Dec 2007; 51(6):907-10.
14. Jain D, Sharma MC, Sarkar C, Rishi A, Suri V, Garg A, Mahapatra AK. Spinal teratoma with pulmonary differentiation: a report of rare case and review of literature. *Fetal Pediatr Pathol*. Jul-Aug 2007; 26(4):185-91.
15. Kasliwal MK, Yerramneni VK, Sai Kiran NA, Suri A, Mahapatra AK, Sharma MC, Garg A. Giant sphenothmoidal nasopharyngeal schwannoma with anterior skull base extension managed by a total anterior transbasal approach. *Neurol India*. Oct-Dec 2007; 55(4):429-31.
16. Agarwal S, Rishi A, Suri V, Sharma MC, Satyarthi GD, Garg A, Sarkar C. Primary intracranial squamous cell carcinoma arising in an epidermoid cyst—a case report and review of literature. *Clin Neurol Neurosurg*. Dec 2007; 109(10):888-91.
17. Sharma JB, Aruna J, Mittal S, Sharma MC. Mixed epithelial and stromal tumor of the kidney in a puerperal woman. *J Obstet Gynaecol Res*. Aug 2007; 33(4):574-7.
18. Mridha AR, Sharma MC, Sarkar C, Suri V, Rishi A, Garg A, Suri A. Myxopapillary ependymoma of lumbosacral region with metastasis to both cerebellopontine angles: report of a rare case. *Childs Nerv Syst*. Oct 2007; 23(10):1209-13.
19. Kukreja M, Gupta R, Julka A, Sharma MC. Neuroblastoma-like schwannoma as a rare cause of proptosis: a case report. *Can J Ophthalmol*. Aug 2007; 42(4):624-5.
20. Sivanandan S, Lodha R, Agarwala S, Sharma M, Kabra SK. Inflammatory myofibroblastic tumor of the trachea. *Pediatr Pulmonol*. Sep 2007; 42(9):847-50.
21. Kasliwal MK, Gupta DK, Mahapatra AK, Sharma MC. Multicentric Cerebellopontine Angle Glioblastoma Multiforme. *Pediatr Neurosurg*. Mar 2008; 44(3):224-28.
22. Jain D, Sharma MC, Sarkar C, Suri V, Garg A, Mahapatra AK, Kumar L. Pituitary gland involvement by a gamma delta hepatosplenic lymphoma, a mimicker of pituitary adenoma: report of a rare case. *J Neurooncol*. June 2008; (2):237-41.
23. Gupta R, Sharma MC, Attri S, Guleria S. Testicular Metastasis of Extraskelatal Myxoid Chondrosarcoma: Report of First Case. *Urology*. May 2008; 71(5):981-4.
24. Suri V, Shukla B, Garg A, Singh M, Rishi A, Sharma MC, Sarkar C. Intracranial inflammatory pseudotumor: Report of a rare case. *Neuropathology*. Aug 2008; 28(4):444-7.
25. Jain D, Sharma MC, Sarkar C, Suri V, Rishi A, Garg A, Vaishya S. Chordoid glioma: report of two rare examples with unusual features. *Acta Neurochir (Wien)*. Mar 2008; 150(3):295-300.
26. Singh K, Sharma MC, Jain D, Kumar R. Melanotic medullary carcinoma of thyroid - report of a rare case with brief review of literature. *Diagn Pathol*. Jan 2008; 11(3):2.
27. Jain D, Sharma MC, Sarkar C, Rishi A, Suri V, Garg A, *et al*. Spinal teratoma with renal differentiation-A rare phenomenon: Report of two patients. *Clin Neurol Neurosurg* 2008; 110:265-9.
28. Gupta R, Rishi A, Suri V, Sharma MC, Gupta A, Garg A, Sarkar C. Sacral myxopapillary ependymoma with extensive osteolysis. *J Neurooncol*. Feb 2008; 86(3):349-52.
29. Jain D, Sharma MC, Arora R, Sarkar C, Suri V. Clear cell ependymoma: a mimicker of oligodendroglioma - report of three cases. *Neuropathology*. Feb 2008; 86(3):349-52.

30. Nair RK, Khaira A, Sharma A, Mahajan S, Dinda AK. Spectrum of renal involvement in paroxysmal nocturnal hemoglobinuria: report of three cases and a brief review of the literature. *Int Urol Nephrol*. 2008; 40(1):56-58.
31. Gupta R, Dinda AK, Singh MK, Misra MC. Macrocystic serous cystadenocarcinoma of the pancreas: the first report of a new pattern of pancreatic carcinoma. *J Clin Pathol* 2008;61:396
32. 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(1):79-81.
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Chapters in Books

1. McLendon, R.E., Judkins, A.R., Eberhart C.G., Fuller, G.N., Sarkar, C., Ng, H.K. (2007) Central Nervous System Primitive Neuroectodermal Tumors. In: WHO Classification of Tumors. Edt. Louis D.N., Ohgaki H., Wiestler O.D., Cavenee WK. International Agency for Research on Cancer. 4th Edn, pp 141-146.
2. Lopes MBS, Wiestler OD, Rachaminov-Stemmer AO, Sharma MC. (2007) Tuberos sclerosi complex and subependymal giant cell astrocytoma. In: WHO Classification of Tumors. Edt. Louis D.N., Ohgaki H., Wiestler O.D., Cavenee WK. International Agency for Research on Cancer. 4th Edn, pp 218-221.

PATIENT CARE

Laboratory services

Surgical Pathology Laboratory

Specimens processed	32752
Special stains	27423
Frozen sections	564

Cytopathology Laboratory

Total specimens	20107
FNAC (out patient)	6937
Ultrasound guided FNAC	1371
Exfoliatives routine	11524
Millipore preparations	275
Immunocytochemistry	38
Autopsies performed	31

Electron microscopy specimens processed	938
Immunohistochemistry Laboratory Specimens processed	11099
Neuropathology services	
Neuropathology surgical specimens	2376
Immunohistochemistry	2837
Muscle biopsies	
Total number received	408
Muscle enzyme histochemistry	1719
Myelin stain	244
Tissue Culture Lab	
Special stains	762
Immunohistochemistry	595
Frozen sections	1225
Renal pathology services	
Urine sediment analysis	878
Immunofluorescence of kidney biopsy	687
Electron microscopy of kidney biopsy	80
Cardiac Pathology Services	
Routine Cases	80
Research Cases	229
Poly. L Lysineslides	14,500
Special stains	338
Unstained	140
Hepatic Pathology Services	
HBs Ag	1440
HBe Ag	1760
HBc-IgM	264
HAV IgM	256
Anti-HCV IgG	800
Anti-HEV IgM	216
HBV DNA	761
HBV DNA (quantitative)	82
HCV RNA (Qualitative & Quantitative)	183
Anti-HBc	344

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Dr S. K. Panda was Expert for selection of Sr. Research Associates (Pool Officer), CSIR.

Dr Chitra Sarkar was nominated as member of the Subject Expert Committee on Life Sciences of the 'Fund for Improvement of S&T infrastructure in Universities and other higher education institutions' (FIST) program of Department of Science & Technology, Govt. of India; Program Advisory Committee on Health Sciences, of DST, Govt. of India; Expert Committee, Women Scientist Scheme, DST, Govt. of India; Chronic Disease Biology Committee of DBT, Govt. of India; nominated as Vice President of the Asian Society of Neuropathology; nominated as Executive Member of the Neuro-Oncology Society of India; was invited as a Guest Faculty to participate in Meeting of Asian

Society of Neuropathology, Tokyo, Japan, May, 2007; International Neuropathology Symposium at Niigata, Japan, October, 2007; Coordinator of Indo-US symposium on Brain Tumor Banking with Prof. Abhijit Guha, M. Kieran, Charles Stiles, USA at Fortis Hospital, Noida, Dec 2007

Dr Ruma Ray was awarded Fellowship of the Royal College of Pathologists, UK.

Dr Vaishali Suri won the Herbert Krause Gold Medal for the paper entitled “Pediatric glioblastomas, a histopathological and molecular genetic study” at the 56th Annual conference of Neurological Society of India, Agra, December 2007.

Dr Shipra Agarwal, junior resident, won the Ramalingaswami award for Best paper for: Relation of FNAC and apoptotic gene expression with subtype, chemotherapy response and prognosis in Wilms tumor. Indian Association of Pathologists & Microbiologists, Delhi Chapter, 2007

Dr Ayushi Jain won First Prize for the poster entitled “MELAS (Mitochondrial myopathy, encephalopathy, lactic acidosis and stroke like episodes) with urticaria pigmentosa- report of a rare case” at the Xth annual conference DNA (DNAICON-2008), Delhi.

Dr Arvind Ahuja won the Second Prize for the poster entitled “Malignant transformation of benign meningiomas after gamma knife radiosurgery: report of two cases”. 56th annual conference of IAPM, PGIMER, Chandigarh, November 2007; Appointed as Visiting Research Fellow of New South Wales University, Sydney, Australia from March, 2008 to February 2011 (3 Years)

Dr S. Datta Gupta was elected Honorary Secretary, Indian Association of Pathologists and Microbiologists in 2006.

Dr Amit Dinda was nominated as Indian resource person for organizing Indo-US workshop on Tissue Engineering and Regenerative Medicine in India 2008-09; elected Honorary Editor, Journal of Indian Society of Renal and Transplantation Pathology; nominated as advisor to Association of Chambers of Commerce, India for development of policy related to safety issues in nanotechnology; A documentary film on the hydrogel based biocompatible implant for drug delivery developed as a collaborative project with IIT Delhi has been commissioned for History Channel as “INDIA INNOVATES – A Documentary on path-breaking scientific technologies from India with a significant global impact”, by The Ministry of External Affairs, Government of India.

The procedure for detection of deletions of 1p&19q using Fluorescence in situ Hybridization (FISH) on formalin fixed paraffin embedded tissue for the diagnosis and prognostication of oligodendrogliomas and Western blotting for diagnosis of calpainopathy, a common form of limb girdle muscular dystrophy, has also been standardized for the first time.

VISITING SCIENTISTS

- Dr. Baibaswata Nayak, Faculty Research Associate, Department of Beterinary Medicine, University of Maryland, College Park, USA visited the Department of Pathology and delivered a lecture entitled “Myo-Insoitol Oxygenase (MIOX) – its regbulation during metanephrogenesis and diabetic nephropathy” and Novel Vectored vaccines for Control of Highly Pathogenic Avian Influenza Viruses” on 11th April, 2008. AIIMS, New Delhi.
- Dr. Nitya Ghatak, Director of Neuropathology, Virginia University, USA visited the Neuro-pathology laboratory and presented a Slide seminar on Interesting cases in January 2008.

9.28 Pharmacology

Professor and Head

Y. K. Gupta

Professors

V.L.Kumar

Kamal Kishore

N.R. Biswas
(on leave w.e.f. Sept 2007)

Additional Professors

S.K.Maulik

(on leave w.e.f. Sept 2007)

Associate Professors

D.S. Arya

Assistant Professors

Jagriti Bhatia

Jatinder Katyal

K.H.Reeta

Surender Singh

EDUCATION

Undergraduate

- The teaching of undergraduates has undergone a significant change in its content in the Pharmacology curriculum in the current year. Several topics of Clinical Pharmacology have been introduced in the form of lecture/group discussions & integrated mini symposia. Such topics include: Management of systemic fungal infections, management of HIV & opportunistic infections, Drug Development-A Practical Approach, Environmental Pharmacology, H5N1 infections & opportunistic infections. management of osteoporosis, diabetes mellitus, peptic ulcers, & bronchial asthma.
- A novel method of assessment of undergraduate students has been introduced in the form of group discussion during mid & end semester examinations.
- Objective Structured Electronic Examination (OSSE) was also introduced in the mid/end semester examinations.
- The interactive discussions on subject through Email with undergraduate students has also been started and the feedback has been enormous.
- The conventional practical classes of pharmacy have been replaced with demonstration & group discussion on marketed pharmaceutical products, new drug delivery systems, prescription audit, drug interaction exercises etc.
- Animal experimentation (isolated tissue experiments) have been minimised in the form of demonstration only. These have been replaced with computer simulated exercises.

Postgraduate

In order to meet the appropriately trained human resource to meet the requirements of the academic & research institutions, the pharmaceutical industry, regulatory bodies, and also in the area of scientific writing, several initiatives have been taken in the training of MD & DM students. Five

lectures from experts in the industry were organised in the department on contemporary topics. Several interactive Mini Symposia, in collaboration with clinicians and industry experts, were also organised on important topics such as Strategic Approach for Biomarkers in Drug Development, Phase II & III clinical trials, Mechanisms of Placebo, Pharmacoeconomics, Epigenetics & Complex Diseases, and Toxicogenomics.

Continuing Medical Education

Conferences, Seminars, Workshops organized by the Department -

1. Indo-US Symposium on Novel Therapeutic Approaches for the Treatment of Neurological Disorders, at AIIMS, New Delhi, November 19, 2007.
2. National symposium on awareness, preparedness and mitigation of exposure to domestic and industrial chemicals, AIIMS, New Delhi, 30-31 August, 2007.
3. Mini symposium on Data Safety Monitoring Board, AIIMS, New Delhi, 15 September, 2007.
4. Mini International symposium on Drug Discovery and Development : Case studies, AIIMS, New Delhi, 30 October, 2007.
5. Brainstorming Workshop on “Rationality Assessment and Guidelines for Fixed Dose Combinations”, 25-26 June 2007, New Delhi.

Lectures delivered

Dr Y. K. Gupta

1. “Concerns about drug safety” Rockland Hospital. New Delhi on April 5, 2007.
2. “Pharmacovigilance in India” at DIA Conference at San Diego, USA on April 26, 2007.
3. “Pharmacovigilance of ASU Drugs” at Training Workshop on Drug Standardization and Quality Assurance under WHO Biennium at CCRAS headquarters office, New Delhi on June 16, 2007.
4. Presentation on “Criteria for adding/deleting Monographs in IP” at Seminar on Innovations in Indian Pharmacopoeia at Sunville Banquet Room, Mumbai on July 13, 2007.
5. Key Note Address at the National Seminar on Quality Control & Standardization of Metal-Based Siddha and Ayurveda Medicine at Sasatra University, Tanjavur on August 3, 2007.
6. “Pharmacovigilance-An Introduction” at the “Round Table Session of the Japan Society for the promotion of Science (JSPS) on “Development for the medicinal Chemistry based on biologically active natural products in the subtropical zone” in Tokyo, Japan from Feb 9-13, 2008.
7. “Oxidative Stress and Herbal Drugs in Neurological Disorders” at R & D Conference South Damen Avenue at Chicago, USA on March 24, 2008.
8. “Designing & Planning Trials in India, China & South East Asia”, USA on March 26, 2008.
9. “SWOT Analysis of Pharmacovigilance, PMS, PSUR in India” at Moscone North Convention Centre at San Francisco, USA on March 27, 2008.
10. “Status of Independent & Institutional Ethics Committees in India” at Moscone North Convention Centre at San Francisco, USA on March 26, 2008.
11. Seminar on “Oxidative Stress in Stroke” at Temple University, USA on April 3, 2008.
12. Special lecture on “Clinical Trials in India” at University of Maryland, Department of Neurology, Maryland, USA on April 4, 2008.
13. Talk on “Antioxidants and Herbal Drugs in Neurological Disorders” at MNI, Montreal, Canada on April 11, 2008.

14. “Navigating the Regulatory Landscape throughout Asia” at Moscone Convention Centre, San Francisco, USA on March 27, 2008.

RESEARCH

Departmental Projects

Ongoing

Dr Y. K. Gupta

1. Assessment of Awareness of Environmental Mercury Pollution in Healthcare System: Solutions & Strategies for Prevention, Ministry of Environment & Forests, Government of India. Duration of project is 3 years (March 2008 to March 2010) Funds: Rs 21,14,796/-.
2. Pharmacological Evaluation of plant extracts and their medicinal products. Funded by Ranbaxy research foundation. Duration of project is
3. A preliminary study on the anti-obesity property of a Unani formulation in experimental models in rats. Funding by Central Council of Research in Unani Medicine.

Dr. Kamal Kishore

1. Efficacy and Safety of Concomitant use of Nevirapine and Rifampicin in Patients Co-infected with HIV and Tuberculosis in India in Collaboration with Department of Medicine, AIIMS.

Dr. S. K. Maulik

1. Clinical trial of a standardized preparation of *Terminalia arjuna* in patients with left ventricular dysfunction. Department of Biotechnology, New Delhi.
2. Modulatory effects of phytoadaptogens on cardiovascular and neurological changes induced by experimental stress in rats. Department of Science and Technology, New Delhi.
3. 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. Funded by the Indian Council of Medical Research, New Delhi.

Dr. K. H. Reeta

1. Plasma level monitoring of mycophenolic acid and clinical outcome in renal transplant patients (Institute Research Grant, 2007-2008) Funds: Rs 1.00 lakhs.

Dr. Surender Singh

1. Major research project funded by ICMR, New Delhi on “Standardization and pharmacological studies on antiarthritic Unani formulation “Majoon suranjan” based on clinical Unani literature” as Principal Investigator. Duration of period 3 years. Funds: Rs 20,99,160/-

Completed

1. Evaluation of *Terminalia arjuna* as a potential ‘prophylactic’ antihypertensive. Jagriti Bhatia. Funded by AIIMS for 1 year (2006-2007).
2. Dr. Jagriti Bhatia- Neurobehavioural evaluation of hydroalcoholic extract of *Emblica officinalis* with special reference to its antiepileptic activity.
3. Dr. Jagriti Bhatia- AIIMS funded project on “Evaluation of anti-inflammatory activity of plant lipids containing alpha-linolenic acid” as Principal Investigator.

PUBLICATIONS

Journals

1. Rathore B, Paul B, Chaudhury BP, Saxena AK, Sahu AP, Gupta YK. Comparative studies of different organs of *Nyctanthes arbortristis* in modulation of cytokines in murine model of arthritis. *Biomed Environ Sci.* 2007; 2: 154-9.
2. Briyal S, Gulati A, Gupta YK Effect of combination of endothelin receptor antagonist (TAK-044) and aspirin in middle cerebral. artery occlusion model of acute ischemic stroke in rats. *Methods Find Exp Clin Pharmacol.* 2007; 4: 257-63.
3. Kumar V.L. and Roy S. *Calotropis procera* Latex extract affords protection against inflammation and oxidative stress in Freund's Complete Adjuvant-induced monarthritis in rats. *Mediators of Inflammation* 2007; 47523-47529, 2007.
4. Kumar V.L. and Seghal R. *Calotropis procera* latex-induced inflammatory hyperalgesia – effect of bradyzide and morphine. *Auton Autacoid Pharmacol.* 2007;27:143-149.
5. Padhy B.M., Srivastava A and Kumar V.L. *Calotropis procera* latex affords protection against carbon tetrachloride induced hepatotoxicity in rats. *J. Ethnopharmacol.* 2007;113:498-502.
6. Kumar V.L. and Padhy B.M. Herbal remedies for liver diseases. *Recent Prog. Med. Plants* 2008;21:333-345.
7. Senthilkumari S, Velpandian T, Biswas NR et al. Evaluation of the modulation of P-Glycoprotein on the intraocular disposition of its substrates in rabbits. *Curr Eye Res* 2008; 33: 333-334.
8. Senthilkumari S, Velpandian T, Sonal N, Biswas NR, Ghose S. Evaluation of the impact of P Glycoprotein drug Efflux Transporter Blockade on the systemic and ocular disposition of P-glycoprotein substrate. *J Ocul Pharmacol Ther* 2008;
9. Velpandian T, Ravi AK, Kumari SS, Biswas NR, Ghose S. Ocular hazards of the colors used during the festival of holi in India-malachite green toxicity. *J Hazard Mater* 2007; 139: 204-208.
10. Shukla J, Bandopadhyaya GP, Varma IK, Kumar R, Maulik SK. Morphology and release kinetics of technetium-99m(V) dimercaptosuccinic acid loaded, poly(lactic-co-glycolic)acid microspheric delivery system. An experimental approach that may be used for targeted radiation treatment. *Hell J Nucl Med.* 2007;10(1):9-13.
11. H.K.Loh, K.C.Sahoo, K.Kishore, R.Roy, T.C.Nag, S.Kumari, D.S.Arya. Effects of thalidomide on isoprenaline-induced acute myocardial injury: a haemodynamic, histopathological and ultrastructural study. *Basic & Clinical Toxicology*, 2007; 4: 233-239.
12. Surender Singh and D.K. Majumdar. Biological activities of *Ocimum sanctum L.* fixed oil – An overview. *Indian Journal of Experimental Biology* 2007; 45:403-12.

Abstracts

1. KH Reeta, J Mehla, YK gupta. Pharmacodynamic and pharmacokinetic interaction of sodium valproate with curcumin and beta-carotene in pentylenetetrazole induced seizures in rats. *Indian J Physiol Pharmacol* 2007;51(5):466.
2. SC Sarangi, KH Reeta, YK Gupta. Protective effect of mycophenolate mofetil on mercuric chloride induced nephrotoxicity in rats. *Indian J Physiol Pharmacol* 2007;51(5):466.
3. Reeta KH, Mehala J, Gupta YK. Pharmacodynamic and pharmacokinetic interaction of sodium valproate with curcumin and b-carotene in pentylenetetrazole-induced seizures in rats. *Indian J Physiol Pharmacol* 2007;51(5):516.

4. Sarangi SC, Reeta KH, Gupta YK. Protective effect of mycophenolate mofetil on mercuric chloride induced nephrotoxicity in rats. *Indian J Physiol Pharmacol* 2007;51(5):466.

Chapters in Books and Monographs

1. Gupta YK, Reeta KH, Briyal S, Gupta V. Chemotherapy for Pediatric Tumors. In: Gupta DK, Carachi R (Editors) *Pediatric Oncology)Surgical and Medical Aspects*. First Edition, 2007, Jaypee Brothers Medical Publishers, New Delhi, India, pp. 481-502.
2. M Gupta, Stewart L, Gupta YK 'Use of Melatonin in Epilepsy: From Bench to Bedside' in the book entitled 'Melatonin: From Molecules to Therapy' published under the imprint of Nova Publishers, USA. 2007;1:656.

PATIENT CARE

Urinary Catecholamine test

Urinary catecholamines estimation is routinely performed in the department for the diagnosis of pheochromocytoma (adrenal gland tumor). A total of 220 samples from different departments were analyzed during the year.

Clinical Pharmacology Facility

As an extension of the Department of Pharmacology, a newly constructed wing in New Private Ward building was taken up as 'Clinical Pharmacology Wing' by Department of Pharmacology in collaboration with Forensic Medicine to upscale patient care facilities and in-patient wards for various clinical pharmacology activities.

Therapeutic Drug Monitoring Facility

Therapeutic drug monitoring has become important for dose titration of many drugs of narrow therapeutic margin. The Department of Pharmacology in collaboration with the Department of Nephrology at All India Institute of Medical Sciences, has started therapeutic drug monitoring facility of several drugs for patient care and research. To start with, antiepileptic drugs, immunosuppressants like cyclosporine, and methotrexate have been started for patient for patient care free of cost. In the year 2007-2008, the following samples were from different departments were done for patients:

Leutinizing Hormone (LH)	35 patients
Follicular Stimulating Hormone (FSH)	7 patients
Estradiol (E2)	38 patients
Progesterone	4 patients
Prolactin	1 patient
Valproate	65 patients

National Poison Information Centre: The Department of Pharmacology has a 24X7 National Poison Information Centre, which 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 also done in the department for various poisons.

In the year 2007-08, the centre received a total of 1002 calls about poisoning and their management from all over the country.

Total Poisoning Calls (941 Calls)

Total Information Calls (61)

Household Products	Agricultural Pesticides	Industrial Chemicals	Drugs	Bites & Stings	Plants	Unknown
397	133	111	180	22	30	52
Oral Route	Dermal Route	Inhalation	Others			
907	21	9	4			

Suicidal cases: 430

Accidental cases: 481

Others: 30

National Pharmacovigilance Programme: CDSCO, Ministry of Health, Govt. of India had initiated the National Pharmacovigilance Programme with 32 centres including five regional and two zonal centres. AIIMS is the designated Zonal Centre for the North East region of the country and receives data from peripheral and regional centres of this region. The data is then collated and analysed for causality assessment of the adverse drug reactions which is then submitted to the Centre (CDSCO) which is the National Centre. The Zonal Centre received a total of 1790 Adverse Drug Reaction Reports in the year 2007-2008 from North and East Region.

AWARDS AND HONOURS

During the year (2007-2008) Dr. Kamal Kishore was awarded Rashtriya Gaurav Award by India International Friendship Society

1. Dr. Madhur Gupta was awarded during the year 2007-2008 the “Shakuntala Amir Chand Prize” by the Indian Council of Medical Research, New Delhi, for her published research work on pharmacotherapy of epilepsy in children

SIGNIFICANT EVENTS

Awareness & Training in Good Clinical practice (GCP) and Good Laboratory Practices (GLP):

The department has been instrumental in the inception and conduct of several GLP and GCP workshops in the past years including this year. Various training sessions for scientists, faculty, and more importantly for the junior scientists were organised for the same.

Dr Y.K. Gupta is Member, Review Committee of Central Council for Research in Ayurveda and Siddha New Delhi; Member, Review Committee of Central Council for Research in Unani Medicine New Delhi; Chairman, National Technical Committee on Good Laboratory Practices (GLP), New Delhi; Member, Expert Group to review toxicity data for indigenous manufacture of pesticide formulation, Directorate of Plant Protection, Quarantine and Storage; Ministry of Agriculture, GOI; 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, New Delhi; Member, Screening Committee for HIV/AIDS under Golden Triangle Partnership Programme, ICMR, New Delhi; Member, Working Group on Development of Antifertility Agent ISM Drug Pippalyadi Yoga; Member, Task Force on ‘Quality standards of Indian medicinal plants’ by ICMR; Member, Task Force for Science and Society Division of Department of Science and Technology, New Delhi; Member, Review Group of Programme ‘Charak’ by Defence

Research and Development Organization, 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, New Delhi; Chairman, Committee for Amendment of Insecticides Rules, 1971 of Plant Protection and Quarantine and Storage, Faridabad; Member, Task Force on Biotechnology for Medicinal and Aromatic Plants of Department of Biotechnology, New Delhi; Member, Ethics Committee for Research on Human Subjects, AIIMS; Member, National Disaster Management Authority, Government of India; Member, Navodaya Vidyalaya Samiti, New Delhi; Member, High Powered Committee on 'Global Environment Change and Health' of 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 on Food and Water Safety, International Life Sciences Institute, India; Editor, IJPP (Pharmacology Section)- A national peer-reviewed journal of pharmacology and physiology in India; Coordinator, Zonal Centre of National Pharmacovigilance Programme under the aegis of the CDSCO, New Delhi; 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 of Consumer Awareness Task Force, Ministry of Health and Family Welfare, New Delhi; Member, National Environmental, Engineering Research Institute, Nagpur; Member, Editorial Board of 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 is Member, Project Evaluation committee, Department of AYUSH, Govt. of India; Member , Pharmacopoeia Committee (U), Department of AYUSH, Govt. of India; Member , Apex Appraisal Committee, AICTE, Govt. of India; Member , Inspection Committee, Pharmacy Council of India, Govt. of India; Member , Expert Committee (PGDPSM), IGNOU, Govt. of India; Member , Board of Research Studies, Jamia Hamdard, New Delhi; Member , Board of Research Studies, UP Technical University, Lucknow (UP).

9.29 Physical Medicine and Rehabilitation

Professor and Head

U. Singh

Additional Professor

Sanjay Wadhwa

Associate Professors

S.L. Yadav

Gita Handa

EDUCATION

Department is involved in teaching of undergraduate medical students during MBBS course through lectures, integrated seminars and practical demonstration / visit to department including prosthetic-orthotic workshop.

Department is providing MD (PMR) training to PG 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 Post-graduate students of Orthopaedics, Pharmacology, Community Medicine and Paediatrics in their Thesis, and Computer Facility Project trainees.

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

Dr. U. Singh

1. Delivered a talk on “Rehabilitation Approaches in Nerve Injuries” during the Inaugural conference of Indraprastha Association of Rehabilitation Medicine (Delhi Chapter of IAPMR), organized by the Department of PMR, AIIMS, New Delhi, held at India Habitat Centre, New Delhi, from April 7-8, 2007.
2. Delivered a lecture on “Quality of Life after Stroke” during the Mid Term CME program of the Indian Association of Physical Medicine and Rehabilitation, organized by Medical College, Trivandrum, September 15-16, 2007.
3. Delivered a lecture-cum-demonstration on “Prosthetics and Orthotics Aids and Appliances” during the 9th Post Graduate Instructional Course in Orthopedics, 2007, organized by Maulana Azad Medical College, New Delhi, October 5, 2007.
4. Delivered a lecture on “Rehabilitation of patients suffering from Neurological Disorders” during the “Neuro-nursing update” organized by College of Nursing, AIIMS, New Delhi, October 16, 2007
5. Delivered a lecture on “Sports Rehabilitation” during the Sports Medcon 2007, organized by Indian Federation of Sports Medicine and Sports Authority of India, New Delhi, November 16, 2007.
6. Delivered a lecture on “Stroke Rehabilitation” during a course for Medical Officers in Rehabilitation, organized by NIOH, Kolkata, November 28, 2007.

7. Delivered a lecture on “CAD CAM and Newer Technology in Lower Extremity Prosthetics” during the pre-conference workshop on Osseointegration, organized by Indian Orthopaedic Association (IOACON) and NIOH, Kolkata, December 3, 2007.
8. Delivered a Key Note Address on “Future of In-patient Rehab Care in India” during Rehabasic Seminar, organized by Freedom Trust, Chennai, December 8, 2007.
9. Delivered a lecture on “Clinical Assessment of Patients with Spinal Cord Injury” during Basic Workshop on SCI Management during ISSICON 2008, organized by Spinal Cord Society (Indian Chapter), Indian Spinal Injuries Centre, New Delhi, February 25, 2008.
10. Delivered a lecture on “Evaluation of a Spinal Cord Injury Patient” during Basic Workshop on SCI Management for Doctors during ISSICON 2008, organized by Spinal Cord Society (Indian Chapter), Indian Spinal Injuries Centre, New Delhi, February 27, 2008.
11. Was a panelist on the following panel discussions during Basic Workshop on SCI Management during ISSICON 2008, organized by Spinal Cord Society (Indian Chapter), Indian Spinal Injuries Centre, New Delhi, February 25-27, 2008:
 - a. Assessment of patients with SCI
 - b. Pre-hospital and acute care of SCI patients
 - c. Management of vertebral fractures in SCI
 - d. Nursing in SCI patients
 - e. Bladder and Sexuality Management of SCI
 - f. Management of early and late complications of SCI
 - g. Management of Pressure sores in SCI
 - h. Therapy, wheel chairs and assistive devices in SCI

Dr. Gita Handa

1. Sportsmedcon 2007 as an organizing committee member on 16-17 November 2007
2. Faculty training Seminar on OCSP organized by CMET at AIIMS
3. Scientific committee Chairman and coordinator for Inaugural Conference of Indraprastha Association of Rehabilitation medicine, organised by the department at India Habitat Center on April 7-8, 2007

Conference Organised by Department

Inaugural Conference of Indraprastha Association of Rehabilitation Medicine, (Delhi Chapter of IAPMR), organized by the department of PMR, AIIMS, New Delhi, held at India Habitat Centre, New Delhi, from April 7-8, 2007.

Lectures delivered

Dr. U. Singh

1. Low Back Ache in Old Age, A Diagnostic Challenge, presented during the Mid Term CME program of the Indian Association of Physical Medicine and Rehabilitation, Medical College, Trivandrum, September 15-16, 2007.
2. PMR practice—how to make an impact, 36th Annual National Conference, Indian Association of Physical Medicine and Rehabilitation, Sweekaar Academy of Rehabilitation Sciences, Secunderabad, January 18-20, 2008.

3. Nocturnal orthotic management of idiopathic adolescent scoliosis: A nightmare bending brace, 18 National Conference of Orthotics and Prosthetics Society of India, Hyderabad, 23-25 January 2008.
4. Advancements in Understanding Neuropathology of SCI and its Clinical Relevance” presented during the International Spine and Spinal Injuries Conference, organized by Spinal Cord Society (Indian Chapter), Taj Palace Hotel, New Delhi, February 22-24, 2008.

Dr. S.L. Yadav

1. Psychosocial morbidity in SCI patients, presented in ISCOS and NOSCOS congress, 27-30 June 2007, Iceland.
2. Role of Intra-articular Hyuran in the management of PA shoulder, our experience, presented in the 4th world congress of ISPRM, June, 10-14, 2007, Co Ex, Seoul, Korea.
3. Evaluation of Quality of life in Lower limb prosthesis users; Indian perspective, presented in 12th World congress of ISPO July, 29-Aug. 3, 2007 Vancouver, Canada.

Dr. Gita Handa

1. Guest Faculty at the Seminar Organized at National institute of Social Defence (NISD) on 23rd August, 2007 to deliver a Guest lecture on “Role of Rehabilitation Medicine in care of elderly”
2. Bladder Function in Cerebral Palsy, a prospective study. 36th Annual National Conference of the Indian Association of Physical Medicine and Rehabilitation, organized by Sweekaar Academy of Rehabilitation Sciences, Secunderabad, January 18-20, 2008.
3. Presented a Poster Paper on Neurogenic Bladder in Cerebral Palsy at IAPMRCON 2008 at Hyderabad on 18-20th January 2008
4. Delivered Guest lecture on Autonomic Dysfunctions in SCI -other Issues during ISSICON 2008 organised by Spinal Cord society at ISIC delhi on 25-27 February 2008.

Camps

Faculty and residents participated in different camps at Srikrishna Janambhumi Mandir at Mathura

RESEARCH

Collaborative Projects

1. ICF Core Set Development in:
 - a. Stroke : Institute for health and Rehabilitation Sciences, University of Munich, Germany.
 - b. Ank Spond : University Hospital Maastricht, The Netherlands.
 - c. Spinal Corol Injury: Ludwig – Maximilians – University, Munich, Geramany.

PUBLICATIONS

1. Gajre SS, Singh U, Saxena RK, Anand S. Electrical impedance signal analysis in assessing the possibility of non-invasive diagnosis of knee osteoarthritis. Journal of Medical Engineering & Technology 2007;31(4):288-299.
2. Singh U. Supplements – Editorial. Indian Journal of Physical Medicine and Rehabilitation 2007 Apr; 18 (1): 1.
3. Borah D, Singh U, Wadhwa S, Bhattacharjee M. Postural Stability: Effects of Age. Indian Journal of Physical Medicine and Rehabilitation 2007 Apr; 18 (1): 7-10.

4. Nallegowda M, Singh U, Khanna M, Kumar R. Coexistence of Ankylosing Spondylosis with Benign Joint Hypermobility Syndrome. Are they Complementary to Each Other? Indian Journal of Physical Medicine and Rehabilitation 2007 Apr; 18 (1): 15-20.
5. Singh U. Use and Abuse of Modalities - Editorial. Indian Journal of Physical Medicine and Rehabilitation 2007 Oct; 18 (2): 33.
6. Borah D, Wadhwa S, Singh U, Yadav SL, Bhattaharjee M, Sindhu V. Age Related Changes in Postural Stability. Indian Journal of Physiology and Pharmacology 2007; 51 (4): 395-404.

PATIENT CARE

Facilities Available in the Department

The Department provides Outpatient, Inpatient and Outreach services to people with disabilities. The department has many diagnostic as well as therapeutic facilities which include comprehensive rehabilitation facilities, balance lab, Computerised dynamometry, Electrophysiology Lab, Minor O.T etc.

New Cases

OPD	: 12103
Ballabgarh	: 5287
Camps	: 125
Prosthetic & Orthotic	: 2391
Total New Cases	19906

Old Cases

OPD	: 10182
OPD visits – PT section	: 14689
OPD visits – OT section	: 19657
OPD visits- MSW	: 2642
OPD visits-Vocational Counselor	: 2852
Disability Evaluation Clinic	: 232
Railway Concession certificates	: 840
Prosthetic & Orthotic	: 9786
Minor O.T Procedures	: 2458
Total Old Cases	63338

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Dr. U. Singh won First Prize in Special Hindi Essay Competition (Category Non-Hindi Speaking) organized by AIIMS, New Delhi during Hindi Week, September 10-15, 2007; Awarded “Freedom Trust Award” for “Social Responsibility in the Field of Rehabilitation,” by Freedom Trust, Chennai, December 2007; Awarded second prize in the essay writing competition during the Vigilance Awareness Week 2007, AIIMS, November 13, 2007; Member of the 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, District Rehabilitation Center Scheme, Ministry of Social Justice and Empowerment; Member, Executive Council, National Institute for the Orthopaedically Handicapped,

Kolkata; Inspector, GGS IP University, Govt. 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; Organizing Chairman, Inaugural Conference of Indraprastha Association of Rehabilitation Medicine, (Delhi Chapter of IAPMR), organized by the department of PMR, AIIMS, New Delhi, held at India Habitat Centre, New Delhi, from April 7-8, 2007; Chairman of the Scientific Session II, Inaugural Conference of Indraprastha Association of Rehabilitation Medicine, (Delhi Chapter of IAPMR), organized by the department of PMR, AIIMS, New Delhi, held at India Habitat Centre, New Delhi, from April 7-8, 2007; Chairman of the following Scientific Sessions: (i) Prognostic Indices & functional outcome measures in Stroke, September 15, 2007; (ii) Free paper Session, 16 September 2007 during the National Mid Term CME 2007 of Indian Association of Physical Medicine and Rehabilitation, organized by Medical College, Trivandrum, 15-16 September 2007; Member, Advisory Committee to monitor upgradation of facilities in the departments of PMR in medical colleges, DGHS, Ministry of Health and Family Welfare, Govt. 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, Govt. of India; Chairman, Scientific Session I, Pre Conference Workshop on Osseointegration and Newer Prosthetic System for Lower Limb, IOACON 2007, organized by IOA and NIOH, Kolkata, December 3, 2007; Chairman, Scientific Session IV, during the 36th Annual National Conference of the Indian Association of Physical Medicine and Rehabilitation, organized by Sweekaar Academy of Rehabilitation Sciences, Secunderabad, January 18-20, 2008; Chairman, Scientific Session II, Acute Management of SCI, during International Spine and Spinal Injuries Conference, organized by Spinal Cord Society (Indian Chapter), Taj Palace Hotel, New Delhi, 22 February 2008; Member, Academic Committee, National Institute for the Orthopaedically Handicapped, Kolkata.

Dr. Gita Handa is Assistant Editor - Indian Journal of Physical Medicine and Rehabilitation; Examiner for Post Graduate Programme in Sports Physiotherapy for GND University, Amritsar; Chairman of the Scientific Committee, Inaugural Annual Conference of the IAPMR (Delhi Chapter), held at IHC, New Delhi, April 7-8, 2007; Chairman of the Scientific Session at Annual Conference of IAPMR, at Secunderabad on 18-20 January 2008.

Dr. S.L. Yadav was Awarded WHO fellowship on Trauma and Rehabilitation at Royal North Shore Hospital, NSW, Sydney, Australia; Chosen as faculty (International) for teaching Neuro-rehabilitation by ISPO.

9.30 Physiology

Professor and Head

J. Sengupta

Professors

R. Mathur
D. Ghosh

K. K. Deepak

H. N. Mallick

Additional Professors

S.C. Mahapatra

K.P. Kochhar

Associate Professors

Ratna Sharma

Nalin Mehta

Assistant Professors

Suman Jain
Sanjay Kumar Sood

Ashok Kumar Jaryal

Raj Kumar Yadav
Anjana Talwar

EDUCATION

Undergraduate Postgraduate/Paramedical

The department provided about 400 hours of teaching to the first year MBBS 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. Dr Nalin Mehta designed and taught a module (10 sessions) on Bioethics as a part of the Departmental PG program and conducted a sensitization session followed by an interactive problem solving group session on Bioethics for Interns for the Interns Orientation Program and delivered a lecture “Ethics and Professionalism in Patient Care & Research” during the Post Graduate Resident Doctor’s Orientation Program conducted by AIIMS on 6 January and 13 January 2008, respectively.

Short-term and long-term training

The department provided short-term training for 2 months (15 May, 2007 to 14 July, 2007) to a student from BSc (H) Biomedical Science, Acharya Narendra Dev College, Delhi University; for 2 months (04.06.07–27.07.07) to a lecturer, Dr B. R. Ambedkar National Institute of Technology, Jalandhar, Punjab; and for 15 days (15.6.07–29.6.07) to a lecturer, Surat Municipal Institute of Medical Education & Research, Surat and MSc (Biotechnology) and long term training for 6 months (4.7.07–31.7.07) to a MSc (Biotechnology) student from Department of Bio-Medical Sciences, Bundelkhand University, Jhansi.

CONTINUING MEDICAL EDUCATION

Organised by the department

The Department of Physiology, AIIMS, conducted the National workshop on Assessment Methods in Learning Evaluation in Basic Medical Sciences from 20–22 September 2007. The workshop was attended by 37 faculty members from medical colleges across the country from the three pre-clinical disciplines. The Workshop was an extensive ‘hands-on’ training in groups for making,

analyzing and improving questions for each tool of assessment. Professor J. Sengupta (Chairperson), Dr Anjana Talwar (Organizing Secretary), Professor D. Ghosh, Dr Ratna Sharma, Dr Suman Jain and Dr R.K. Yadav were the members of the Organizing Committee of this workshop.

Lectures delivered

Dr R. Mathur

- Mathur R. “Pain modulation status” during CME: Physiological Approaches to Pain Management, Gwalior; 6 October 2007.
- Mathur R. “Assessment techniques for pain modulation status” during CME: Physiological Approach, to Pain Management, G.R. Medical College, Gwalior; 6 October 2007.
- Mathur, R. “Pathophysiology of pain and pain management” during CME: Pathophysiology of pain and pain management”, H.M. Patel Centre for Medical Care & Education, Karamsad, Gujarat; 27 October 2007.

National and International Conference

Organised by the department

- Dr K.K. Deepak organized a workshop on “Autonomic Function Testing: Principles and Methods” during 53rd National Conference of Association of Physiologists and Pharmacologists of India (APPICON 2007) held at Andhra Medical College, Vishakhapatnam, Andhra Pradesh; 27–30 December 2007.
- Dr N. Mehta conducted a training session on “Priority Setting in Healthcare & Research” on 7.9.2007 during ICMR-NIH 10-week Training Program on Bioethics (20 August–22 September 2007) for trainers, researchers, faculty and Institutional Ethics Committee Members, organized by Indian Council of Medical Research at St. Johns National Academy for Health Sciences, Bangalore.
- Dr N. Mehta conducted one day workshop for students and faculty on: 1. Research Grant Proposals: The essentials, 2. Scientific writing, 3. Effective on-screen presentations and 4. Priority Setting in research, at ‘Training Workshop on Research Methodology’ organized by National Institute of Naturopathy, Pune, 4–6 December 2007.

Lectures delivered

Dr R. Mathur

- “Framing of OSPEs” during National Workshop on Assessment Methods for Learning Evaluation in Basic Medical Sciences, Department of Physiology, AIIMS, 20–22 September 2007.
- “Pathophysiology of pain: clinical assessment of pain modulation status”, Conference on AMPICON-2007, Shere-I-Kashmir Institute of Medical Sciences, Srinagar; 2–4 Nov. 2007
- “Patterns of aggressive behaviour in rats exposed to chronic ELF-MF”, 95th Indian Science Congress, Visakhapatnam, 3–7 Jan., 2008.
- “Functional Recovery Following Spinal Cord Injury: Role of Magnetic Field Exposure” International Symposium on Regenerative Neuroscience and Annual Meeting of Society for Neurochemistry (INDIA) at NIMHANS, Bangalore; 17–18 Jan., 2008.
- “Possible mechanism of action of magnetic field on aggressive behaviour”; Symposium on Oxidative Stress and Cognition – An Overview, Maulana Azad Medical College, New Delhi; 8–9 Feb, 2008.

- “Mechanism of recovery after spinal cord injury by exposure to extremely low frequency magnetic field”, Workshop cum Symposium on Electromagnetic Fields: Bio-Interactions, Applications and Mobile Computing, Electromagnetic Pollution, Jawaharlal Nehru University, New Delhi; 14–15 March, 2008.
- “Effect of magnetic field on motor response of tail to a wide range of thermal stimuli in complete transection of spinal cord injured rats”, Workshop cum symposium on Electromagnetic Field: Bio-Interactions, Applications and Mobile Computing Electromagnetic Pollution, Jawaharlal Nehru University, New Delhi; 14–15 March, 2008.
- “Effect of exposure to low intensity magnetic field on pain modulation status of rats using temporal summation technique” Workshop cum Symposium on Electromagnetic Field: Bio-Interactions, Applications and Mobile Computing Electromagnetic Pollution, Jawaharlal Nehru University, New Delhi; 14–15 March, 2008.
- “Effect of yogic lifestyle on muscle over-activity in chronic tension type headache” APPICON, Andhra Medical College, Vishakhapatnam; 27–30 Dec, 2007.

Dr K.K. Deepak

- “Clinical Physiology to boost sports performance”, Sport Medicine and Arthroscopy Workshop Basic (shoulder), New Delhi; 18 March, 2007.
- “Objectives structured practical examination (OSPE): an overview”, National Workshop on Assessment methods for Learning Evaluation in Basic Medical Sciences, Department of Physiology, AIIMS; 21 Sept., 2007.
- “Monitoring of autonomic functions during cardiac rehabilitation program involving physical training”, 1st International Conference of Physiotherapy and Sports Sciences, Punjabi University, Patiala; 4–9 Oct., 2007.
- “Myocardial insult and autonomic neural function”, XIX Annual conference of Physiological Society of India (PSI), Faridabad; 6–8 Dec., 2007.
- “Quantification of baroreflex sensitivity: A useful parameter for determining brainstem dysfunction” 53rd National Conference of Association of Physiologists and Pharmacologists of India, Andhra Medical College, Vishakhapatnam, 27–30 Dec., 2007.
- “How to compete for research grant?”, 53rd National Conference of Association of Physiologists and Pharmacologists of India, Andhra Medical College, Vishakhapatnam, 27–30 Dec., 2007.
- “Tests of autonomic reactivity”, Workshop on Autonomic Function Testing: Principle and Methods, Andhra Medical College, Vishakhapatnam, 27–30 Dec., 2007.
- “The autonomic function lab at AIIMS: From concept to evolution”, 53rd National Conference of Association of Physiologists and Pharmacologists of India (APPICON 2007), Andhra Medical College, Vishakhapatnam, 27–30 Dec., 2007.
- Mechanism of setting of question paper, question banking and item analysis, Workshop on Effective Teaching/Learning Strategies in Nursing, College of Nursing, AIIMS; 14 Jan., 2008.
- Writing research proposals: Problems and solutions, 13th refresher course in environmental sciences, UGC Academic Staff College, JNU, New Delhi; 13 Feb., 2008.
- “Human elements in analysis of physiological signals”, Seminar cum Workshop on Acquisition and Analysis of Biomedical Signals, SRM University, Kattankulathur, Chennai; 29 Feb., 2008.
- “Engineering of autonomic controls in humans”, Department of Applied Mechanics, IIT Madras, Chennai, 3 March, 2008.

- “Role of autonomic function testing in the management of autonomic dysfunction”, JIPMER under aegis of JIPMER Scientific Society, Pudducherry; 18 March, 2008.
- “Principles of regulation of Physiologic functions”, JIPMER, Pudducherry; 19 March, 2008.
- “Research study design”, Central Council for Research in Yoga & Naturopathy, New Delhi; 28 March, 2008.
- “Guidelines for writing research project”, Training workshop on Research Methodology in Naturopathy & Yoga, Central Council for Research in Yoga and Naturopathy, New Delhi; 28 March, 2008.

Dr K.P. Kochhar

- Lecture series (5) on Healthy lifestyle, Physical Activity, Stress Management and De Addiction delivered to school students of Delhi as part of HRIDAY SHAN Project (Health Related Information Dissemination Amongst Youth-Student Health Action Network)

Dr N. Mehta

- “How to prepare a case report for publication” at the ‘Training Workshop on Research Methodology in Yoga & Naturopathy’ invited by the Central Council for Research in Yoga & Naturopathy (CCRYN), on the 26th of March 2008 organized from 26–28 March, 2008.

Dr S. Jain

- Prenatal auditory stimulation: Effect on postnatal behaviour of domestic chick. Symposium on Current Trends in Auditory Research, Maulana Azad Medical College, New Delhi. 21–22 Sept. 2007.

Dr R.K. Yadav

- “Oxidative stress and antioxidants: Role in human body.” Symposium Oxidative Stress and Cognition – An Overview, Maulana Azad Medical College, New Delhi; 8–9 Feb., 2008.

Dr S.K. Sood

- “Selective attention during various task loads” Symposium Oxidative Stress and Cognition – An Overview, Maulana Azad Medical College, New Delhi; 8–9 Feb., 2008.

RESEARCH

Funded Projects

Completed

1. Histochemical investigations into the possible neural substrates responsible for sucrose induced pain modulation. Dr S. Jain. Funded by AIIMS, from 2006–2007. Funds: Rs. 1,00,000/-.
2. Autonomic status and leptin levels in serum and peritoneal fluid of patients with pelvic endometriosis. Dr R.K. Yadav. Funded by AIIMS, from 2006–2007. Funds: Rs 1/- Lakh.
3. The effect of smoking on stress induced changes in cognitive functions. Dr A. Talwar. Funded by AIIMS from 2005–2007. Funds: Rs 1,40,000/-.

Ongoing

1. Elucidating endometriosis using genomic strategy. Dr J. Sengupta. Funded by Department of Biotechnology, from April 2007 to March 2010. Funds: Rs.1,66,94,000/-.

2. Effect of bone marrow stromal cell transplantation and magnetic stimulation in the sensory-motor functional recovery of spinalised rats. Dr R. Mathur. Funded by ICMR from March 2008–February 2011. Funds: Rs. 16,55, 200/-.
3. Motor responses to noxious/non-noxious stimuli in spinalised humans and rats: Role of electromagnetic stimulation in recovery. Dr R. Mathur. Funded by the Department of Science and Technology, (Integrated Long term Programme of cooperation in Science & Technology between India and Russia), from April 2006 to March 2009. Funds Rs.32,67,339/-.
4. Assessment of pain modulation status in chronic tension type headache and migraine patients. Dr R. Mathur. Funded by CSIR from 2007-2009. Funds: Rs.20,000/- per year.
5. Multicentric trial of integrated software for quantification of autonomic tone. Dr K.K. Deepak. Funded by Dept. of Information Technology, Ministry of Communication and Information Technology, from 15 March 2004–31 March 2008. Funds: Rs. 28,33,000/-.
6. Development of ECG amplifier: an essential hardware for the autonomic function tests (Heart Rate Variability). Dr K.K. Deepak. Funded by Dept. of Science and Technology; from 24 Sept., 2004 – 23 Jan., 2008. Funds: Rs.17,26,269.20/-.
7. Role of the warm receptors of the preoptic area in altering sleep. Dr H.N. Mallick. Funded by Defense Institute of Physiology and Allied Sciences from August 2003 to August 2007. Funds: Rs 5.0 lac.
8. 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. Dr H.N. Mallick. Funded by ICMR from 15 Jan 2007 to 14 Jan. 2010. Funds: Rs.5.0 lac.
9. Role of glutamate in the preoptic area in the regulation of sleep wakefulness. Dr H.N. Mallick. Funded by the Ajinomoto, Incorporation Company, Japan from April 2006 to March 2009. Funds: Rs 6.0 lac.
10. Defining endometrial receptivity for blastocyst implantation using cDNA based array technology. Dr D. Ghosh. Funded by Department of Science and Technology, from 23 Jan. 2006 to 22 Jan., 2009. Funds: Rs.44,48,700/-.
11. Immunomodulatory effects of Tulsi (*Ocimum sanctum* Lin) extracts on healthy human subjects. Dr S.C. Mahapatra. Funded by: Central Council for Research in Ayurveda and Siddha, New Delhi for 2007-2010. Funds: Rs 14, 92, 419.
12. A study on stress reactivity of students as a function of their general and emotional intelligence and effect of meditation on the stress response. Dr R. Sharma. Funded by AIIMS from 2006-2008. Funded : Rs 1.0 lac.
13. 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. Dr R. Sharma. Funded by Central Council for Research in Yoga and Naturalpathy, Ministry of Health from 2006-2009. Funds: Rs.15.0 lac.
14. Prenatal auditory sound stimulation: effect on spatial memory and expression of synaptic proteins in chick hippocampus. Dr S. Jain. Funded by Council of Scientific and Industrial Research from 2006-2009. Total Funds: Rs.15.0 lac.
15. Estimation of beta-endorphin and nociceptin in ventromedial nucleus of hypothalamus after prolonged sucrose ingestion by microdialysis. Dr S. Jain. Funded by AIIMS Research Grant from 2007-2008. Total funds Rs. 1.0 lac.
16. Psychoneuroimmune effects of meditation: an evaluation by PET and biochemical markers. Dr R. K. Yadav. Funded by Department of Biotechnology from 2007-2010. Funds: Rs 11.60 lac

17. Adiponectin concentrations in serum and peritoneal fluid of patients with endometriosis. Dr R. K. Yadav. Funded by AIIMS from 2007-2008. Funds: Rs 1.0 lac.
18. Neural correlates of conflict: An event related functional magnetic resonance imaging study: Dr S.K. Sood. Funded by the AIIMS from April 2006 to March 2008. Funds: Rs1.3 lac.

Departmental Projects

Ongoing

1. Effect of varying stimulus onset asynchronies on multisensory prepulse modulation of startle response.
2. Effect of speech and non-speech stimuli variation on prepulse inhibition in dyslexic children.
3. Effect of acute deep brain stimulation of the subthalamic nucleus on selective attention in Parkinson's disease.

Collaborative Projects

Completed

1. Assessment of autonomic response and arterial stiffness using Photoplethysmographic signal (Centre for Biomedical Engineering, IIT Delhi).
2. Efficacy of a relaxation program during early postpartum period on volume of expressed breast milk in mothers of very preterm babies: A randomized controlled trial (Department of Paediatrics, AIIMS.)
3. Autonomic functions and selected immune markers in inflammatory bowel disease: Role of yogic intervention, (Department of Gastroenterology, AIIMS).

Ongoing

1. Purgulation of human adult retinal pigment epithelial (GRPE) cells in the 6-OHD & lesioned rat model of Parkinsons' disease (PD), (Department of Neurology, AIIMS)
2. Assessment of endogenous opioid system and muscle spasm in headache patients, (Departments of Neurology, Psychiatry, Endocrinology; AIIMS)
3. Modified neuroendocrine method to estimate endogenous opioid levels in healthy volunteers, (Department of Endocrinology, AIIMS.)
4. Bioeffects of magnetic field: role of protein kinase C and cytochrome oxidase in adult rats, (School of Environment Sciences, JNU).
5. A comparison of autonomic function before and after surgical intervention in patients with temporal lobe epilepsy, (Department of Neurology, Neurosurgery, AIIMS).
6. Correlation between cardiovascular autonomic function and myocardial ischemia, (Department of Cardiology, AIIMS).
7. Cardiovascular autonomic functions after Myocardial Infarction: effect of short-term exercise training, (Department of Cardiology, AIIMS).
8. Autonomic dysfunction in newly detected Type-II diabetes mellitus patients, (Department of Endocrinology, AIIMS).
9. Electroencephalographic and sympathetic responses to visual and cues with emotional and rational contents, [Atal Bihari Vajpayee Indian Institute of Information Technology and Management, Gwalior].

10. Influence of prenatal auditory stimulation on the development of synaptic proteins, brain derived growth factor and spatial memory in chick hippocampus, (Department of Anatomy, AIIMS).
11. Role of proteomic approach and biomarkers in the diagnosis of endometriosis. (Department of Obstetrics and Gynaecology, AIIMS).

PUBLICATIONS

Journals

1. Bhatia R., Dureja G.P., Tripathi M., Bhattacharjee M., Bijlani R.L. and Mathur R. Role of temporalis muscle over activity in chronic tension type headache: effect of yoga based management. *Indian J. Physiol Pharmacol* 2007; 51(4): 410-414.
2. Bhattacharjee M., Bhatia R., Gupta N. and Mathur R. Gender specificity of sucrose induced analgesia in human adults. *Indian J. Physiol Pharmacol* 2007; 51(4): 410-414.
3. Ghosh D. Is hypothesis' hypertelic in science. *Indian J Physiol Pharmacol* 2008; 52: 7-10.
4. Kar M, Ghosh D. and Sengupta J. Histochemical and morphological examination of proliferation and apoptosis in human first trimester villous trophoblast. *Hum Reprod* 2007; 22(11): 2814-2823.
5. Kar M., Ghosh D. and Sengupta J. Molecular correlates of syncytialization in muscle and placenta. *Indian J Physiol Pharmacol* 2007; 51: 311-325.
6. Kochhar K.P. Creativity in Biomedical Research. Guest Editorial, *Indian Journal of Physiology and Pharmacology* 2007; 51(3): 307-310.
7. Kochhar K.P. An Ode to Nephros Teaching Physiology by Poetry. *Indian Journal of Physiology and Pharmacology* 2007; 51(3): 421-422.
8. Kumar V.M., Vetrivelon R., Mallick H.N. Noradrenergic afferents and receptors in the medial preoptic area: neuroanatomical and neurochemical links between the regulation of sleep and body temperature. *Neurochem Int.* 2007; 50: 783-90.
9. Mahapatra S.C. and Mahapatra S. Physiological changes in old age. *J. Res. Ayur. Siddha* 2007; 28(4): 123-129.
10. Mallick H.N. Understanding safety of glutamate in food and brain. *Indian J. Physiol Pharmacol* 2007; 51: 216-34.
11. Mallick H.N, Tandon S., Jagannathan N.R., Gulia K.K., Kumar V.M. Brain areas activated after ejaculation in healthy young human subjects. *Indian J. Physiol Pharmacol.* 2007; 51: 81-5.
12. Mathur R. Effect of chronic intermittent exposure to AM radiofrequency field on responses to various types of noxious stimuli in growing rats. *Journal of Electro Magnetic Biology and Medicine* 2008; 27(3):266-76.
13. Mondal S., Mahapatra S.C., Mirdha B.R., Naik S.N. Antimicrobial activities of essential oils obtained from fresh and dried leaves of ocimum sanctum (l.) against enteric bacteria and yeast. *Acta Horticulturae* 2007, 756:267-69.
14. Rishi M. R. and Mathur R. Threshold of pain in chronic magnetic field (50 Hz, 17.9 μ T) exposed rats: Effect of sucrose ingestion. *Journal of Electro Magnetic Biology and Medicine* 2008; 27(3):254-65.
15. Sakhuja A., Goyal A., Jaryal A., Wig N., Vajpayee M., Kumar A., Deepak K.K. Heart rate variability and autonomic function tests in HIV positive individuals in India. *Clin Auton Res* 2007; 17:193-196.

16. Sengupta S., Sengupta J., Mittal S., Kumar S. and Ghosh D. Effect of human chorionic gonadotropin (HCG) on expression of vascular endothelial growth factor A (VEGF-A) in human mid-secretory endometrial cells in three-dimensional primary culture. *Indian J Physiol Pharmacol* 2008; 52: 19-30.
17. Sengupta J., Lalitkumar P.G.L., Najwa A.R., Charnock-Jones D.S., Evans A.L., Sharkey A.M., Smith S.K. and Ghosh D. Immunoneutralization of vascular endothelial growth factor inhibits pregnancy establishment in the rhesus monkey (*Macaca mulatta*). *Reproduction* 2007; 133: 199-1211.
18. Sethi J., Singh S., Sood S., Talwar A., Seth S. Antistressor activity of *Ocimum Sanctum* (Tulsi) against experimentally induced oxidative stress in rabbits. *Methods Find Exp Clin Pharmacol* 2007; 29(6): 411-416.
19. Srividya R, Mallick H.N., Kumar VM. The medial septum acts through the medial preoptic area for thermoregulation and works with it for sleep regulation. *Indian J. Physiol Pharmacol* 2007; 51: 261-73.
20. Thakar A, Deepak K.K, Shyamkumar S. Auricular Syncope. *J Laryngol Otol* 2007; 12: 1-3.

Abstracts

- 1 Choudhary N, Tripathi M, Chandra S, Jaryal A, Deepak KK. Effect of vagal nerve stimulation (VNS) on cardiovascular autonomic functions in refractory epileptic patient – A Case Report. *Indian J Physiol Pharmacol* 2007;51(5):534-35.
- 2 Choudhary N, Tripathi M, Chandra S, Jaryal A, Deepak KK. Hemispheric location of epileptic foci influences cardiovascular autonomic function: a preliminary study. *Clin Auton Res* 2007;17(5):281.
- 3 Deepak K.K, Madan K, Jaryal A, Roy A, Pandit N, Prabhakaran D, Pandey RM, Reddy KS. Correlation between baroreflex sensitivity and respiratory sinus arrhythmia in myocardial infarction patients. *Heart* 2007; 93; 1-2.
- 4 Deepak K.K, Madan K, Agarwal A, Pandit N, Jaryal A, Roy A, Pandey RM, Prabhakaran D, Reddy SK. Early autonomic dysfunction in acute myocardial infarction patients involves both autonomic activity and reactivity. *Clin Auton Res* 2007;17(5):314.
- 5 Deepak K.K, Tripathi M, Choudhary N, Jaryal A, Wankhar S and Chandra PS. Temporal lobe epileptic patients how existence of autonomic oscillation in EEG. *Clin Auton Res* 2007;17(5):282.
- 6 Deepak K.K. How to compete for research grant. *Indian J Physiol Pharmacol* 2007;51(5):446-47.
- 7 Deepak K.K. Quantification of baroreflex sensitivity: A useful parameter for determining brainstem dysfunction. *Indian J Physiol Pharmacol* 2007;51(5):440.
- 8 Deepak K.K. The Autonomic Function Lab at AIIMS: From concept to evolution. *Indian J Physiol Pharmacol* 2007;51(5):434
- 9 Deepak K.K. The rhythm of heart: A window to autonomic controls. *Indian J Physiol Pharmacol* 2007;51(5):454.
- 10 Jaryal A.K., Khadka R, Narang R, Patel C.D., Deepak K.K. Thallium – 201 Positive patients with coronary artery disease show high heart rate variability. *Heart* 2007;93;3-4.
- 11 Khadka R, Madan K, Jaryal A, Narang R, Deepak K.K. Autonomic reactivity, autonomic tone and baroreflex sensitivity in healthy subjects. *Indian J Physiol Pharmacol* 2007;51(5):535-36.
- 12 Khadka R, Narang R, Patel CD, Jaryal A, Deepak KK. Effect of presence of angina like symptoms on heart rate variability in patients with diabetes mellitus. *Clin Auton Res* 2007;17(5):314.

- 13 Khandelwal E, Madan K, Khadka R, Kulsreshtha P, Jaryal A, Deepak K.K. Autonomic responses and cardiac autonomic drive in patients of orthostatic hypotension. *Indian J Physiol Pharmacol* 2007;51(5):535-36.
- 14 Madan K, Jaryal A, Roy A, Pandit N, Prabhakaran D, Reddy S.K, Deepak K.K. Unmasking of the correlation between autonomic drive to myocardium and blood vessels in patients of acute myocardial infarction. *Clin Auton Res* 2007;17(5):314.
- 15 Makhija L, Ojha N, Madan K, Khadka R, Choudhary N, Sharma P, Jaryal A and Deepak K.K. A computational model of respiratory sinus arrhythmia. *Indian J Physiol Pharmacol* 2007;51(5):533-34.
- 16 Mishra A., Deepak K. K., Sagar R., Bijlani R. L. A Psycho-Philosophical study: Application of astanga yoga as a tool in treatment of psychosomatic disorders. *American Psychosomatic Society* 2008; 307(1678):92.
- 17 Sharma P, Makharia G.K, Ahuja V, Jaryal A and Deepak K.K. Autonomic cardiovascular control during active phase of inflammatory bowel disease. *Indian J Physiol Pharmacol* 2007;51(5):535-36.
- 18 Sharma P, Makharia G, Ahuja V, Deepak K.K. Comparative study of cardiovascular autonomic function in patients with ulcerative colitis and Crohn's disease. *J. Gastrentrol Hepatol* 2007;22(2):178.
- 19 Vempati R, Deepak K.K. The use of yoga as an adjuvant therapy in the management of bronchial asthma: based on a randomized controlled trial. *World Allergy Organization Journal, WAC* 2007;S1:53.
- 20 Vempati R, Deepak K.K. Effect of yogic practices on airway inflammation, mast cell activation and exercise induced asthma: a randomized controlled trial. *Allergy* 2007;62(Supple.83):217.

Chapters in Books

Selvaraj N, Jaryal A, Santosh J, Deepak K.K, Anand S. Monitoring of cardiovascular reactivity during cold pressor test using photoplethysmography. *Proceedings of the IEEE – International Conference on Signal processing, Communication and Networking, Madras Institute of Technology, Anna University Chennai India, IEEE Conference Publication Management Group, Piscataway, NJ 08854, 445 Hoo Lane* 2008; 363-367.

Books and Monographs

Deepak K.K. Yoga and Biofeedback for the treatment of irritable bowel syndrome, Ed-in-Chief: Professor B T Chidananda Murthy, Central Council for Research in Yoga and Naturopathy, CCRYN 2007, 1-58.

PATIENT CARE

Neurophysiology Research Laboratory offered assessment of pain and pain modulation status for chronic pain patients. 60 patients (headache, fibromyalgia) were assessed during the year. Autonomic function lab and vascular function lab provided diagnostic facility for referred patients. The labs provided routine test of autonomic reactivity along with autonomic tone quantification and non-invasive recording of gastric motility (electrogastrography, EGG). A total number of 888 subjects have been tested for autonomic function test this year, which included 715 patients.

Integral Health Clinic (IHC) is a patient care facility that offers a lifestyle modification course for the treatment of Lifestyle disorders like Ischemic heart diseases, Hypertension, Peptic Ulcer syndrome, Bronchial asthma, Diabetes mellitus, obesity. 10 courses were conducted. 38 patients attended the IHC.

Continuing Health Education to parents, school teachers and students of 500 of Delhi as part of HRIDAY SHAN Project.

AWARDS, HONOURS AND SIGNIFICANT EVENTS

The department faculty has chaired several sessions in national and international conferences/symposium. The faculty also has 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, Govt. of India; Member, National Committee of International Union of Physiological Sciences, International Union of Basic and Clinical Pharmacology of the Indian National Science Academy.

Dr R. Mathur Appointed Member Board of Studies, Department of Physiology, J N Medical College, Aligarh Muslim University, Aligarh; Member, Board of Research Studies of the faculty of interdisciplinary Research Studies, Jamia Hamdard University, Delhi; Member, Board of Studies of Department of Anatomy and Physiology, Jamia Hamdard University, Delhi; Member of PhD. Sub Committee in the Department of Physiology, Delhi University, Delhi; Continue to serve as a treasurer of Indian Society of Pain Research and Therapy, Delhi; Serving as inspector, Medical Council of India, Delhi; Member, selection board for recruitment of scientist (B, C) in Defense Research Developmental Organization, Government of India; Member selection board for recruitment of faculty, Institute of Postgraduate Medical Education & Research, Medical College, Rohtak; Kumar S, Jain S, Behari J, Behari M, Avelev V. D, Gupta A, Mathur R received the 2nd prize and best poster presentation certificate award by Editor in Chief of Asian Journal of Experimental Sciences (AJES) for the poster entitled “Effect of magnetic field on motor response of tail to a wide range of thermal stimuli in complete transection of spinal cord injured rats” in the workshop cum symposium on Electromagnetic Field: Bio-Interactions, Applications and Mobile Computing Electromagnetic Pollution, Jawaharlal Nehru University during March 14-15, 2008; Suri M., Jain S., Mathur R received the 1st prize for poster presentation entitled “study of dietary influence on pain perception in healthy adult male rat in the National symposium on “Emerging role of physiology and lifestyle intervention in health sciences”, Delhi, February, 2008.

Dr K. K. Deepak Member, education committee of International Union of Physiological Sciences; Appointed member, Board of Specialty of Physiology of Medical Council of India; Serve as Professor-Incharge, Examination Section, AIIMS; Appointed as Appellate Authority under RTI act 2005 for entire AIIMS; Served as Central Public Information Officer (CPIO) for examination related matter at AIIMS; Continue as member, Advisory Committee, Central Board of Secondary Education. Appointed as visiting Professor, conducted two days workshop on “Autonomic Testing and Autonomic Lab Organization in Department of Physiology, JIPMER, Pudducherry; Serving as member, Ethics Committee, AIIMS, New Delhi; Appointed as member, Institutional Animal Ethics Committee, AIIMS; Member expert committee for Evaluation/Ballistic trial of Bullet Proof Patka,

Bureau of Police R&D, Ministry of Home Affairs, Government of India; Appointed as Officer-Incharge, Legal Cell, AIIMS; Serving as member Project Advisory committee (DST) for Biomedical “International Collaborative Projects”, Department of Science and Technology (DST), Government of India; 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; Continue as member, project evaluation committee for evaluation of extramurally funded projects scheme of Morarji Desai National Institute of Yoga; Served as Director’s nominee for “Project Management Committee” under Pradhan Mantri Swasthya Suraksha Yojana, MOHFW, Government of India; Serving as member, Academic council, Netajee Subhash National Institute of Sports Patiala, Punjab; Member, selection board for recruitment of scientist (G) in Defense Research and Development Organization, Government of India; Member, Selection Board, Jamia Hamdard, New Delhi; Chairman, Counseling Committee for AIIMS P.G. Junior Resident/senior resident selection; Sub-editor for Indian Medical Journal; Reviewer for Internal Journal of Yoga, Journal of Post Graduate Medium and Indian Journal of Physiology and Pharmacology; Member, National Advisory Committee for organizing “National Yoga Week” and “Re-orientation Training program in yoga by Morarji Desai National Institute of Yoga (An autonomous organization under Department of AYUSH, Ministry of health and Family welfare, Government of India); Member, Stores Purchase Committee, AIIMS, New Delhi; Member, Indian Science congress Association; Member, National Advisory board, 53rd Annual Conference of Association of Physiologists and Pharmacologists of India; Project reviewer, National Research Development Corporation, Govt of India; Post-graduate examiner for Delhi University, Hamdard University and Punjabi University, Patiala; Member, editorial board, International Journal of yoga, Biomedicine an International Journal for Biomedical Sciences; Awarded “Maj. Gen. S L Bhatia Oration Award” by Association of Physiologists and Pharmacologists of India for outstanding contribution to the research and development in the field of Physiology for the year 2007 held at Andhra medical College, Vishakhapatnam, Andhra Pradesh; 27-30 Dec 2007; The research paper “Sharma P, Makharia G, Ahuja V, Deepak KK. Comparative study of cardiovascular autonomic function in patients with ulcerative colitis and Crohn’s disease. *J. Gastrentrol Hepatol* 2007;22(2):178, was awarded “Journal of Gastroenterology and Hepatology Travel grant” at Asian Pacific digestive week 2007, Kobe, Japan; 16th Oct 2007.

Dr H. N. Mallick Chairperson, Scientific Committee, Asian Sleep Research Society; General Secretary, Indian Society of Sleep Research; Finance Secretary, Association of Physiologists and Pharmacologists of India.

Dr D. Ghosh continued to be Executive Editor of Indian Journal of Physiology and Pharmacology.

Dr SC Mahapatra Chaired a scientific session during the 13th Annual conference of the Indian Society for Parenteral and Enteral Nutrition, held at AIIMS, New Delhi, 12-14 October 2007.

Dr N. Mehta PSG-FAIMER (2007-2009) Fellowship - Awarded PSG-FAIMER Fellowship for the year 2007-2009 at the PSG-FAIMER Regional Institute a South Asia Regional Centre for Faculty Leadership Development in Medical Education at Coimbatore, sponsored by the Foundation for Advancement of International Medical Education and Research (FAIMER), a non-profit Foundation of the Educational Commission for Foreign Medical Graduates (ECFMG) Philadelphia, USA; Member ‘National Health Information Network’, a committee set up by the Ministry of Health &

Family Welfare to suggest measures for implementation of the recommendations of the National Knowledge Commission; Chairman, Institutional Ethics Committee for Research involving Human Subjects, AMITY School of Physical Education and Sports Sciences, NOIDA, (U.P.); Member, Institutional Ethics Committee for Research on Human Subjects, Dr Ram Manohar Lohia Hospital, New Delhi.

Dr R.K. Yadav represented AIIMS at the Digestive Disease Week 2007, one of the largest medical conferences of the world, at Washington Convention center in Washington DC, USA; 19-24 May, 2007.

Department provides central facilities:

- i) Autonomic Function Laboratory and Vascular Function Laboratory;
- ii) Confocal Imaging Laboratory;
- iii) Integral Health Clinic;
- iv) Molecular Biology Laboratory.

VISITING SCIENTISTS

- 1 Professor John Hearn, Deputy Vice-Chancellor (International), the University of Sydney, Australia.
- 2 Mr. Rajeev Yadav, Concordia University visited the department and delivered a talk on “Challenges in long term EEG monitoring”; 28 Nov 2007.
- 3 Dr Andreas Michalsen, Head of the Clinic for Internal and Integrative Medicine, University Duisburg-Essen, Germany, visited Integral Health Clinic on 10th October 2007. He also delivered a lecture on the topic, “Lifestyle modification and Mind-Body Medicine in stress-related disease: Current evidence and research implications”, on 11th October 2007 in the Seminar Room, Department of Physiology, AIIMS.
- 4 Dr Subimal Dutta, Professor, Sleep Research Laboratory, Department of Psychiatry, Boston University, School of Medicine, Boston, Massachusetts 02118 on 26 Nov. 2007 visited the REM Sleep and Memory Laboratory, Department of Physiology, AIIMS.
- 5 Dr Deepak Srivastava, Professor, UC Davis School of Medicine, Davis Director, San Joaquin General Sleep Centre, Stockton, California on 12 Dec. 2007 visited REM Sleep & Memory Laboratory, Department of Physiology, AIIMS.

ACADEMIC, ADMINISTRATION, FINANCE, ENGINEERING, LIBRARY, CENTRAL FACILITIES ETC.

Running Departmental Central Facilities of ‘Biochemistry Lab’ and Molecular Biology Lab’.

Dr H.N. Mallick continues to serve as Deputy Superintendent of hostels.

Innovation in Undergraduate Teaching

- (i) Quiz Sessions
- (ii) Interactive Question Answer
- (iii) Using Poetry

9.31 Psychiatry

Professor and Head

Rajat Ray

Professor

Manju Mehta

S.K. Khandelwal

R.K. Chadda

Pratap Sharan

Associate Professor

Rajesh Sagar

Assistant Professors

Nand Kumar

Mamta Sood

EDUCATION

Undergraduate

M.B.B.S.

3rd Semester: 24 hrs

6th Semester: 14 hrs

8th Semester: 06 hrs

Clinical Posting

4-5th Semester: 20 days

6-8th Semester: 40 days

The department has introduced *case based teaching* in CRHSP, Ballabgarh and *OSCE couplet in psychiatric evaluation* in CRHSP, Ballabgarh and department of Medicine, AIIMS

B.Sc. Nursing:

Two semesters: 38 hrs

Postgraduate and Doctoral

Conjoint teaching activity of the department and the National Drug Dependence Treatment Centre (NDDTC)

Journal discussion: Weekly

Seminar: Weekly

Case Conference: Weekly

Faculty/Staff presentation: Weekly

Specific teaching activity of the department of Psychiatry

Psychotherapy supervision for M.D. (Psychiatry) and Ph.D. (Clinical Psychology) students

The department has introduced supervised Consultation-Liaison training for junior residents

Specific teaching activity at NDDTC

Seminars: Weekly

CME

Organised a half-day workshop on “Stress Management” for medical undergraduates (August 2007) and medical-surgical postgraduates (September 2007 & February 2008).

Organised a half-day workshop on “Counselling Skills for Dermatology Residents” (March 2008).

Lectures delivered

Dr Pratap Sharan

- “Conduct Disorders.” Indian Psychiatric Society Workshop on Clinical Practice Guidelines for Child and Adolescent Psychiatry, Jaipur, September 2007.
- “Mental Health: Treatment and Services.” Mental Health Day, 2007 at All India Institute of Medical Sciences. New Delhi, October 2007.
- “Prevention of Schizophrenia.” CME on Childhood Onset Schizophrenia. Indian Association for Child and Adolescent Mental Health, Mumbai, November 2007.
- “Stop Exclusion: Dare to Care.” Panel Discussion held for school students at All India Institute of Medical Sciences. New Delhi, January 2008.

Dr Nand Kumar

- “Stereoisomer and Sulpride.” Delhi Psychiatric Society, New Delhi, January 2008.
- “Role and Sulpride.” CME on Schizophrenia. Delhi Psychiatric Society, January 2008.

Dr Mamta Sood

- “Childhood Onset Schizophrenia: Clinical Features and Course & Outcome.” CME on Childhood Onset Schizophrenia. Indian Association for Child and Adolescent Mental Health, Mumbai, November 2007.

National and International Conferences

Dr. Manju Mehta

“National Workshop on Curriculum Development for the course entitled M.A. in Counselling.” Tata Institute of Social Sciences, Mumbai, 1-2 February 2008.

Dr. S.K Khandelwal

“Longitudinal Assessment of Members of Indian Scientific Antarctic Expedition.” National Centre for Antarctic and Ocean Research, Goa, 27-28 June 2007.

Dr. R.K. Chadda

- “Alzheimer’s Disease: Etiopathogenesis.” 3rd Annual National Conference of the Indian Association of Geriatric Mental Health, Jaipur, 8-9 December, 2007.
- “Criminal Psychology” for the officers of police and Central Bureau of Investigations (CBI), Government of India. The CBI Academy, Ghaziabad, 11 December 2007.
- “Diagnosing Schizophrenia in Clinical Practice”. Schizophrenia Update. Manas Foundation, Ludhiana, 16 December 2007.

- “Medicalisation of Nervous and Emotional Problems.” 60th Annual Conference of the Indian Psychiatric Society, Kolkata, 3-6 January 2008.
- “An Experience of Delivering Psychiatric Services in Earthquake Affected Area of Kashmir in India.” International Conference on Disaster Research: Trends and Evidences. Voluntary Health Association of India, New Delhi, 21 February 2008.
- “Drug Therapy Information to Special Populations: Psychiatric Patients.” Training Programme on the Rational Use of Drugs for Nurses. Delhi Society for Promotion of Rational Use of Drugs, Ahilyabai College of Nursing, New Delhi, 26-27 February 2008.

Dr. Rajesh Sagar

- Resource person in the symposium entitled “Art of Psychiatry.” Annual National Conference of the Indian Association of Private Psychiatrists, Mount Abu, August 2007.
- Resource person. Annual National Conference of the Indian Association of Private Psychiatrists, Bhubaneswar, November 2007.
- Resource person. 60th Annual National Conference of Indian Psychiatric Society, Kolkata, January 2008.

Dr. Mamta Sood

- “Issues related to female psychiatrist in India.” Annual Congress of Japanese Society of Psychiatry and Neurology, Kohchi, Japan, May 2007.

Dr. Manju Mehta

“Enhancing Skills in Adolescents.” International Conference on Psychology in Mental Health, Bangalore, 26-28 July 2007.

Dr Pratap Sharan

- “Literature Search on Diagnosis and Classification.” 2nd Meeting of the International Advisory Group for the Revision of ICD-10 Mental and Behavioural Disorders. Geneva, Switzerland, September 2007.
- “Prevention of Mental Disorders: Implications for Revision of Diagnosis and Classification.” World Health Organization/ American Psychiatric Institute for Research and Education (WHO/ APIRE) Conference on Public Health Aspects of Diagnosis and Classification. Geneva, Switzerland, September 2007.
- “Validity of the WHO-AIMS Instrument and Results.” Mental Health Systems Research in Low and Middle Income Countries: Preliminary Findings from the WHO-AIMS Project. Geneva, Switzerland, September 2007.
- “Methodological and Statistical Challenges/ Future Research Directions.” Mental Health Systems Research in Low and Middle Income Countries: Preliminary Findings from the WHO-AIMS Project. Geneva, Switzerland, October 2007.

Dr. Rajesh Sagar

- Resource person. 11th World Congress of International Federation of Psychiatric Epidemiology. Gutenberg, Sweden, May, 2007.
- Resource person. Satellite symposium held in conjunction with the Neuroscience Meeting, San Diego, USA, 31 October - 2 November 2007.

Dr. Nand Kumar

- “Longitudinal Assessment of Disability in Bipolar Affective Disorder.” 3rd International Conference of South Asian Federation of Psychiatric Associations. Kalutara, Sri Lanka, 2-4 November, 2007.

RESEARCH

Funded Projects

Ongoing

1. Development of Cognitive Behaviour Therapy module for postgraduate residents. (Dr. Manju Mehta). Funded by Ministry of Health and Family Welfare. Funds: Rs. 1.5 lakhs; August 2007-August, 2008.
2. Second phase trial of Norepinephrine Reuptake Inhibitor (NERI) in depression. (Dr. Pratap Sharan, Dr. Rajesh Sagar). Funded by Eli Lilly. Funds: Rs. 10 lakhs; 2006-2008.
3. Analysis of Research related to Diagnosis and Classification of Mental and Behavioural Disorders. (Dr. Pratap Sharan). Funded by World Health Organization. Funds: Rs. 2 lakhs; 2007-2008.
4. Feasibility testing of an Identification Instrument for Identifying Depression/Anxiety in Patients attending Psychiatric OPD. (Dr. Pratap Sharan, Dr. Rajesh Sagar). Funded by World Health Organization – South East Asia Regional Office. Funds: Rs. 2.65 lakhs; 2007-2008.
5. 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. (Dr. Rajesh Sagar). Funded by Servier International.
6. Central Coordinating Team (CCT) and Technical Advisory Group (TAG) member of the multi-centric research project on Neuro-developmental Disability in Children. Funded by Autism Speaks/ the Indian National Trust/ Ministry of Social Justice and Empowerment/ International Clinical Epidemiology Network (INCLIN) (Dr. Rajesh Sagar).
7. Improvement of Quality of Life, Depression and Glycemic Control in Diabetes Mellitus with Rhythmic Breathing (Sudarshan Kriya Yoga And Pranayam) in Addition to Standard Treatment of Diabetes. (Dr. Nand Kumar). Funded by Indian Council for Medical Research. Funds Rs. 9 lakhs; 2008-2010.
8. Prospective Longitudinal Study on Duration of Untreated Psychosis in Patients with First Episode of Psychosis (Dr. Mamta Sood). Funded by All India Institute of Medical Sciences Research Grant. Funds: Rs. 1 lakh; 2007-2008.

Completed

1. Road Rage – A study of aggressive behaviour. (Dr. Manju Mehta). Funded by Ministry of Health & Family Welfare, Government of India. Funds: Rs. 1 lakh; May 2005 - May 2007.
2. Risk Factors of Substance Use and Abuse in Offspring of Substance Abuse Patients (Dr. Manju Mehta). Funded by Indian Council for Medical Research. Funds: Rs. 6 lakhs; October 2004 - April 2007.
3. Development of an Instrument for Identification of Depression in South East Asia Region Countries. (Dr. Pratap Sharan, Dr Rajesh Sagar). Funded by World Health Organization – South East Asia Region Office. Funds: Rs. 2.5 lakhs; 2007-2008.
4. Review of Existing Research related to Diagnosis and Classification of Mental and Behavioural Disorders. (Dr. Pratap Sharan). Funded by World Health Organization – Funds: WHO Intramural, 2007.
5. A Phase III Randomized, Placebo-Controlled, Double-Blind Trial Evaluating the Safety and Efficacy of Sublingual Asenapine vs. Olanzapine and Placebo in Inpatients with an Acute Mania Episode. (Dr. Rajesh Sagar). Funded by Pfizer Limited, Funds: Rs. 5 lakhs; 2005-2007.

Collaborative Projects

Longitudinal and Structured Assessment of the Summer and Winter Teams of the 27th Indian Antarctic Expedition. (Dr. S.K.Khandelwal). Supported by the National Centre for Antarctic and Ocean Research. November 2007 - March 2009.

Functional Status in Patients with Schizophrenia and Substance Misuse (with College of Nursing) (Dr. Pratap Sharan). 2007-2008.

Association between Catechol-O-Methyltransferase (COMT) Polymorphism and Obsessive-Compulsive Disorder (OCD) in the Indian Population (with Department of Biochemistry) (Dr. Pratap Sharan). 2007-2009.

Long Term Cognitive Outcome in Children Cured for Acute Lymphoblastic Leukemia (with Department of Radiotherapy). (Dr. Pratap Sharan). 2007-2008.

PUBLICATIONS

Journals

1. Chabungbam G, Avasthi A, Sharan P. Sociodemographic and clinical factors associated with relapse in schizophrenia. *Psychiatry Clin Neurosci* 2007;61:587-93.
2. Chadda RK, Joshi PC, Gosain SS. Students' awareness about psychiatric illnesses: A study from a hill state. *J Mental Health Human Behav* 2007;12:26-30.
3. Chadda RK, Malhotra A, Kaw N, Singh J, Sethi H. Mental health problems following earthquake in Kashmir: findings of community run clinics. *Prehospital Disaster Med* 2007;22:541-5.
4. Chadda RK, Singh TB, Ganguly KK. Caregiver burden and coping: a prospective study of relationship between burden and coping in caregivers of patients with schizophrenia and bipolar affective disorder. *Soc Psychiatry Psychiatr Epidemiol* 2007;42:923-30.

5. Das PP, Sharan P, Grover S, Behera A. Parathyroid adenoma presenting as bipolar affective disorder. *Psychosom* 2007;48:532-3.
6. Jacob KS, Sharan P, Mirza I, Garrido-Cumbrera M, Seedat S, Mari JJ, Sreenivas V, Saxena S. Mental health systems in countries: where are we now? *Lancet* 2007;370:1061-77.
7. Painuly N, Sharan P, Mattoo SK. Antecedents, concomitants and consequences of anger attacks in depression. *Psychiatry Res* 2007;153:39-45.
8. Rao R, Sagar R, Kabra SK, Lodha R. Psychiatric morbidity in HIV infected children. *AIDS Care* 2007;19:828-33.
9. Ray M, Kothur K, Padhy SK, Sharan P. Hashimoto's encephalopathy in an adolescent boy. *Indian J Pediatrics* 2007;74:492-4.
10. Saldanha D, Chaudhury S, Pawar AA, Srivastava RK, Sood M, Bedi HK. Changing pattern of alcohol abuse in the army before and after AO 3&11/2001. *Med J Armed Forces India* 2007;63:160-2.
11. Sharan P, Bharadwaj R, Grover S, Padhy SK, Kumar V, Singh J. Dependence syndrome and intoxication delirium associated with zolpidem. *Nat Med J India* 2007;20:180-1.
12. Sharan P, Sagar R. Mental health policy for children and adolescents in developing countries (Editorial). *J Indian Assoc Child Adolesc Mental Health* 2007;3:1-4.
13. Sinha P, Rao R, Sharan P. Ziprasidone-induced tardive dyskinesia in a patient without known risk factors. *Nat Med J India* 2007;20:271-2.
14. Sinha P, Sharan P. A public health perspective on violent offences among persons with mental illness: some recent developments. *J Mental Health Human Behav* 2008;13:8-17.
15. Varghese ST, Kumar A, Sagar R. Ultradian pattern bipolar affective disorder and chronic antidepressant use. *J Postgraduate Med* 2007;53:214.

Books/Chapter in Books

1. Chadda RK, Sagar R, Sood M, Agarkar A. *Mental Illnesses: Identification and Treatment (Manasik Rog: Pahchan aur Upchar)* - in Hindi. New Delhi: All India Institute of Medical Sciences, 2007.
2. Chadda RK, Sood M. Psychiatric emergencies. In: Grover A, Aggarwal V, Gera P, Gupta R (Eds) *Manual of Medical Emergencies 3rd Edition*. New Delhi: Pushpanjali Medical Publications, 2007; 914-31.
3. Chadda RK. Psychosocial aspects of poisoning. In: Grover A, Singh NP, Guleria R (Eds) *Pocket Book of Poisoning*. New Delhi: Pushpanjali Medical Publications, 2007; 28-31.
4. Khandelwal SK, Deb SK. Transcendental meditation: current status. *Psychotherapy in a Traditional Society: Context, Concept & Practice*. New Delhi: Jaypee Brothers Medical Publishers, 2007;190-205.
5. Kumar N, Chadda RK. Acute opiate poisoning. In: Grover A, Aggarwal V, Gera P, Gupta R (Eds) *Manual of Medical Emergencies 3rd Edition*. New Delhi: Pushpanjali Medical Publications, 2007; 101-5.

6. Mehta M. Behavioural Sciences in Medical Practice, 2nd Edition, Jaypee Brothers Medical Publishers, 2008.
7. Sagar R, Kishore J. Rural health services in India. In: *Yojna - Special Issue on 'Approach to 11th Plan*. New Delhi: Ministry of Information & Broadcasting (Government of India), 2007; vol. 5: 22-6.
8. Sharan P, Levav I, Olifson S, de Francisco A, Saxena S. Research capacity for mental health in low- and middle-income countries: Results of a mapping project. Geneva: Global Forum for Health research and World Health organization, 2007.
9. Sharan P, Sagar R. Development of an Instrument for Identification of Depression in South East Asia Region Countries. New Delhi: World Health organization, South East Asian Regional Office, 2007.
10. Sharan P, Sagar R. Identification and management of negative emotions in the community. New Delhi: World Health organization, South East Asian Regional Office, 2007.

PATIENT CARE

	NEW	OLD	TOTAL
General OPD:			
Walk in Clinic:	12017	21823	33840
Detailed assessment	1813	-	1813
Specialty Clinic			
Child Guidance Clinic:	398	396	794
De-Addiction Clinic:	122	1439	1561
Total:	14350	23658	38008
Total Admission:	325		
Total discharges:	334		
Laboratory Investigations for Patient Care:			
Total Number of Serum Lithium levels: 1000			

The department has undertaken a new initiative for “Structuring and expansion of consultation-liaison (C-L) psychiatry services.” Its highlights are:

- 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.
- Background work on development of screening instruments for management of psychological/psychiatric morbidity in medical oncology inpatients.
- Development of outpatient liaison interaction with endocrinology department.

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Dr. Manju Mehta was nominated as the President of Indian Society for Pain Research and Therapy, Vice President of the Indian Association for Child and Adolescent Mental Health, and member of

Central Mental Health Authority; Delhi Mental Health Authority; Board of Visitors and of the Academic Committee of IHBAS. She acted as a resource person for the programme “Judicial Method: The Science, Art and Craft of Judging” organized by the National Judicial Academy, Bhopal (13-15 April 2007). She was invited as an Adviser in the P.T. Boards for interviewing candidates at the Union Public Service Commission, New Delhi (16-20 April 2007) and at Bihar Public Service Commission, Patna (10-16 September 2007). She was also invited as an expert in the two-day workshop at National Centre for Antarctic and Ocean Research, Goa (27-28 June 2007) and for a meeting organized by the Indra Gandhi National Open University for launching the Diploma Programme in Family Counselling and Therapy in the School of Extension and Development Studies (25-26 February 2008).

Dr. S.K. Khandelwal participated as a member of the summer team in the prestigious 27th Indian Scientific Antarctic Expedition on deputation from Government of India (10 November 2007 to 13 April 2008). To prepare for this, he attended the high altitude training programme for the members of the Expedition at the Mountaineering & Skiing Institute, Indo-Tibetan Border Police, Auli (12-25 September 2007), where he also delivered a lecture on the “Mental Health Consequences in the Extreme Climatic Conditions of Antarctica.” He was awarded the “Best Trainee” award for members of the Indian Scientific Antarctic Expedition at the High Altitude Training Programme. He also conducted training in “Mind Management and Survival in Antarctica” and “Group dynamics and Behaviour during Expedition to High Altitude with Special Reference to Kailash Mansarover Expedition” at Maitri, the Indian Scientific Station, Antarctica (December 2007).

Dr. R. K. Chadda was nominated as member of the advisory council of the International Academy of Behavioural Medicine, Counselling and Psychotherapy (IABMCP) and awarded the Diplomat of the academy (IABMCP). He took over as the Secretary General of the Indian Association for Social Psychiatry. He was also appointed as a member of the Ethics Committee of the Institute of Human Behaviour & Allied Sciences (IHBAS) Delhi; as the Principal Coordinator for revision of the standard treatment guidelines for mental disorders, developed by the Delhi Society for Promotion of Rational Use of Drugs. He conducted a series of one day CME programmes on common mental disorders for the medical officers in the Directorate of Health Services, Government of Delhi. About 80 doctors received this training. (29th August 2007, 12th September 2007, 29th September 2007). He organised a number of community awareness activities during the World Mental Health week. The activities included mental health awareness stalls in the general hospital, street plays, public lectures, painting competition for school children and release of an information booklet in Hindi on mental disorders. The Programme was funded by the WHO- India office (4th -10th October, 2007). He delivered a lecture on “Somatoform Disorders” and “Anxiety Disorders” in the training programme for medical officers under the District Mental Health Programme at Post Graduate Institute of Medical Sciences, Rohtak (April 2007). He also delivered lectures (once every month) in a training programme in Psychiatry for medical Officers, organized at G.B. Pant Hospital, New Delhi.

Dr. Pratap Sharan was a Special Invitee to the 2nd Meeting of the International Advisory Group for the Revision of ICD-10 Mental and Behavioural Disorders of the World Health Organization (2007). He is a resource person for the WHO’s Research for Change Initiative: Enhancing the quality of mental health publications from low- and middle-income countries (2003-Onwards);

WHO/APIRE Conference on Public Health Aspects of Diagnosis and Classification (2007-2008), Mental Health Systems Research in Low and Middle Income Countries: Preliminary Findings from the WHO-AIMS Project. Geneva, Switzerland (2007); the Director of Civil Aviation's Committee on prevention of and negotiating with hijackers (2006-Onwards); and Government of Madhya Pradesh's Expert Group on Improvement of Mental Health Services in the State (2006-Onwards). He was a member of the Expert Panel for recruitment of Assistant Professor in Psychiatry for Government of Madhya Pradesh (March, 2008). He is the editor of the Journal of Indian Association of Child and Adolescent Mental Health. He served as an editorial board member for the Indian Journal of Psychiatry and Journal of Mental Health and Human Behavior. He was invited to participate in the Workshop for Editors of Indian Biomedical Journals. Indo-US Science and Technology Forum and the National Medical Journal of India. New Delhi, India, 2008. He is a peer reviewer for Comprehensive Psychiatry (International), International Psychogeriatrics (International), National Medical Journal of India (Indexed), and Indian Journal of Psychiatry. He was the Chairperson for the 'Award Session' and for a symposium entitled "Towards ICD-11: Child Psychiatry Disorders" of the IX Biennial Conference of the Indian Association of Child and Adolescent Mental Health, Mumbai, 2007.

Dr. Rajesh Sagar was appointed as a member of the Clinical Epidemiology Unit (CEU) of Indian Clinical Epidemiology Network (IndiaCLEN) body of International Clinical Epidemiology Network (INCLEN). He received the membership of National Academy of Medical Sciences, 2007. He was elected to the Executive Council of the Indian Association for Child & Adolescent Mental Health (2007-2009). He is a member of task force on Clinical Research in Mental Health in Central Council of Homeopathy Research, New Delhi & Member, Editorial Advisory Board for Indian Journal of Research in Homoeopathy, published by the Central Council for Research in Homoeopathy (CCRH) under the Department of AYUSH, Ministry of Health & Family Welfare, Govt. of India. He was also a member of the International Advisory Board of Schedule for Clinical Assessment in Neuropsychiatry (SCAN), and the International Federation of Psychiatric Epidemiology. He was invited to attend as the India coordinator of the World Mental Health Survey Consortium Annual Meeting since 2005 including the one at Portsmouth, USA (June 2007). He is a member of the Scientific Advisory Committee (SAC) of the National Brain Research Centre (NBRC) and was invited to attend its 9th meeting at Manesar, Haryana (April 2007). He was invited as a guest speaker in the CME of Physical Medicine and Rehabilitation - organized by Physical Medicine and Rehabilitation Department, AIIMS, New Delhi (April 2007). He was invited as a speaker on 'Differential Diagnosis of Pervasive Developmental Disorders - Psychiatrist's Perspective' in the workshop to train medical officers in Delhi Government Hospitals, New Delhi (18-19 July 2007). He was a resource person for the First National Meet of State Mental Health Authorities (25-26 July 2007) and for the National Meet of State Run Mental Health Institutions of the country (21-22 November, 2007) organized by Ministry of Health & Family Welfare at New Delhi. He organized a meeting for Finalization of Training Modules and Operation Guidelines for National Mental Health Program (NMHP) at AIIMS, New Delhi (March 2008).

Dr Nand Kumar was elected as Honorary General Secretary for Mental health Foundation (India). He was a resource person in Gidhour Health Mela in Bihar under National Rural Health Mission (5-8 January 2008); for the training of general duty medical officers organized by the Director

General Health Services, Delhi Government (September 2007); and for a mental health and de-addiction camp organized under the aegis of Art of Living Foundation (February 2008). He restarted the Day Care Centre of the Psychiatry Ward at AIIMS with in May 2007. He successfully circulated online and offline Request Petition for inclusion of mental illness in the National Trust Act. He conducted a mental health awareness program for Mental health Foundation at the Residents Welfare Association annual carnival (9 February 2008). He became a Fellow of the Indian Association for Social Psychiatry and a member of the International Initiative for Mental Health and Asia Pacific Society of Alcohol and Addiction Research (APSSAR).

Dr. Mamta Sood was appointed as the Trainee Editor of Journal of Indian Association for Child and Adolescent Mental Health (2005 onwards) and nominated as the Assistant Secretary General of the Indian Association for Social Psychiatry in January 2008. She is a resource person for training of students of 'postgraduate diploma in old age care' conducted by Project NICE (National Initiative for Care of Elderly) under National Institute of Defense which is under the Ministry of Social Empowerment and Justice; and for the training of general duty medical officers organized by the Director General Health Services, Delhi Government (September 2007). She became a Fellow of the Indian Association for Social Psychiatry and member of the Asia Pacific Society of Alcohol and Addiction Research (APSSAR) and American Psychiatric Society.

9.32 Radio-Diagnosis

Professor and Head

Sushma Vashisht
(Retired on 29.2.2008)

Arun Kumar Gupta
(w.e.f. 1.3.2008)

Professor

Deep Narayan Srivastava

Additional Professor

Raju Sharma

Associate Professors

Sanjay Thulkar
(IRCH)

Sanjay Sharma
(RPC)

Ashu Seith

Assistant Professors

Smriti Hari

Shivanand Gamanagatti
(Trauma Centre)

Atin Kumar
(Trauma Centre)

Scientist-IV

Shashi B. Paul

EDUCATION

Undergraduate and Postgraduate

BSc (Hons) Medical technology in radiography (MTR): A batch of 7 students was admitted to BSc (Hons) Medical technology in radiography course in 2007-2008. This course is of three years duration. A total of 20 students are enrolled in this course.

MD: There are a total of 19 junior residents out of whom 3 are sponsored candidates.

Continuing Medical Education

Lectures delivered

Dr Arun Kumar Gupta

- 'Skeletal maturity assessment', 'Tharang 2008', Trivandrum, 29-30 March 2008.
- 'Imaging of Anorectal anomalies and intersex disorders', 'Tharang 2008', Trivandrum, 29-30 March 2008.
- 'Diseases of GIT in children'. 'Tharang 2008', Trivandrum, 29-30 March 2008.

Dr Deep Narayan Srivastava

- 'Clinical applications of CT in abdomen – Recent advances', XIX Annual conference of UP chapter of Indian society of Gastroenterology, GSV Medical college Kanpur, 15-16 March 2008.
- 'Interactive film session', XIX Annual conference of UP chapter of Indian society of gastroenterology, GSV Medical college Kanpur, 15-16 March, 2008.

Dr Raju Sharma

- 'Imaging of Benign Bone Lesions', Annual Conference of Indian Radiology & Imaging Association, North Zone Chapter, IGMC, Shimla, 2007.
- 'Chest Radiograph: What the surgeon should know', ASICON Meeting, AIIMS, 24 February 2008.
- 'Film Reading Session', Annual Conference of Indian Radiology & Imaging Association, Delhi Branch, 23-24 February 2008.
- 'Imaging of focal liver lesions', EDRACON, New Delhi, 3 February 2008.
- 'Fetal MR Imaging', Annual Conference of Indian Radiology & Imaging Association, Haryana State Branch, Rohtak, 30 March 2008.

Dr Sanjay Thulkar

- 'Role of CT scan in management of Ovarian Cancer', Symposium on Ovarian Cancer, AIIMS, New Delhi, 14 April, 2007.
- 'Breast MRI', CME on breast imaging organized by Indian Radiology & Imaging Association, Bihar State Branch and IGIMS, Patna at IGIMS, Patna, 2 March 2008.
- 'Breast Interventions' at CME on breast imaging organized by Indian Radiology & Imaging Association, Bihar State Branch and IGIMS, Patna at IGIMS, Patna, 2 March 2008.
- 'Imaging and diagnostic procedures in breast diseases', at the Training Workshop of CGHS doctors organized by Department of Surgery AIIMS, New Delhi, 8 March 2008.

Dr Sanjay Sharma

- 'Advances in Breast Cancer Imaging', CME on Breast diseases organised by the Delhi State Chapter of the Association of Surgeons of India (ASI), Lady Hardinge Medical College, New Delhi, 29 July 2007.

Dr Ashu Seith

- 'CT Paediatric Chest', in "Awesome Pulmonology", Paediatric Pulmonology Zonal-CME, SMS Medical College, Jaipur, 6-7 May 2007.
- 'MRI and Interventions in Paediatric Chest', in "Awesome Pulmonology", Paediatric Pulmonology Zonal-CME, SMS Medical College, Jaipur, 6-7 May 2007.
- Panelist in panel discussion on 'Juvenile Nasopharyngeal Angiofibroma' in 9th Annual conference of Skull Base Surgery Society of India-AIIMS, New Delhi, 27-28 Oct 2007.
- 'CT in paediatric chest', Annual Conference of Indian Radiological and Imaging Association, Delhi Branch, AIIMS, New Delhi, 23-24 Feb 2008.
- 'Imaging for Head and Neck Cancer', Head and Neck Cancer CME, AIIMS, New Delhi, 15-17 March 2008.

Dr. Smriti Hari

- 'Role of CT and MRI in Gynaecology', National CME in Obstetrics and Gynaecology, A.I.I.M.S. New Delhi, 21-22 April 2007.
- 'Normal CT Anatomy of pelvis', "Interpretation of CT Scan for beginners", organized by Department of Medicine/ Nuclear Medicine VMMC and Safdarjang Hospital New Delhi, 26 August 2007.
- CPC at XVIII annual CME of Association of Physicians of India-Delhi Chapter, New Delhi, 3-4 November 2007.

- Clinikoradiological Discussion on Pediatric Hypertension at XIXth National Conference of IPNG, Hyderabad, 16-18 November 2007.
- CPC at Golden Jubilee Medicine Update 2007 organized by Department of Medicine MAMC, 13 December 2007.
- ‘Imaging and Diagnostic procedures in Breast Cancer’, “Training Workshop of CGHS Doctors” organized by Department of Surgery AIIMS, New Delhi, 15 March 2008.

Dr Shivanand Gamanagatti

- ‘Portal vein embolisation – Live Video demonstration’, XVII National Conference of the IASG, AIIMS, New Delhi, 29 September- 1 October, 2007.
- ‘Transarterial Chemoembolisation with DC beads’, 6th conference on Evidence based Management of Cancers in India- Interventional Radiology in Oncology, Tata Memorial Hospital, Mumbai, 29 February-2 March 2008.

Dr Atin Kumar

- ‘Approach to pediatric chest X ray’, in “Awesome Pulmonology”, Paediatric Pulmonology Zonal-CME, SMS Medical College, Jaipur, 6-7 May 2007.

Dr Shashi B. Paul

- ‘Percutaneous Ablative therapy for Hepatocellular carcinoma: An Overview’, Annual conference of Indian National Association of Study of liver (INASL), New Delhi, March 2008.

Other departmental staff

- ‘Pediatric Chest: Interactive Session’, Respicon, Dhaka, Bangladesh, November 2007.
- ‘Radiology of Nose and Paranasal Sinus’, Annual Conference of Otorhinologist, AIIMS, New Delhi, December 2007.
- ‘Current Trends in bowel Imaging’, 33rd Annual Conference of Indian Radiological and Imaging Association, Assam Branch, Tezpur, December 2007.
- ‘Interpretation of Chest radiograph and CT brain’, Pedicon, Roorkee, February 2008.

National and International Conferences

Lectures delivered

Dr Sushma Vashisht

- “Imaging of Tracheobronchial Tree”, Annual conference of Indian Radiological and Imaging Association (IRIA), Bangalore, 17-20 January 2008

Dr Deep Narayan Srivastava

- ‘Role of Rhenium lipiodol in hepatic tumour management’, 6th conference on Evidence based Management of Cancers in India- Interventional Radiology in Oncology, Tata Memorial hospital, Mumbai, 29 Feb–2 March 2008.
- ‘Workshop on portal vein embolization’, 6th conference on Evidence based Management of Cancers in India- Interventional Radiology in Oncology, Tata Memorial Hospital, Mumbai, 29 Feb–2 March 2008.
- ‘Imaging & Interventions in HCC’, South Asian conference on Radiology, Kathmandu, 28–30 March 2008.

Dr Sanjay Thulkar

- 'Multimodality imaging for radiotherapy planning', 11th National Conference of Association of Radiation Therapy Technologists of India, AIIMS, New Delhi, 6 October 2007.
- 'Imaging in locally advanced breast cancer', 5th TMH-WCI (Tata Memorial Centre-Women's Cancer Initiative) Conference at Tata Memorial Centre, Mumbai, 26 October 2007.
- 'Imaging in Multiple Myeloma', National Hematology update –VII, AIIMS, New Delhi, 24 February 2008.

Dr Ashu Seith

- 'Paediatric Imaging- Technical Considerations', 2nd Asia Pacific conference of Radiological Technologists, AIIMS, New Delhi, 30 November-2 December 2007.

Other departmental staff

- 'Advances in digital imaging', 16th Asian congress of Radiological technologists (ACRT) and 9th NCIART at PGIMER, Chandigarh, 15-18 Nov 2007.

RESEARCH

Departmental projects

Completed

- Role of directional vacuum assisted breast biopsies in patients with previously equivocal biopsy results
- Imaging evaluation of intra-orbital masses causing proptosis.
- Imaging evaluation of locally advanced squamous cell carcinoma of oral cavity.
- Evaluation of tracheobronchial lesions by Multidetector row CT
- Role of magnetic resonance imaging and magnetic resonance sialography in salivary gland diseases
- Comparison of conventional and Gadolinium-BOPTA enhanced MR Cholangiography in the evaluation of biliary enteric anastomosis.
- MR evaluation of recurrent shoulder dislocation
- Role of MRI in planning of breast conserving surgery for carcinoma breast
- Role of MR arthrography in the assessment of glenohumeral instability

Ongoing

- Differentiating recurrent gliomas from post radiotherapy changes: Utility of advanced MRI techniques and their correlation with 99m tc-glucoheptonic acid (GHA) brain SPECT.
- Role of MDCT in staging of laryngeal carcinoma with limited MRI correlation
- Comparison of US, CT and MR Portography in children with EHPVO
- MRI and PET-CT evaluation of soft tissue sarcomas
- Comparison of MDCT, Endoscopic Ultrasound, MRI & PET-CT in evaluation of pancreatic malignancy
- MRI in evaluation of chronic wrist pain
- Percutaneous management of malignant biliary obstructions
- Diffusion weighted MRI: A new tool for evaluation of focal liver lesions

- Diagnostic accuracy of whole body diffusion weighted MRI in oncologic imaging: comparison with whole body STIR MRI and FDG-PET-CT.
- Role of PET-CT Enteroclysis and double balloon enteroscopy in the evaluation of Crohn's disease.
- Role of PET-CT colonography and colonoscopy in the evaluation of ulcerative colitis
- Role of PET and CEMRI in the evaluation of suspected breast cancer in patient already undergone mastectomy of opposite breast for carcinoma.
- Role of MRI in characterization of sonographically indeterminate adnexal masses
- To evaluate the role of CT-guided radiofrequency ablation in the management of inoperable primary lung cancer.

Collaborative projects

Completed

- Comparative evaluation of ultrasonography and MRI in prenatal diagnosis of fetal anomalies. (with Obstetrics and Gynecology)
- Comparative evaluation of MRI and Arthroscopy in the diagnosis of meniscal tears in anterior cruciate ligament deficient knees. (with Orthopedics)
- Long Term Follow-up study to compare changes in the Temporomandibular Joint following mandible advancement using Twin Block and Bionator Appliances using MRI. (with Dental Surgery)
- Comparative Study of MR Enteroclysis and Double Balloon Enteroscopy in Ulcero-Constrictive Lesions of Small Bowel. (with Gastroenterology)
- Study of natural history of portal biliopathy and impact of shunt surgery. (with Gastrointestinal Surgery)
- Quantitative imaging study of breast cancer and its correlation with oxidative stress. (with Medical Physics)
- Study of structure and function of lung in patients with achalasia cardia.(with Gastroenterology)
- Prevalence of osteoporosis in patients with ankylosing spondylitis. (with Endocrinology)
- Role of ¹⁸F-FDG PET/CT in the evaluation of nodular pulmonary lesions and its comparison with CT scan findings. (with Surgery)
- Evaluation of ¹⁸F- FDG PET/CT and comparison with CT findings in patients with mediastinal lymphadenopathy due to tuberculosis and sarcoidosis. (with Medicine)
- Donor kidney size and outcomes following live donor kidney transplantation. (with Nephrology)
- To study the role of core decompression with and without fibular grafting in patients with avascular necrosis of femoral head; and its effects on the disease progression. (with Orthopedics)
- To document the effect of the time of institution of DMARDs on the radiological outcome in patients with rheumatoid arthritis (with Medicine)
- Effect of Vitamin D3 supplementation on bone disorders in children with chronic kidney disease. (with Pediatrics)
- Evaluation of high-resolution ultrasound for screening of premature atherosclerosis in children with nephrotic syndrome. (with Pediatrics)
- Endothelial dysfunction in rheumatoid arthritis (with Medicine)
- Profile of micronutrient deficiency & hepatobiliary dysfunction in cystic fibrosis. (with Pediatrics)

- Study of radio diagnostic services of AIIMS hospital & their utilization pattern, so as to identify equipment, physical facilities & manpower for the diagnostic imaging services of hospitals of Coal India Ltd. commensurating with their needs (with Hospital Administration).
- Prospective randomized double blind control trial of dexamethasone vs Albendazole on calcification as an outcome in 1-2 ring enhancing lesions in neurocysticercosis of children (with Pediatrics)
- Study of aetiological & risk factor profile in Pediatric strokes (with Pediatrics) Advancement of epidural catheter to thoracic space in children: comparison of two gauge of catheters (with Anaesthesia).
- Management of liver cancer using radionuclide methods with special emphasis on early diagnosis, locoregional therapy (intra-arterial) and internal dosimetry. (with Nuclear Medicine)
- Evaluation of image based treatment planning in radiotherapy (with Radiotherapy)
- Randomized comparison of ABVD with EVAP in newly diagnosed cases of Hodgkin's lymphoma (with Medical Oncology)
- Role of three dimensional computed tomographic scanning in assessment of mandibular invasion and its utility in planning mandibular resection and reconstruction in oral cancer patients (with Surgical Oncology)

Ongoing

- Comparative evaluation of CT and PET in assessment of efficacy of Radio frequency ablation of unresectable non-small cell lung cancer. (with Radiotherapy, Medical Oncology and Nuclear Medicine)
- 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 and Gynecology).
- Validation of gel dosimetry as 3D verification tool in highly conformal radiotherapy techniques (with Neurobiochemistry and Radiotherapy).
- Role of FDG-PET and MRI in assessment of Osteosarcoma: Prechemotherapy and Post chemotherapy (with Medical Oncology and Orthopedics).
- Regulation of Coagulation in orthopedic surgery to prevent DVT and pulmonary embolism (with Orthopedics).
- Comparison of FDG-PET and Dynamic MRI in correlation of VEGF expression on tumour cells in patients with Osteosarcoma (with Medical Oncology).
- Comparison of minimally invasive techniques and conservative treatment in vertebral collapse (with Orthopedics).
- A comparative Evaluation of changes in ultrasonographic dimensions of masseter muscle with EMG activity prior and subsequent to twin block therapy (with Dental Surgery).
- Clinico-radiological evaluation of total knee arthroplasty; short term retrospective-prospective study (with Orthopedics).
- Assessment of endothelial dysfunction and oxidative stress in chronic kidney disease of varying severity and after renal transplantation (Department of Nephrology)
- To determine the efficacy of Flutamide as a tumour volume reducing agent in nasopharyngeal angiofibroma. (with ENT)
- A Phase 3, Open-Label, Parallel-Group Study to evaluate the efficacy of pre-prandial Human Insulin Inhalation Powder (HIIP) Compared to pre-prandial Injectable Insulin I patients with Type 1 Diabetes Mellitus. (with Endocrinology)

- Equivalence randomized controlled trial of bioresorbable plates and titanium plates in the osteosynthesis of mandibular fracture: A pilot study.(with Dental Surgery)
- Utility of PET scan in assessing extent of disease and response to treatment in sarcoidosis. (with Medicine).
- The differential cellular profile of broncho-alveolar lavage and its correlation with pulmonary function test and CT chest in patients of pulmonary sarcoidosis. (with Medicine)
- A clinical and cephalometric study of temporary anchorage device (TAD) supported anchorage in the management of maximum discrepancy extraction cases.(with Dental Surgery)
- Role of Alfa 1 reductase inhibitors in treatment of nasopharyngeal angiofibroma. (with ENT)
- Use of CT as an adjunct to pre-operative planning and monitoring for osteo-odonto-keratoprosthesis in patients's with end-stage Steven Johnson syndrome. (with Ophthalmology)
- Relationship of fetal Doppler velocimetry to biophysical profile and fetal outcome in normal pregnancies and in pregnancies with intrauterine growth retardation. (with Obstetrics and Gynecology).
- Evaluation of PET Scan in preoperative assessment of cases of endometrial carcinoma. (with Obstetrics and Gynecology).
- 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 Gynecology).
- Correlation of stage and imaging of endometriosis with fertility outcome. (with Obstetrics and Gynecology)
- Randomized controlled trial of Radio frequency ablation (RFA) versus Percutaneous acetic acid injection (PAI) therapy for the treatment of small hepatocellular carcinoma. (with Gastroenterology)
- Surveillance of patients of cirrhosis for detection of hepatocellular carcinoma - a cohort study. (with Gastroenterology)
- Validation of the symptomatology as a predictor of hepatocellular carcinoma in patients of cirrhosis of liver. (with Gastroenterology)
- Randomized controlled trial of Transarterial Chemoembolization (TACE) versus TACE plus oral chemotherapy in the treatment of unresectable hepatocellular carcinoma. (with Gastroenterology)
- Randomized controlled trial in the treatment of Transarterial Chemotherapy (TAC) versus Oral chemotherapy of unresectable Hepatocellular carcinoma. (with Gastroenterology)
- Randomized controlled trial of N-Acetylcysteine in prevention of renal failure in hepatocellular carcinoma patients undergoing Transarterial Chemotherapy (TAC) and Transarterial Chemoembolisation (TACE). (with Gastroenterology)
- Randomized controlled trial Oral chemotherapy versus supportive therapy in the treatment of unresectable hepatocellular carcinoma. (with Gastroenterology).
- Study of effectiveness of virtual simulation in external beam radiotherapy planning of carcinoma cervix (with Radiotherapy).
- Metabolic characterization of soft tissue tumours and pathologic and radiological correlation with in vivo Magnetic Resonance Spectroscopy. (with Surgical oncology and NMR).
- Molecular Genetic Studies in patients with Leukodystrophy (with Pediatrics).
- A Survey on the prevalence of tuberculosis (with Medicine).

- Endothelial dysfunction in systemic sclerosis. (with Medicine)
- Evaluation of the efficacy of thrice weekly DOTS regimen in TB pleural effusion at six months. (with Medicine).
- Role of Centchroman in regression of mastalgia and regression of fibroadenoma and its correlation to histopathology and estrogen & progesterone receptors. (with Surgery).
- Study of physical parameters and quality assurance in the gamma knife based stereotactic radiosurgery with non-coplanar beam in the phantom (with Medical Physics).
- Role of PET-CT in differentiating benign and malignant pancreatic mass lesions in patients with or without chronic pancreatitis (with Nuclear Medicine).
- Efficiency of zinc supplement as an adjunct with ATT in children below 15 years age with pulmonary TB. in reducing time to sputum conversion, a randomised blind control trial (with Pediatrics).
- Renal functions & their maturation & renal volume in normal & growth restricted neonates. (with Pediatrics).
- Efficacy of zinc (given as an adjunct) in the treatment of severe and very severe pneumonia in hospitalized children 2-24 month of age. (with Paediatrics).
- Utility of cardiac MRI in RV function evaluation in health and disease (with Cardiac Radiology)
- 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).
- Comparison of seizure recurrence in neurocysticercosis patients with calcified and non calcified healed lesions (with Paediatrics).
- Incidence of acute kidney injury in sick, hospitalized children: A prospective observational study (with Paediatrics).

PUBLICATIONS

Journals

1. Jain V, Gamanagatti SR, Gadodia A, Kataria P, Bhatti SS. Non-familial cherubism. *Singapore Med J* 2007; 48(9): e253.
2. Jain V, Gamanagatti SR. Bye Bye Birdie. Inner Vision. *Radiographics* 2007 Apr; 27 (2): 342.
3. Jain V, Singh J, Sharma R. Spontaneous concomitant cranial and spinal subdural hematoma with spontaneous resolution. *Singapore Med J* 2008; 49(2):e53-58
4. Hari S, Subramanian S, Sharma R. Magnetic resonance imaging of ulnar nerve abscess in leprosy: a case report. *Lepr Rev.* 2007 Jun; 78(2):155-9. Erratum in: *Lepr Rev.* 2007 Dec; 78(4):434.
5. Hari S, Kumar J, Kumar A, Chumber S. Bilateral severe mammary duct ectasia. *Acta Radiol.* 2007; 48(4):398-400.
6. Subramanian S, Hari S, Santosh Kumar S. Clinics in diagnostic imaging (118). *Singapore Med J.* 2007 Sep; 48(9):869-72; quiz 873.
7. Subramanian S, Kandpal H, Sharma R, Pushkar N, Sen S, Gamanagatti S, Vashist S. Invasive sinus aspergillosis with perineural spread in an immunocompetent patient. *Australas Radiol.* 2007 Dec; 51 Suppl: B189-92.
8. Subramanian S, Kumar M, Thulkar S, Harsh K. Bowel metastases from primary leiomyosarcoma of the gluteal region. *Singapore Med J* 2008; 49:e68-70.

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Abstracts

1. Paul SB, Gamanagatti SR., Madan K, Sreenivasa Baba C, Madhusudhan KS, Gulati MS and Acharya SK. Recognising Extrahepatic Collateral Supply to Large Unresectable Hepatocellular Carcinomas for Effective Management by Transarterial Chemoembolisation. *Hepatology International* 2008 Mar; 2: A 257
2. S. Subramanian, S. Gamanagatti, D.N. Srivastava, Z. Abbas, P. Garg. Vascular and nonvascular interventions in pancreatitis. *Eur Radiol* 2008 Feb; 18 Supplement 1.
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Chapters in Books

1. Sharma S, Madhusudan KS. Modern cross sectional imaging techniques in Ophthalmology: An overview. In: Venkatesh P, Garg S, Azad RV (Eds). *Retinal Imaging*. First edition. New Delhi: Jaypee Brothers Medical Publishers (P) Ltd; 2008:9-33.
2. Thulkar S, Sharma S. Multiple myeloma: An update with Indian Experience. In: Kumar R (Ed). *Multiple Myeloma: an update with Indian experience*. First edition. Mumbai: Ranbaxy Super Specialities; 2008: 20-33.

PATIENT CARE

Details of investigations for the period 1 April 2007 to 31 March 2008

Routine X-rays

S.No.	X-Rays	Number
1.	Routine Outdoor	1,16,271
2.	Routine Indoor	25,004
3.	Portable X-Rays	24,454
4.	Casualty X-Rays	74,362
	Total	2,40,091

Special Investigations

S.No.	Investigation	Number
1.	Barium Meal	1297
2.	Barium Enema	431
3.	Barium Swallow	1190
4.	Intravenous Urography	1841
5.	Adult Micturating Cystourethrography	886
6.	Paediatric Micturating Cystourethrography	695
7.	Hysterosalpingography	286
8.	Contrast Studies	910
9.	Mammogram	1579
10.	Digital Subtraction Angiography	139
11.	Interventional Digital Subtraction Angiography	1091
12.	Venogram	81
13.	OT Procedures	82
14.	MRI	1932
15.	Routine Ultrasound	20289
16.	Doppler	2405
17.	Ultrasound guided Interventions: Routine + Emergency	1748
18.	Casualty Ultrasound	18981
19.	Casualty Doppler	780
20.	Body CT	10826
21.	Head CT	4417
22.	CT Guided Biopsy	331
23.	Ultrasound (Room No. 8)	637
	Total	73, 327

Grand Total = 2,40,091 + 73,327= 3,13,418

New Equipment:

- 2 High End Doppler Ultrasound machines
- 3 Mobile X-Ray units
- 2 Flat panel radiography system
- 1 RF Ablation System

AWARDS, HONOURS AND SIGNIFICANT EVENTS

- **Dr Raju Sharma** elected 'Member of the International Society for Magnetic Resonance in Medicine'.
- **Dr. Shashi Paul** awarded Geeta Mittal Medal and Book Prize for "Best basic research in Oncology" for the year 2005, at All India Institute of Medical Sciences, New Delhi, for the research thesis: 'Prevalence, diagnostic evaluation and screening for hepatocellular carcinoma, and management strategy of small hepatocellular carcinoma among patients with cirrhosis of liver'. 2005. Award conferred at the Annual Convocation of AIIMS, October 2007. Won ISG- Presidential Poster Award at the 48h Annual conference of the Indian Society of Gastroenterology held at Bangalore, November 2007 for the poster: Recognising extrahepatic collateral supply to large unresectable hepatocellular carcinomas for effective management by transarterial chemoembolisation. *Shashi B Paul*, Shivanand R.Gamanagatti, Kaushal Madan, C. S. Baba, K.S Madhusudhan, Manpreet S. Gulati and Subrat K. Acharya.
- **Dr. Sanjay Sharma** Reviewer for a peer reviewed international indexed Journal 'Catheterization and Cardiovascular Interventions', an official journal of the Society of Cardiac Angiography and Interventions.
- **Dr. Shivanand** awarded 'Editor's recognition Award for reviewing' (European Journal of Radiology).

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-5

Postgraduate- MD Laboratory Medicine Students on RIA

Short- and long-term training

Two long term trainees on WHO fellowship (6 months) and Short-term training was provided to 2 students

Continuing Medical Education

The department organized the National Workshop on Molecular Cytogenetics: Rapid Aneuploidy Diagnosis, AIIMS, New Delhi ; 20-25 August, 2007.

National and International Conferences/Workshops

The department organized the International Conference on Molecular and Clinical Aspects of Gonadal and Non-Gonadal Actions of Gonadotropins, AIIMS, New Delhi; 7-9 February 2008.

Lectures delivered

Professor Anand Kumar

- Presented a paper at the International Conference on Molecular and Clinical Aspects of Gonadal and Non-Gonadal Actions of Gonadotropins, AIIMS, New Delhi; 7-9 February 2008.
- Was a speaker at the National symposium 'An update of male reproduction and infertility, CDRI, Lucknow; March 13-14, 2008 and chaired a session.
- Delivered a Keynote address in a symposium on 'Recent Trends in Animal Research', M.L. Sukhadia University, Udaipur; 3-4 March 2008.
- Invited speaker at the National Seminar in Recent Trends in Biochemistry, Pondicherry University, March 2008.
- Attended and presented a paper at the Annual Meeting of American Society of Andrology, Tampa, USA; 2007.

Dr A. Halder

- Invited for conducting a workshop session on Application of FISH in prenatal diagnosis (prenatal diagnosis of aneuploidy by rapid FISH), Annual Conference of the Indian Society of Prenatal Diagnosis and Therapy, Chennai; 23-25 November 2007.

- Delivered the following talks:
 - (i) 'Inhibin B as marker of ovarian function', AICOG Conference 2008, Delhi; January 2008.
 - (ii) 'Do gonadotropins used for ovarian hyperstimulation cause chromosome aneuploidy, chromosome mosaicism and skewed sex ratio in mouse embryo?' Gonadotropin 2008, Delhi; February 2008.
 - (iii) 'Biological basis of skewed sex ratio', ISSRF conference, Hyderabad; February, 2008.

RESEARCH

Funded Projects

Completed

- 1 Secretion of progesterone and expression of hypoxia inducible factor 1 α during hypoxia induced by cobalt chloride in MA 10 cells. Investigator: Anand Kumar. Funded by ICMR, RA Project.
- 2 Evaluation of sexually transmitted diseases among adolescents and young adults in India. N. N. Sarkar.
- 3 Enumeration of elucidation of barriers to condom use. N. N. Sarkar.

Ongoing

- 1 Prevalence of 22q11 deletion syndrome in children with structural cardiac malformation: In tertiary care referral hospital-based study in Delhi. Funded by ICMR for 3 years. Funds: Rs 9 lakh.
- 2 Rapid detection of chromosome X, Y, 21, 18 & 13 aneuploidy by primed *in situ* labeling. Funded by intramural/AIIMS for 2 years. Funds: Rs 2 lakh.
- 3 Role of hypoxia on vascular endothelial growth factors secretion in MA10 Leydig cells. Investigator: P. K. Chaturvedi. Funded by ICMR SRF Project.

Departmental Projects

Completed

- 1 Effect of cryo-freezing on human spermatozoa: Sperm functions and ultra-structural study.
- 2 To study the pregnancy outcomes in patients with special reference to cyclophosphamide therapy .

Ongoing

1. Chromosome aneuploidy and mosaicism in preimplantation embryo on mouse model and human embryo.
2. An investigation on underlying etiology on primary testicular failure.
3. Role of hypoxia on progesterone and vascular endothelial growth factor secretions in MA-10 cells.
4. Regulation of proliferation of prostatic cancer cell line LNCaP.
5. Regulation of granulosa cell steroidogenesis.
6. Genetic and endocrine factor in primary testicular failure.
7. Role of cobalt chloride induced hypoxia on MA-10 cells.
8. Elucidation of barriers to emergency contraception (EC): Does promoting EC increase risk for contacting sexually transmitted infections, HIV/AIDS.
9. Evaluation of the impact of intimate partner violence on woman's reproductive health and pregnancy outcome.
10. Childhood sexual or physical abuse and its impact on woman's life.

Collaborative Projects

Ongoing

1. Characterization of chromosomal anomalies in multiple myeloma patients using cytogenetics and FISH (with Medical Oncology, Dr B.R.A. IRCH).
2. Use of letrozole versus clomiphene citrate combined with gonadotropins in superovulation and IUI cycles (with Obstetrics & Gynaecology).
3. Effect of oral contraceptive containing ethinyl estradiol combined with drospirenone v. desogestrel on clinical and biochemical parameters in patients of polycystic ovarian syndrome (with , Obstetrics & Gynaecology).

PUBLICATIONS

1. Kumar A, Chaturvedi PK, Mohanty BP. Hypoandrogenemia is associated with subclinical hypothyroidism in men. *International J Androl* 2007; 30:14-20.
2. Kumar A, Mohanty BP, Lata Rani. Effect of subclinical and overhypothyroidism on testicular steroidogenesis. *J Androl Supplement* 2007; March/April p.43
3. Lata Rani, Mohanty BP, Kumar A. Effect of cycloheximide and hypoxia on steroidogenesis in MA-10 cells. Abstract Proceedings of the 17th Annual Meeting of ISSRF, New Delhi, 2007; P24, p.88.
4. Mohanty BP, Lata Rani and Kumar A. Role of cobalt chloride induced hypoxia on Leydig tumor cell steroidogenesis, Abstract Proceedings of the 17th Annual Meeting of the ISSRF, New Delhi, 2007; P.25, p.89.
5. Kumar A, Mohanti BP, Lata Rani. Secretion of testicular steroids and gonadotrophins in hypothyroidism. *Andrologia*, 2007; 39:253-260.
6. Halder A, Fauzdar A. Potential use of blood, buccal and uterine cells for rapid noninvasive diagnosis of suspected aneuploidy using FISH. *Journal of Clinical & Diagnostic Research*. 2007; 1(2):32-38.
7. Halder A, Fauzdar A, Ghosh M, Kumar A. Sum Inhibin B: A Direct, Precise & Noninvasive Marker of ovarian Function. *Journal of Clinical & Diagnostic Research* 2007; 1(3):131-137.
8. Halder A. Nonimmunologic Hydrops Fetalis Associated with True Knot of Umbilical Cord: A Necropsy Study. *J Turkish German Gynecol Assoc*. 2007; 8:420-423.
9. Halder A. Unexplained ten consecutive early third trimester intrauterine fetal deaths: A diagnostic dilemma. *Int J Gynecol Obstet* 2007; 7:(IUD_0910.doc).
10. Halder A. Premature Graying of Hairs, Premature Aging and Predisposition to Cancer in Jajjal, Punjab: A preliminary observation. *J Clin Diagn Res* 2007; 6:577-580.
11. 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:(3): 141-145.
12. 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. *Indian J Med Res* 2008; 128(3):287-297.
13. Sarkar NN. Intracytoplasmic sperm injection: an assisted reproductive technique and its outcome to overcome infertility. *J Obstet Gynaecol* 2007; 27: 347-353.
14. Sarkar NN. Barriers to condom use. *Eur J Contraception Reproductive Health Care* 2008; 13:114-122.
15. Sarkar NN. Impact of intimate partner violence on women's reproductive health and pregnancy outcome. *J Obstet Gynaecol* 2008; 28:266-271.

16. Chaturvedi Pradeep Kumar, Nirwal Garima, Kumar Anand. Effect of hypoxia on the VEGF secretion in MA-10 Leydig cells. *Biology of Reproduction* 2007 (Spl issue, Abstract 249).
17. Nirwal Garima, Kumar Anand, Chaturvedi Pradeep Kumar. Effect of hCG and cAMP on progesterone production in Leydig cells during hypoxic condition. *Biology of Reproduction* 2007 (Spl issue Abstract 417).

Chapters in Book

1. Kumar A, Rani L, Mohanty BP. Hypoxic modulation of LH action on the MA 10 cells. Abstract, Proceedings of the International Conference on Molecular and Clinical Aspects of Gonadal and Nongonadal Actions of Gonadotropins, AIIMS, New Delhi; 7-9 February 2008, p.29.

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	2547
LH	2061
Prolactin	1980
T3	4430
T4	5497
TSH	10453
Testosterone	976
Estradiol	729
Progesterone	62
AFP	2002
PSA	1405
Beta hCG	373
CA-125	833
Cortisol	71
Total Number of tests	33419

Sample number has been increased from 24935 last year to 33419 this year 34% increase

Andrological Examinations: Semen Examination: 290, Seminal Fructose: 103.

Not as part of standard outpatient service however, ~150 cases were referred to me mainly from Sex and Marriage Counseling Clinic(SMCC), Pediatric Genetics, CTVS and other hospitals of Delhi for Counseling/Advice (all in my office/department) and related to Reproductive Genetics in particular Male Primary Hypogonadism and Microdeletion Syndrome.

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Professor Anand Kumar appointed as Expert to Royan Awards (Iran) 2007 in Biomedical Research; Expert in World Bank aided National Agricultural Innovation Project Consortium at NDRI, Karnal

for Project Development; nominee of the University Grant Commission in DRS-I SAP Advisory Committee of ML Sukhadia Unviesity, Udaipur 2007; nominee of the Committee for the Purpose of Control and Supervision of Experiments on Animals (CPCSEA) to the Institutional Animal Ethics Committee of Dr. BR Ambedkar Centre of Biomedical Research, University of Delhi, Delhi and Jaipur College of Pharmacy, Jaipur; a paper entitled 'Hypoandrogenaemia associated with sublinical hypothyroidism in men', submitted to Int J Androl has been included in top ten articles.

Dr. Ashutosh Halder is in the Reviewers Panel, Medicinal Science Monitor International; Consultation to consultant Rolf Bie, consultant pathologist; Continuing as Executive Committee Member, ADNAT (Association for the Promotion of DNA Fingerprinting & other DNA Technologies), CCMB, Hyderabad; reviewed manuscript/scientific papers for the British Medical Journal, Oncogene Research, Indian Pediatrics, Indian Journal of Med Rese, Indian J Clin Biochem, Indian J of Pediatrics, Indian J of Human Genetics, J Maxillofacial and Oral Surgery; reviewed various projects submitted to DST, ICMR, CSIR, etc; invited as faculty for conducting a workshop session on Application of FISH in Prenatal Diagnosis, Annual Conference Indian Society of Prenatal Diagnosis and Therapy, Chennai; 23-25 November, 2007; co-organized International Conference on Molecular and Clincial Aspects of Gonadotropin, AIIMS, New Delhi; 7-9 February 2008; Dr. A. Halder Biography included in 25th Silver Anniversary Edition of Who's Who in the World , 2007 & Who's Who in Asia, 2007' Member, Board of Speciality of Medical Genetics by Medical Council of India; Organized National Workshop on Molecular Cytogenetics: Rapid Aneuploidy Diagnosis, AIIMS, New Delhi; 20-25 August 2007.

Dr. P.K. Chaturvedi got Membership of Society for the Study of Reproduction, USA. Organizing secretary International Conference on Molecular and Clinical Aspects of Gonadal and non-Gonadal Actions of Gonadotropins , AIIMS, New Delhi; 7-9 February 2008.

Dr. NN Sarkar is the Reviewer of the Journal of Public Health, International Journal of Gynaecology & Obstetrics.

VISITING SCIENTIST

Dr C.V. Rao (USA), Dr Nafis Rahman (Finland) visited the department.

9.34 Surgical Disciplines

Faculty

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

Assistant Professor

V.K. Bansal

Anita Dhar

EDUCATION

Short term training

1. Dr. Piyush Choudhry (27.08.07 to 26.2.08)

Elective Training:

8 undergraduate students from Germany, UK, UAE and from other states in India completed elective training.

Continuing Medical Education

Organized by the department

Professor M. C. Misra

- Course Director for
 - i. 1st Training course in Laparoscopic Suturing Skills from 25th February to 27th February 2008 at Minimally Invasive Surgery Training Centre, AIIMS, New Delhi.
 - ii. 2nd Training course in Operative Laparoscopic- Basic and Advanced from 8th -12th May 2007 at Minimally Invasive Surgery Training Centre, AIIMS, New Delhi.
 - iii. 3rd Training course in Operative Laparoscopic- Basic and Advanced from 23rd July -27th July 2007 at Minimally Invasive Surgery Training Centre, AIIMS, New Delhi.
 - iv. 4th Training course in Operative Laparoscopic- Basic and Advanced from 10th September -14th September 2007 at Minimally Invasive Surgery Training Centre, AIIMS, New Delhi.
 - v. 5th Training course in Operative Laparoscopic- Basic and Advanced from 22nd October -26th October 2007 at Minimally Invasive Surgery Training Centre, AIIMS, New Delhi.
 - vi. 6th Training course in Operative Laparoscopic- Basic and Advanced from 26th November -30th November 2007 at Minimally Invasive Surgery Training Centre, AIIMS, New Delhi.
 - vii. 7th Training course in Operative Laparoscopic- Basic and Advanced from 7th January -11th January at Minimally Invasive Surgery Training Centre, AIIMS, New Delhi.

- viii. 8th Training course in Operative Laparoscopic- Basic and Advanced from 31st March -4th April 2007 at Minimally Invasive Surgery Training Centre, AIIMS, New Delhi.
- Organizing Chairman, Second AIIMS Surgical Week, Inaugural Conference of Society of Endoscopic and Laparoscopic Surgeons of India (SELSI) at All India Institute of Medical Sciences, New Delhi from 27th March to 30th March 2008.
- Organizing Chairman, of Live Operative Workshop on Obesity Surgery, All India Institute of Medical Sciences, New Delhi on 31st January 2008.

Professor A. Srivastava

- Co-Organizing Chairman, of Second AIIMS Surgical Week & Inaugural Conference of Society of Endoscopic and Laparoscopic Surgeons of India (SELSI) at All India Institute of Medical Sciences, New Delhi from 27th March to 30th March 2008.
- Organized Surgical CME (March 27th March 2008) comprising theoretical deliberations by the national faculty and operative workshop on diseases of the breast, thyroid, parathyroid and adrenal diseases during Second AIIMS Surgical Week.
- Training of lady doctors working in Central Government Health Services: Organized “Training of Trainers” workshop on breast self examination to increase the awareness about the increasing breast cancer and train them in the methodology and benefits of self examination in early detection of breast cancer which was attended by 153 CGHS doctors. This is the first step towards launching a screening programme for common cancers in the community of Delhi. This programme has been initiated by Director General of Health Services, Ministry of Health & FW, Nirman Bhawan, India.

Dr Sandeep Guleria

- Co-ordinator: National dialogue on the Human Organ transplantation Act organized by the Rajiv Gandhi foundation May 2007.
- Co-Convener of CME on – Essentials of Chest Surgery for General Surgeons organized by ASICON Surgical Research & Education Foundation ASI, Delhi State Chapter & Deptt. Of Surgical Disciplines, on 24th February 2008 at AIIMS.
- National Faculty in Inaugural Conference of Society of Endoscopic and Laparoscopic Surgeons of India (SELSI) (International Minimal Access Surgery Conference, CME cum Live Workshop), ENDOSURG 2008 organized by the Department of Surgical Disciplines from 27th to 30th March 2008 at AIIMS.

Dr. Rajinder Parshad

- Co-Convener of CME on – Essentials of Chest Surgery for General Surgeons organized by ASICON Surgical Research & Education Foundation ASI, Delhi State Chapter & Deptt. of Surgical Disciplines, on 24th February 2008 at AIIMS.
- National Faculty in Inaugural Conference of Society of Endoscopic and Laparoscopic Surgeons of India (SELSI) (International Minimal Access Surgery Conference, CME cum Live Workshop), ENDOSURG 2008 organized by the Department of Surgical Disciplines from 27th to 30th March 2008 at AIIMS. Live demonstration of laparoscopic procedures.

Dr. Sandeep Aggarwal

- Organized the Live Operative Workshop on Obesity Surgery on Jan 31 2008, at Dr. V Ramalingaswami Board Room, AIIMS, New Delhi. This workshop marked the commencement of Bariatric Surgery Services at AIIMS.

- Joint Secretary, Second AIIMS Surgical Week, Inaugural Conference of Society of Endoscopic and Laparoscopic Surgeons of India (SELSI) at All India Institute of Medical Sciences, New Delhi from 27th March to 30th March 2008.

Dr. V K Bansal

- Course Coordinator for
 - i. 2nd ‘Training Course in Operative Laparoscopy- Basic and Advanced’ from 8th -12th May 2007 at Minimally Surgery Invasive Training Centre, AIIMS, New Delhi.
 - ii. 3rd ‘Training Course in Operative Laparoscopy- Basic and Advanced’ from 23rd July to 27th July 2007 at Minimally Invasive Surgery Training Centre, AIIMS, New Delhi.
 - iii. 4th ‘Training Course in Operative Laparoscopy- Basic and Advanced’ from 10th September to 14th September 2007 at Minimally Invasive Surgery Training Centre, AIIMS, New Delhi.
 - iv. 5th ‘Training Course in Operative Laparoscopy- Basic and Advanced’ from 22nd October to 26th October 2007 at Minimally Invasive Surgery Training Centre, AIIMS, New Delhi.
 - v. 6th ‘Training Course in Operative Laparoscopy- Basic and Advanced’ from 26th November to 30th November 2007 at Minimally Invasive Surgery Training Centre, AIIMS, New Delhi.
 - vi. 7th ‘Training Course in Operative Laparoscopy- Basic and Advanced’ from 7th January to 11th January 2008 at Minimally Invasive Surgery Training Centre, AIIMS, New Delhi.
 - vii. 8th ‘Training Course in Operative Laparoscopy- Basic and Advanced’ from 31st March to 4th April 2008 at Minimally Invasive Surgery Training Centre, AIIMS, New Delhi.
 - viii. 1st Training Course in Laparoscopic Suturing Skills from 25th February to 27th February 2008 at Minimally Invasive Surgery Training Centre, AIIMS, New Delhi.
- Organizing Secretary of Inaugural Conference of Society of Endoscopic and Laparoscopic Surgeons of India (SELSI) at All India Institute of Medical Sciences, New Delhi from 27th March to 30th March 2008.

Dr. Anita Dhar

- Organized training workshop “Training of the Trainers on Breast Self Examination” for the doctors of the CGHS on 8th and 15th March 2008 at AIIMS. More than 153 doctors attended the workshop till now and were given hands on training also in the wards for clinical breast examination.
- Organized the Breast Day in Second AIIMS Surgical Week and Inaugural Conference of Society of Endoscopic and Laparoscopic Surgeons of India (SELSI) (International Minimal Access Surgery Conference, CME cum Live Workshop) and ENDOSURG 2008 organized by the Department of Surgical Disciplines from 27th to 30th March 2008 at AIIMS.

Lectures delivered

Professor M. C. Misra

- Special Meeting of the Board of Studies of the Department of Surgery JN Medical College on 4.04.07 at AMU, Aligarh.
- As a Member of the Search Committee for the Vice- Chancellor on 5th May 2007 at Hyderabad.
- Visited as part of Central Technical Team for appraisal of Rajendra Institute of Medical Sciences, Ranchi for upgradation under PMSSY on 7th and 8th May 2007.
- Invited to visit “R Adams Cowley Shock Trauma Center” University of Maryland Medicine, Baltimore, USA on 6th June 2007

- Invited to present Surgical Grand Rounds on 13th June 2007 at Mount Sinai Hospital, USA – Topic: Generalized peritonitis – Tropical spectrum
- As a Guest Faculty in National Conference on Medical Preparedness and Mass Casualties Management on 24th to 25th July 2007 at New Delhi, Organized by the National Disaster Management Authority.
- As a Faculty Member in Global Hernia Clinical Advisory Board meeting from 26th & 27th July 2007 at Lyon, France & Trevoux, France.
- As Guest Faculty in NATCON-IASO-2007 conference at Mohan Dai Owsal Cancer Treatment Research foundation Ludhiana from 21st to 23rd September 2007.
- Invited to chair a scientific session in Surgery Update 2007 XXIV National Continuing Medical Education Programme in Surgery at Maulana Azad Medical College, New Delhi from 24th to 29th September 2007.
- Deliver an Oration at the Bazpur Conference, CME 2007 of IMA Bazpur Branch, Udham Singh Nagar, Uttarakhand on 7.10.07 held at Nainital.
- Appointed to act as an advisor in the PT Board for interviewing candidate in the Combined Medical Services Examination on 8.10.07 at UPSC Office.
- Invited as a Panelist during the Parenteral and Enteral Nutrition Conference held at AIIMS from 12th to 14th October 2007.
- Invited as a Faculty Member in 16th Asian Congress of Surgery, the Biennial Congress of the Asian Surgical Association (ASA) from 19th to 22nd October 2007 at Beijing, China to deliver guest lecture on Laparoscopic repair of incisional and ventral hernia.
- Invited as Operating Faculty in 6th Live Endo Laparoscopic Workshop at Agra on 27th to 28th October 2007
- Invited to deliver a lecture on “Laparoscopy in General Surgery Emergencies” in 33rd Annual Conference of UP Chapter of Association of Surgeons of India from 2nd to 4th November 2007 at BHU Varanasi.
- Invited to act as a Faculty Member, Workshop on Best practices in Tertiary Healthcare on 5th November 2007 at the Ministry of Health & FW, Govt. of India, Nirman Bhawan, New Delhi.
- Invited Guest Faculty Act as a National Faculty during the 8th Postgraduate Endocrine Surgery Course and 8th Indian Association of Endocrine Surgeons’s conference at SGPGI, Lucknow from 22nd to 25th November 2007.
- Invited Faculty at the National Hernia Congress & Live Workshop at New Delhi from 14th to 16th December 2007.
- Invited to participate during Symposium on Severe Dudenal Trauma and Intra-abdominal infections during ASI conference in Bhubaneshwar on 27th & 28th December 2007.
- Invited as guest faculty during the 3rd Meeting of International Endohernia society (IEHS) at Stuttgart, Germany from 17th to 19th January 2008 and presented “Comparison of open and laparoscopic repair of incisional/ventral hernia – results of a prospective randomized study”.
- Invited as a National Faculty to participate during 8th National Congress of IAGES& workshop of Minimal Access Surgery at Jaipur from 14th to 17th February 2008.
- Invited as a National Faculty to participate at the Live operative Workshop on Laparoscopic Surgery on 9th March 2008 at J N Medical College, AMU Aligarh
- Invited as a Chairperson in 7th Annual International Conference of Rajiv Gandhi Cancer Institute and Research Centre from 7th March to 9th March 2008

- Participated at the Second Meeting of Global Hernia Clinical Advisory Board on 11th & 12th March 2008 at the Camelback Inn in Scottsdale, Arizona, USA.
- Invited as a National Faculty to participate at the Live operative Workshop on Laparoscopic Surgery on 15th & 16th March 2008 during Kanpur Endosurgery – 2008, Organized at Mariampur Hospital under Kanpur Surgical Club and UP Chapter of ASI.

Papers presented at various conferences

- Three Ports Vs. Four Ports Laparoscopic Cholecystectomy; A Prospective Randomized Controlled Study. National Conference of Indian Association of Gastrointestinal Endo-Surgeons at Jaipur in February 2008
- A Prospective Randomised Controlled Study of Direct Telescopic Dissection Vs. Balloon Dissection in Laparoscopic Total Extraperitoneal Inguinal Hernia Repair. National Conference of Indian Association of Gastrointestinal Endo-Surgeons at Jaipur in February 2008
- Laparoscopic repair of Incisional Hernia Using Composite Mesh. National Conference of Indian Association of Gastrointestinal Endo-Surgeons at Jaipur in February 2008 National Conference of Indian Association of Gastrointestinal Endo-Surgeons at Jaipur in February 2008
- Preoperative Localization and Surgical Management in Duodenal Gastrinoma. National Conference of Indian Association of Surgical Oncology held at Ludhiana from 20th -23rd September 2007
- Prospective Study to evaluate the Role of *Helicobacter pylori* in Gall Bladder Diseases. National Conference of Indian Association of Surgical Oncology held at Ludhiana from 20th -23rd September 2007
- Effective Training of Laparoscopic Hepaticojejunostomy using porcine model. Annual Conference of Association of Surgeons of India held at Bhubaneshwar from 27th to 28th December 2008
- Laparoscopic Pericystectomy for Hepatic Hydatid cyst. Annual Conference of Association of Surgeons of India held at Bhubaneshwar from 27th to 28th December 2008
- Laparoscopic Adrenalectomy: Experience of a Tertiary care Centre. National Conference of Indian Association of Gastrointestinal Endo-Surgeons at Jaipur in February 2008 National Conference of Indian Association of Gastrointestinal Endo-Surgeons at Jaipur in February 2008
- Laparoscopic Choledochal Cyst Excision and Roux En Y Hepaticojejunostomy. National Conference of Indian Association of Gastrointestinal Endo-Surgeons at Jaipur in February 2008 National Conference of Indian Association of Gastrointestinal Endo-Surgeons at Jaipur in February 2008
- Laparoscopic Management of Retroperitoneal Paraganglioma. National Conference of Indian Association of Gastrointestinal Endo-Surgeons at Jaipur in February 2008 National Conference of Indian Association of Gastrointestinal Endo-Surgeons at Jaipur in February 2008
- Post Cholecystectomy Symptoms Following Laparoscopic Cholecystectomy A Prospective Study. National Conference of Indian Association of Gastrointestinal Endo-Surgeons at Jaipur in February 2008 National Conference of Indian Association of Gastrointestinal Endo-Surgeons at Jaipur in February 2008
- Prospective Evaluation of Laparoscopic Skills Acquisition in a Short term Focussed Training Programme on a Phantom Model using Porcine Gall Bladder. National Conference of Indian Association of Gastrointestinal Endo-Surgeons at Jaipur in February 2008 National Conference of Indian Association of Gastrointestinal Endo-Surgeons at Jaipur in February 2008

- Salivary Gland Tumor: How Common is Facial Nerve Palsy during Immediate post operative period, Experience of A Tertiary Care Centre. Annual Conference of Delhi State Chapter ASI held at MAMC, New Delhi November 2007.
- Laparoscopic Removal of Retroperitoneal Schwannoma. National Conference of Indian Association of Gastrointestinal Endo-Surgeons at Jaipur in February 2008 National Conference of Indian Association of Gastrointestinal Endo-Surgeons at Jaipur in February 2008
- Transabdominal Preperitoneal Repair of Groin Hernia Annual Conference of Delhi State Chapter ASI held at MAMC, New Delhi November 2007.
- Transanal Endoscopic Microsurgery: A Case Report Annual Conference of Delhi State Chapter ASI held at MAMC, New Delhi November 2007.
- Total Extra-Peritoneal Repair of Groin Hernia: Prospective Evaluation at a Tertiary Care Center National Conference of Hernia Society of India in January 2008.
- Varied Presentations of Hepatobiliary and Pancreatic Tuberculosis – A Series from a Tertiary Care Centre Annual Conference of Association of Surgeons of India held at Bhubaneswar from 27th to 28th December 2008.
- Laparoscopic Repair of Parastomal Hernia National Conference of Hernia Society of India in January 2008.

Professor A. Srivastava

- Surgical techniques of ilio-inguinal block dissection –Annual meeting of Indian Association of Surgical Oncology, Ludhiana Punjab in September 2007
- Surgical technique of parotidectomy for parotid tumours – Annual meeting of Association of Surgeons of India – Bhubhneswar, Orissa December 2007
- Surgical technique of breast conservation surgery - Annual meeting of Association of Surgeons of India – Bhubhneswar, Orissa December 2007

Dr Sandeep Guleria

- Guest Lecture Indian Society of Nephrology (East Zone): Simultaneous Kidney Pancreas Transplantation: A cure for diabetes. 22nd September 2007 Kolkatta
- Guest Lecture IASO Ludhiana: Management of Cancer after Transplantation 23rd September 2007, Ludhiana
- Convenor: Symposium “Surgical complications in Transplantation”. Annual Meeting Indian Society of Organ Transplantation. Annual Meeting Bangalore 6th September 2007
- CME on Nursing in Nephrology. Guest Lecture: Renal Transplantation 9th October 2007, New Delhi.
- Guest Lecture: Indian Chapter International college of Surgeons: “Surgical complications of Renal Transplantation. 25th October 2007 Agra.
- Guest Lecture “Current status of Organ Transplantation in India” Annual conference Delhi Chapter Association of surgeons of India SURGICON 2007. 18th November 2007 Maulana Azad Medical College New Delhi.
- “Generic Tacrolimus in Renal Transplantation” Poster presentation at the Xth Congress of the Asian Society of Transplantation. December 1st to 4th 2007. Patayya Thailand
- “The CNI consensus statement: Report of the Indian CNI consensus meeting” Poster presentation at the Xth Congress of the Asian Society of Transplantation. December 1st to 4th 2007. Pattaya Thailand

- Chair Person “Management of Vascular Trauma” ASICON Golden Jubilee CME , Sir Ganga Ram Hospital 23rd December 2007
- Chair Person Annual Conference IMA South Delhi Branch “Management of Acute Renal Failure” 6th January 2008
- Panelist Renal Summit II “CNI’s in Renal Transplantation” New Delhi 12th January 2008.
- Guest Lecture “Post Laparotomy complications and their Management” Surgery CME 2nd February 2008. Indraprastha Apollo Hospital New Delhi.
- Chair Person “Session on Transplantation” in Meeting on prevention of chronic Kidney disease. 17th February 2008, AIIMS New Delhi.
- Guest Lecture “Tailoring Immunosuppression” Malaysian Society of Transplantation Bangalore 2nd February 2008.
- Guest Lecture on “Pre-emptive transplantation” at the Nephrology Urology Transplant Meeting of SAARC countries at Kathmandu Nepal. 7th to 9th March 2008
- 16. Guest Lecture “Should Protocol biopsies be routine” Annual meeting Delhi Nephrology society 12th March 2008
- Guest Lecture “Simultaneous Kidney Pancreas Transplantation” Indian Academy of Nephrology 16th March 2008 Jaipur.
- Chairperson Asicon Golden Jubilee CME on Oncology Shanti Mukand Hospital 23rd March 2008.

Dr. Rajinder Parshad

- Sharma Gayatri, Mirza Sameer, Prashad Rajendra, Gupta Siddhartha D. and Ralhan Ranju: Prognostic Significance of P16INK4A hypermethylation in Invasive Ductal Breast Carcinoma Patients. Poster abstract published in 5th Indo-Australian Conference in Medical Biotechnology, Delhi, India, Feb. 11-12, 2008, pp 52.
- Mirza Sameer, Sharma Gayatri, Prashad Rajindra, Gupta D Siddhartha, Ralhan Ranju. Promoter Hypermethylation of 14-3-3 sigma, Er alpha, PRB and BRCA1 in serum and tumor DNA of invasive Ductal Breast Carcinoma Patients. Abstract published in International Symposium on Genomic Instability and Cancer, Srinagar, J&K (India), July 22-26, 2007, pp 64.
- Sameer Mirza, Gayatri Sharma, Rajindra Prashad, Siddhartha D Gupta and Ranju Ralhan. Promoter Hypermethylation of Slit2, TMS1, ERalpha and PRB in tumor and serum DNA of Invasive Ductal Breast Carcinoma Patients. Chinese Journal of Clinical Oncology, Special Issue for the 4th Congress of the World Society for Breast Health, pp 90.
- Sharma Gayatri, Mirza Sameer, Prashad Rajendra, Gupta Siddhartha D. and Ralhan Ranju: Prognostic Significance of GSTP1 hypermethylation in Invasive Ductal Breast Carcinoma Patients. Poster abstract published in Indian Association for Cancer Research, Ahmedabad, Gujrat, Feb. 7-9, 2008, pp134.
- Mirza Sameer, Sharma Gayatri, Prashad Rajindra, Gupta D Siddhartha, Ralhan Ranju.: Prognostic Significance of promoter hypermethylation in Invasive Ductal Breast Carcinoma Patients.. Poster abstract published in Indian Association for Cancer Research, Ahmedabad, Gujrat, Feb. 7-9, 2008, pp140.
- Mirza Sameer, Sharma Gayatri, Prashad Rajindra, Gupta D Siddhartha, Ralhan Ranju.: Prognostic Significance of RARB hypermethylation in Invasive Ductal Breast Carcinoma Patients.. Poster

abstract published in AACR International Conference, Dead Sea, Jordan, March 16-19, 2008, pp. 136. (Scholar In training Award).

Dr. Sandeep Aggarwal

- Overview of Bariatric Surgery during the Live Operative workshop on 31st Jan 2008 held at AIIMS, New Delhi

Dr. V K Bansal

- Management of Pancreatic duct stump after Pancreaticoduodenectomy. National Conference of Indian Association of Surgical Oncology held at Ludhiana from 20th -23rd September 2007
- Training in Laparoscopic Surgery. Inaugural Conference of Society of Endoscopic and Laparoscopic surgeons of India at All India Institute of Medical Sciences from 27th March to 30th March 2008.
- Transanal Endoscopic Microsurgery – our first experience. National Conference of Indian Association of Gastrointestinal Endo-Surgeons at Jaipur in February 2008.
- National Conference of Indian Association of Gastrointestinal Endo-Surgeons at Jaipur in February 2008.
- National Conference of Indian Association of Surgical Oncology held at Ludhiana from 20th - 23rd September 2007
- Annual Conference of Delhi State Chapter ASI held at MAMC, New Delhi in November 2007.
- National Conference of Hernia Society of India in January 2008
- National Conference of Endocrine Surgeons of India at SGPGI, Lucknow in October 2007
- Three Ports Vs. Four Ports Laparoscopic Cholecystectomy: A Prospective Randomized Controlled Study. MC Misra, VK Bansal, HK Bhattacharjee, V Jindal, B Prashant, Gaurav C, A Krishna,

Dr. Anita Dhar

- Role of Centchroman in regression of fibroadenoma: A Randomized Trial. Presented at International Surgery Week 2007 (ISS), 30th August 2007 at Montreal, Canada. Abstract ID 148, page-45, abstract book and also at www.isw2007.com
- Comparison of Centchroman with Danazol in the amelioration of mastalgia: A Randomized Trial. Presented at International Surgery Week 2007 (ISS), 30th August 2007 at Montreal, Canada. Abstract ID 531, page-338, abstract book and also at www.isw2007.com
- Breast cancer in elderly. Presented in ASI State Chapter Annual Conference 2007, New Delhi.

RESEARCH

Funded Projects

Ongoing

1. Prospective study to evaluate the role of *Helicobacter pylori* in benign and malignant hepatobiliary disease from Institute Research Grant from April 2006 March 2008, Prof. M. C. Misra Rs. 80,000/-
2. A Randomized controlled trail of laparoscopic Inguinal Hernia repair – Trans-abdominal Preperitoneal versus total extra peritoneal approach from Institute Research Grant from 2007-08, Prof. M. C. Misra Rs. 1,62,500/-

3. To Evaluate the efficacy and tolerability of tacrolimus in patients undergoing renal transplantation. Dr Sandeep Guleria Panacea Biotec, Funding: Rs 6 lakhs Save the Kidney, Rajiv Gandhi Foundation, Funding: Rs 11.20 lakhs.
4. Effect of famotidine on tumor infiltrating lymphocytes in breast cancer- A double blind placebo controlled randomized clinical trial. Dr Rajinder Parshad. Funded by CSIR; Duration 2 years. (Contingency grant of Rs.20,000 per year.).
5. Prospective study to evaluate the role of *Helicobacter pylori* in benign and malignant hepatobiliary disease from Institute Research Grant from April 2006-March 2008, Dr. V. K. Bansal Rs 80,000.
6. Safety and efficacy of autologous stem cells in prevention of amputation in patients with chronic critical limb ischemia. A multi-centric study Dr. Anita Dhar funded by Department of Biotechnology. Duration 2 years. Rs.50 lac.

Departmental projects

Ongoing

1. B hcg expression in patients with benign and malignant breast diseases.
2. A prospective randomized control trial of sutured vs. tacker fixation of mesh in patients undergoing laparoscopic Incisional Hernia repair.
3. A prospective randomized comparison of TAPP vs. TEP repair in patients undergoing laparoscopic inguinal hernia repair.
4. Prospective Evaluation of laparoscopic Skills Acquisition in a Short Term Focussed Training Programme on a Phantom Model using Porcine Gall Bladder.
5. Prospective Study to evaluate the role of *Helicobacter pylori* in benign and malignant hepatobiliary disease.
6. Role of Centchroman in regression of Mastalgia and regression of Fibroadenoma and its correlation to histopathology and estrogen and progesterone receptor.
7. 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.
8. Lymphoscintigraphy of upper limb lymphatics in patients undergoing axillary dissection in carcinoma breast.
9. Measurement of the depth of the terminal ductal lobular unit from the skin in mastectomy specimen to masses at the optimum thickness of the flap to be raised in the mastectomy for breast cancer.
10. Assessment of cosmetic outcome following breast oncoplasty following breast conservative surgery.
11. Safety and efficacy of autologous stem cells in prevention of amputation in patients with chronic critical limb ischemia.
12. To Study the Incidence and Assess the Risk Factors for Post- Transplant New Onset Diabetes Mellitus.
13. Laparoscopic Assisted Surgery for Treatment of Intestinal Tuberculosis
14. Clinical co-relation of ER, PR, HER2 neu expression and BRCA1 gene mutations in Indian breast cancer patients.
15. Designing of methylation target arrays for breast cancer.
16. Development and validation of a simple method for measurement of trans fatty acid intake and to study the association between trans fatty acids and CAD.

17. Prospective Evaluation of laparoscopic Skills Acquisition in a Short Term Focussed Training Programme on a Phantom Model using Porcine Gall Bladder.
18. Transvaginal Cholecystectomy – a pilot feasibility study
19. Effective Training Of Laparoscopic Hepatico-jejunostomy Using Porcine Model
20. Study of human breast cancer by magnetic resonance techniques.
21. Evaluation of the effect of donor kidney on renal transplant outcome.
22. Evaluation of the role of Protocol biopsies in renal transplantation and to evaluate the role of cyclosporine versus tacrolimus

Collaborative projects

Ongoing

1. Feasibility study on Injury & Road Traffic Injury surveillance.
2. Total extra peritoneal hernia repair comparison of space creation by direct telescope vs. balloon dissection- A randomized controlled study.
3. Feasibility for the fast tract surgery for thyroidectomy.
4. Dyslipidemia and cardiovascular risk factors in renal transplant recipients.
5. Donor Kidney size and outcome following live related renal transplantation.
6. Renal Arterial Resistive index as a predictor of chronic allograft nephropathy.
7. Role of Directional Vacuum Assisted biopsy in Patients with Previously equivocal Biopsies for Breast Masses Suspicious of Breast Cancer.
8. Post operative surgical site infection in clean and clean contaminated operations.
9. Effect of famotidine on tumor infiltrating lymphocytes in breast cancer- A double blind placebo controlled randomized clinical trial.
10. Quantitative imaging study of breast cancer.

Completed

1. Outcome after laparoscopic cardiomyotomy – early and late (with Gastroenterology).
2. Efficacy and feasibility of regional anaesthesia compared to general anaesthesia for totally extraperitoneal laparoscopic inguinal hernia repair (with Anaesthesiology).
3. Studies on COX-2 and its novel peptide inhibitors in breast cancer (with Biotechnology and Biophysics).
4. Role of magnetic resonance imaging and magnetic resonance sialography in salivary gland diseases, (with Radiodiagnosis, Otorhinolaryngology and Surgical Oncology).
5. Breast cancer: Local tumour staging by MRI and its impact on therapeutic approach, (with Radiodiagnosis and Pathology).
6. A pilot study of standardized open mesh repair in inguinal hernia (with Anaesthesiology).
7. Development of ‘Blood-less surgery’ (with Bioengineering Cardiff University, UK).
8. Quality of life of live related renal donors (with Nephrology).
9. Molecular typing and detection of Mupirocin and Methicillin Resistant Staph aureus (with Microbiology).
10. Cox2 gene polymorphisms in breast cancer patients (with Biotechnology and Biophysics).
11. Cytokine Gene Polymorphisms in Renal Transplant Patients (with Transplant Immunology and Immunogenetics).
12. Cytomegalovirus disease in transplantation (with Microbiology).

13. Feasibility of fast track discharge in breast cancer patients undergoing definitive surgery and impact on quality of life (with Physical Medicine).

PUBLICATIONS

Journals

1. Misra MC, Bansal VK, Kumar S, Prashant B, Bhattacharjee HK. Total extra-peritoneal repair of groin hernia: prospective evaluation at a tertiary care center. *Hernia* 2008; 12:65-71.
2. Misra MC, Bansal VK, Prashant B, Bhattacharjee HK. Training in Laparoscopic Surgery. *JIMSA* 2007, Vol 20 No 2.
3. Tayal S, Suri V, Misra MC, Ray R, Myoepithelial carcinoma of soft tissue: a case report, *Indian J Pathol Microbiol.* 2007 Oct; 50(4):761-3.
4. Gupta R, Dinda AK, Singh MK, Misra MC, Macrocystic serous cystadenocarcinoma of the pancreas: The first report of a new pattern of pancreatic carcinoma. *J Clin Pathol.* 2008 Mar; 61(3): 396-8,
5. Comparison of interrupted versus continuous closure in abdominal wound repair: A Meta-analysis of 23 trials.” Prof. Anurag Srivastava. Accepted for publication in *Asian Journal of Surgery*
6. Evidence based management of Mastalgia: Meta-analysis of randomized trials. Srivastava A, Mansel RE, Arvind N, Prasad K, Dhar A, Chhabra A. *The Breast* 2007
7. Guleria S, Kamboj M, Sharma M, Chatterjee A, Chaudhary A, Mahajan M, Gupta S, Bhowmik D., Agarwal SK, Tiwari SC, Dash “Tacrolimus (Pangraf) in live related renal transplantation: an initial experience of 101 recipients in India. *Transplant. Proc.* 2007 Apr; 39(3): 749-9.
8. Nayak B, Guleria S, Varma M, Tandon N, Aggarwall S, Bhowmik D, Agarwal SK, Tiwari SC, Dash SC. Effect of biphosphonates on bone mineral density after renal transplantation as assessed by bone mineral densitometry. *Transplant. Proc.* 2007 Apr; 39 (3):750-2
9. Panigrahi A, Gupta N, Siddiqui JA, Margoob A, Bhowmik D, Guleria S, Mehra NK. Monitoring of anti-HLA and anti-Major histocompatibility complex class I related A antibodies in living related renal transplantation. *Transplant. Proc.* 2007 Apr; 39(3): 759-60
10. Panigrahi A, Gupta N, Siddiqui JA, Margoob A, Bhowmik D, Guleria S, Mehra NK. Post Transplant development of MICA and anti-HLA antibodies is associated with acute rejection episodes and renal allograft loss. *Hum Immunol.* 2007 May; 68(5):362-7
11. 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* 2007 Dec 11
12. Gupta R, Sharma MC, Attri S, Guleria S. Testicular Metastasis of extraskeletal myxoid chondrosarcoma Report of a first case” *Urology* 2008 Feb 26 { epub ahead of print }
13. Kallianpur AA, Parshad R, Dehran M, Hazrah P. Ambulatory total extraperitoneal inguinal hernia repair: feasibility and impact on quality of life. *JSLs.* 2007 Apr-Jun; 11(2):229-34.
14. Hazrah P, Parshad R, Dhir M, Singh R. Factors associated with attrition in patients with breast cancer: a retrospective study. *Natl Med J India.* 2007 Sep-Oct; 20(5):230-3.
15. Mirza S, Sharma G, Prasad CP, Parshad R, Srivastava A, Gupta SD, Ralhan R. Promoter hypermethylation of TMS1, BRCA1, ERalpha and PRB in serum and tumor DNA of invasive ductal breast carcinoma patients. *Life Sci.* 2007 Jul 4; 81(4):280-7.
16. Sameer Mirza, Gayatri Sharma, Rajindra Prashad, Siddhartha D Gupta and Ranju Ralhan. To Determine Clinical Significance of Metastasis Tumor Antigen (MTA1) ex-expression in Invasive

- Ductal Breast Carcinoma. Indian Journal of Clinical Biochemistry, Dec 2007, Vol. 22 (Supl.), pp 314.
17. Gayatri Sharma, Sameer Mirza, Rajindra Prashad, Siddhartha D Gupta and Ranju Ralhan Promoter Hypermethylation of GSTP1, ERalpha and PRB in tumor and serum DNA of Invasive Ductal Breast Carcinoma Patients. Indian Journal of Clinical Biochemistry, Dec 2007, Vol. 22 (Supl.), pp 318 (Best Presentation Award).
 18. Chaudhary A, Seenu V, Sedain G, Ray R, Sharma S, Aggarwal S, Mehta S Hemangiopericytoma of renal pelvis— an unusual tumor in an adolescent. Urology. 2007 Oct;70(4):811
 19. Herron DM, Marohn M; SAGES-MIRA Robotic Surgery Consensus Group. A consensus document on robotic surgery. Surg Endosc. 2008 Feb;22(2):313-25; discussion 311-2. (Dr S Aggarwall was a participant in this group)
 20. Dhar A, Anurag Srivastava. Role of Centchroman in Regression of Mastalgia and Fibroadenoma. World J Surg. 2007 June Vol.31, No.6
 21. Agarwal N, Saha S, Srivastava A, Chumber S, Dhar A, Garg S. Trop Gastroenterol. 2007 July-Sep; 28(3):117-20. Peritonitis: 10 years experience in a single surgical unit.
 22. A Srivastava, R E Mansal, N Arvind, K Prasad, A Dhar, A Chabra. The Breast. 2007; 16: 503-512. Evidence-based management of Mastalgia: A meta-analysis of randomized trials.
 23. Bansal VK. Book Review: Images in Clinical Surgery by Robin Kaushik. Mehta Publishers, New Delhi, 2007. The National Medical Journal of India 2007;20;315.

Chapters in Books

1. Sandeep Guleria: Published a monograph on 'Living with a transplant' for patient education
2. Anita Dhar: Designed a brochure "Fight against Breast Cancer" for the cause of Breast Awareness and Self Breast Examination.

PATIENT CARE

The department runs a general surgical OPD every day, follow-up clinic 4 days a week, Breast Cancer Clinic twice a week and Renal Transplant Clinic once a week. The department is providing regular services in multiple fields including minimally invasive surgery, renal transplantation, laparoscopic donor nephrectomy, hepato-biliary and pancreatic surgery, thoracic and thoracoscopic surgery, endocrine surgery, vascular surgery, and cancer surgery. Bariatric Surgery for surgical treatment of morbid obesity has started in the department since January 2008.

Awards, Honours and Significant Events

Prof. M.C. Misra, Founder President, Indian Hernia Society, Nominated from India as a Member of Global Hernia Clinical Advisory Board, Convenor, Society of Endoscopic & Laparoscopic Surgeons of India (SELSI), Organizing Chairman, Inaugural Conference of SELSI on 29th & 30 March 2008.

Dr. Arvind Kumar, Elected Governing Council Member of Association of Surgeons of India

Dr Sandeep Guleria was awarded the Exemplary contribution award by the IMA south Delhi Branch in January 2008

Dr. Anita Dhar was designated as Trainer for No Scalpel Vasectomy (NSV) by the Ministry of Health and Family Welfare in 2007.

Social service through public awareness

Prof. M.C.Misra was invited to participate in Live Phone–in health program titled “Total Health” on various health related issues for creating public awareness conducted by the DD News. The topics included breast cancer, life style, morbid obesity and hernia. The Sahara Samay invited Prof. Misra to conduct live Phone –In show on breast cancer and morbid obesity. Prof. Misra was extensively involved in creating public awareness for social cause in print media on breast cancer, hernia, morbid obesity and road accidents. Prof. M.C. Misra and Prof. Anurag Srivastava conducted workshop involving “Training of Trainers” particularly of Lady doctors to create awareness and methodology of breast self examination and rapid assessment of breast symptoms for early diagnosis and therapy of breast cancer under a project supported by Director General of Health services, Ministry of Health & FW, Govt of India, New Delhi.

9.35 Transplant Immunology & Immunogenetics

Professor and Head

N.K Mehra

Associate Professor

D.K Mitra

Scientists

Uma Kanga

Gurvinder Kaur

Sunil Kumar

Arundhati Panigrahi

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 Hematology. 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 in laboratory techniques in HLA testing and other immunological investigations.

Long term training

Lt. Col (Dr) from the AFMC is undergoing long term training in Clinical Immunogenetics.

Continuing Medical Education (CME)

Training to faculty

Five faculty members from Medical Colleges in Rajasthan (Jaipur & Bikaner) and West Bengal undertook training in the Department in HLA testing and other immunological investigations with the purpose of setting up HLA laboratories at their respective institutions.

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 flow cytometry 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.

Lectures delivered

Professor N.K. Mehra

- Donor selection strategies: Hematopoietic stem cell transplantation, Dharmshila Hospital, New Delhi, 20 April 2007.
- Strides in Medicine and Biology: Can we live for 150 years? DBT Workshop on Clinical Diagnosis, Cytogenetics and Biochemical Genetics, University of Gwalior, 25 July 2007.

- International Workshop on Negative side of Gram positive Bacteria, Marrarikulam, Kerala, 20-22 Oct 2007.
- Hematopoietic Stem Cell Transplantation: Opportunities & Challenges, Sir Ganga Ram Hospital, New Delhi, 24 Oct 2007.
- Genetics of Type 1 diabetes. ICMR Workshop on Mapping Pattern of diabetes in India, New Delhi, 21 Nov 2007.
- Strides in Immunology: Can Man live for 150 years? National Symposium on Science of Life: New Horizons, Miranda House, Delhi University, 23 Nov 2007.
- A Journey into the world of HLA & Medicine. 76th Annual Conference of Society of Biological Chemists (India), Tirupati, 25–27 Nov 2007.
- TB Vaccines. DBT Meeting on Bioinformatics of TB, New Delhi, 27 Nov. 2007.
- Hematopoietic stem cell transplantation: Opportunities & Challenges. Symposium on Problems in Chronic Anemia, Kolkatta, 1 Dec 2007.
- Host Genetics and HIV infection. 34th Annual Conf. of the Indian Immunology Society, Pune, 16 Dec 2007.
- Genetic determinants of host susceptibility to mycobacterial infections. 17th International Congress of Leprosy, Hyderabad, 2 Feb 2008.
- Predictive cytokine polymorphic genes in organ and BMT. International Conference on Medical & Community Genetics, PGIMER, Chandigarh, 15 Feb 2008.
- Second National Conference on Prevention of Kidney Diseases, AIIMS, New Delhi, 15–17 Feb 2008.
- New insights into the genetics of Type 1 Diabetes. 5th Intl. Symposium on Genetic, Health and Disease, Guru Nanak Dev University, Amritsar, 18 Feb. 2008.
- Genetic architecture of HIV infection. Microbicides-2008 – Striving towards HIV prevention, New Delhi, 25 Feb 2008.
- Strides in Immunology: Can man life for 150 years? Biotech Festival Surya – ITS Paramedical College, Muradnagar, 29 Feb 2008.
- Antibody basis of graft rejection. Indian Academy of Nephrology, Jaipur, 15 March, 2008.
- A Journey into the world of HLA and Medicine. MAMC Golden Jubilee Symposium, New Delhi, 29 March 2008.
- Genetic correlates of HIV infection. 1st International Symposium on Genetics and Immune Correlates of HIV infection and vaccine induced immunity, Budapest, 10 June 2007.
- Molecular medicine approaches to disease diagnosis and prevention. 13th International Congress of Immunology, Rio de Janeiro, Brazil and Session Chair, 20-25 Aug 2007.
- MHC Genomics and disease. International workshop on Genetics of Complex infectious disease. Indo-German Science Centre for Infectious Diseases, Braunschwig, Germany, 30 Sep–2 Oct 2007.
- Session Chair at the 31st Annual Conference of the Australasian and South East Asian Tissue Typing Association, Freemantle, Australia, 15-18 Nov 2007.
- Host genetics of HIV infection. 3rd Al-Ain International Immunological Conference, Al-Ain, UAE, 17 March 2008.

National and International Conferences/Meetings Organized by Department

- Comprehensive approach to understand streptococcal diseases and their sequelae to develop innovative strategies for diagnosis, therapy, prevention and control” (ASSIST) Partners meeting, New Delhi, 26 Feb 2008.
- Genetics of HIV infection transmission, resistance and disease progression”. First Investigators meeting, New Delhi, 22 Nov 2007.
- Workshop on “Genetic Architecture of complex Infectious Diseases”, Indo-German Science Centre for Infectious Diseases (IG-SCID). Goslar, Braunschweig, Germany, 1-2 Oct 2007.

RESEARCH

Funded Projects

Ongoing

1. Monitoring T cell activation markers and cytokine production following allogenic renal transplantation. Prof. N.K. Mehra. Funded by ICMR for 3 years (2005-08) Funds: Rs.17 lacs.
2. Program support for Advanced Program in Histocompatibility and Immunogenetics (PS-APHTI). Prof. N.K. Mehra. Funded by DBT for 3 years (2005-08). Funds: Rs.163.43 lacs.
3. ICMR-INSERM Project on Type 1 Diabetes. Prof. N.K. Mehra. Funded by ICMR for 5 years (2004-09). Funds: Rs.120.20 lacs.
4. Comprehensive approach to understand Streptococcal disease and their sequele to develop innovative strategies for diagnosis for diagnosis, therapy, prevention and control. Prof. N.K. Mehra. Funded by European Commission for 3 years (2006-09). Funds: Rs.114 lacs.
5. Type 1 diabetes Genetics Consortium: An International Effort. Prof. N.K. Mehra. Funded by NIH, USA for 3 years (2005-08). Funds US\$25,000.
6. HLA Profile of Raica Community of Rajasthan. Prof. N.K. Mehra. Funded by ICMR for 2 years (2006-2008). Funds: Rs.10.08 lacs.
7. Genomic analysis of MHC region genes (HLA & Non HLA) in Type 1 Diabetes in the Indian Population. Prof. N.K. Mehra. Funded by ICMR for 3 years (2006-09). Funds: Rs.27 lacs.
8. Comparative study on the Immunogenetic similarities between Euro..... Prof. N.K. Mehra. Funded by DST for 3 years (2007-2010). Exchange visits.
9. Genetic basis for HIV-1 transmission Resistance and disease progression. Prof. N.K. Mehra. Funded by DBT for 3 years (2007-2010). Funds:
10. Hematopoietic stem cell transplantation and Genetics of HIV infection. TATA INNOVATION FELLOWSHIP. Prof. N.K. Mehra, funded by DBT, 3 years (Oct. 2007-2010).
11. Studies on T cell mediated suppression of immunity in visceral Leishmaniasis patients. Dr. D.K. Mitra. Funded by DBT for 3 years (2006-09). Funds Rs.79.29 lacs.
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). Dr. D.K. Mitra. Funded by DBT for 3 years (2006-09). Funds: Rs.23.18 lacs.
13. Role of oral Vitamin D as an adjunct therapy in category I pulmonary tuberculosis along with assessment of immunological parameters. Dr. D.K. Mitra. Funded by DBT for 3 years (2006-09). Funds: Rs.20.64 lacs.

14. Impact of HIV infection on latent TB among patients with HIV-TB coinfection. Dr. D.K. Mitra. Funded by DBT, ICMR for 3 years (2007-2010). Funds: Rs.134.00 lacs.
15. Genomic and Molecular studies on the Immunopathogenesis of Bronchial Asthma. Dr. DK Mitra (with Medicine, IGIB, CSIR, Pathology). Funding Agency: DBT; Funds – 37 lacs. Duration 2004-07
16. Study of reduction of duration of ATT with Immunomodulator (MW) of Immunological parameters. Dr. D.K. Mitra (with medicine). Funding Agency: DBT; Funds – 40 lacs. Duration: 2004-07.

PUBLICATIONS

Journals

1. Kaur G, Singh P, Kumar N, Rapphap CC, Sharma G, Vajpayee M, Wig N, Sharma SK, Mehra NK. Distribution of CCR2 polymorphism in HIV-1 infected and healthy subjects in North India. *Int J. Immunogenet*, 2007; 34:153-6.
2. A Panigrahi, J A Siddiqui, A Rai, A Margoob, Khaira A, D Bhowmik, S C Tiwari, S Guleria, and N K Mehra. Allosensitization to HLA and MICA is an important measure of renal graft outcome. *Clinical Transplants 2007*, Terasaki Foundation Laboratory, Los Angeles, California, p211-17, 2007.
3. Kaur G, Tuen M, Virland D, Cohen S, Mehra NK, Münz C, Abdelwahab S, Garzino-Demo A, Hioe CE. Antigen stimulation induces HIV envelope gp120-specific CD4(+) T cells to secrete CCR5 ligands and suppress HIV infection. *Virology*. 2007; 369:214-25.
4. Singh P, Kaur G, Sharma G, Mehra NK. Immunogenetic basis of HIV-1 infection, transmission and disease progression. *Vaccine* 2008; 26:2966-2980.
5. Sharma PK, Saha PK, Singh A, Sharma SK, Mitra, DK. Regulatory T cells in patients with tuberculosis. *Chest* 2007; 132:476S.
6. Saha PK, Sharma PK, Saxena A. Sharma SK, Mitra, DK. Co-expression of CXCR3 on both CCR5+ and CD11A bright TH1 like cells in tuberculosis pleural effusion. *Chest* 2007; 132:640S.
7. Panigrahi A, Gupta N, Siddiqui JA, Margoob A, Bhowmik D, Guleria S, Mehra NK. Post Transplant Development of MICA and anti-HLA antibodies is associated with acute rejection episodes and renal Allograft Loss. *Hum Immunology* 2007; 68; 362-367.

PATIENT CARE

Laboratory services

HLA matching

	Recipients	Donors	Total
Renal Transplant Patients	222	250	472
Bone Marrow Transplant patients			
Leukemia	35	105	140
Aplastic anemia	56	170	226
Acute Leukemia	71	201	273
Thalassemia	62	196	258
Others	72	206	278
Total	296	948	1254

HLA-DNA matching	204	320	524
Cadaver Donor Organ transplantation			
Cadaver Donor	3		
Kidney recipients	10		
Heart recipients	0		
Cross Match Test			
Serology	310		
Flowcytometry	23		
Panel reactive antibody (PRA) screening	525		
Flow PRA	25		
ELISA PRA	200		
DIAGNOSTICS			
Spondyloarthropathies	430		
Other diseases			
Chimerism studies in BMT	96		
Immunophenotyping of Leukemia Patients	280		
Unrelated Donor search for BMT	350		

During the year, a total of 350 requests for search of unrelated HLA matched donor from the ‘Asian Indian Donor Marrow Registry’ for bone marrow transplantation (BMT) were received. These include 158 from USA, 58 from Europe, 62 from various Asian countries and 72 from India.

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Prof. N.K. Mehra was awarded the prestigious ‘Basanti Devi Amir Chand’ Prize of the Indian Council of Medical Research (ICMR) for the year 2005. He was selected for the ‘Tata Innovation Fellowship’ of the Department of Biotechnology (DBT), Govt. of India, was conferred Fellowship ‘FNA’ of the Indian National Science Academy (INSA) and also fellowship of Madras Science Research Foundation. He was nominated member of the ‘Editorial Board’ of Current Science. He continues to be the ‘Vice President’ of the Federation of Immunological Societies of Asia Oceania (FIMSA), ‘Council Member’ of the International Histocompatibility Advisory Council and ‘international Councillor’ for the Australasian and South East Asian Tissue Typing Association (ASEATTA). He was ‘leader of the Indian Delegation’ to Germany to formulate research projects on ‘Genetic Susceptibility’ under the under Indo-German Science Centre for Infectious diseases (Sept.2007). He was invited as a ‘Plenary Speaker’ at the 1st International Symposium on Genetics and Immune Correlates of HIV infection and vaccine Induced immunity, Budapest, Hungary (June 2007) and at the 3rd Al-Ain International Immunology Conference, Al-Ain, UAE (March 2008), and as ‘Minisymposium Chair’ at the 13th International Congress of Immunology, Rio-de-Janeiro, Brazil (August 2007).

Prof. Mehra was a member of the 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.

Prof. Mehra is a Member of the 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) National Institute for Research in Reproductive Health, Mumbai, v) LV Prasad Eye Institute, Hyderabad, vi) Desert Medical Research Centre, Jodhpur, vi) Research Advisory Council of the Institute of Life Sciences, Bhubaneswar.

Prof. Mehra is a Member of the Biomedical Research Board, ICMR and Scientific Advisory Group of the Non-Communicable Disease Division; Member of various committees of the Department of Biotechnology (DBT) – i) Task Force on Stem Cell Research and Regenerative Medicine, ii) Inter Disciplinary Research Committee (IDRC), iii) Expert Group on Research in Tuberculosis, iv) Committee on TB Vaccines Clinical Trial (TVCTEG), v) Expert Group on leprosy research, vi) Expert Group for establishment of Aerosol Facility at JALMA, Agra.

Prof. Mehra was a Member of the Selection Committee of the National Institute of Immunology and an Expert for selection of Faculty of the PGIMER, Chandigarh; Jury Member of the Ranbaxy Science Foundation Awards; Selection Committee of ICMR for selection of Research Officers; Member of the CSIR Travel Grant Award Committee; Member of the Editorial Board of 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 & Immunology (Thailand); International Journal of Human Genetics (India); Open Pathology Journal.

Prof. Mehra was invited as “Guest Speaker” in several national and international meetings.

Dr. Uma Kanga (Scientist-II) continues to serve 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 the Transplant Update in Oct 2007, held in Ahmedabad.

VISITING SCIENTISTS

Prof. Paul Terasaki, Director, Terasaki Foundation, USA delivered a lecture on Reducing chronic rejection by monitoring and removal of antibody. 3rd Dec. 2007.

Prof. G.S. Chhatwal (Coordinator ASSIST), Braunschweig, Germany along with his group visited the Laboratory to review the ASSIST project – 26th Feb. 2008.

Dr Patricia Price, University of Western Australia, Perth, Australia.

9.36 Urology

Professor and Head

N.P. Gupta

Professors

A.K. Hemal
(Long leave since 30.9.07)

P.N. Dogra
(Long leave since 27.9.07)

Additional Professor

Amlesh Seth

Associate Professor

Rajeev Kumar

EDUCATION

The faculty of the department participated in and delivered lectures in continuing medical education programmes, symposia, national and international conferences during the year.

The Department imparted lectures for the undergraduates and nursing students. The postgraduate education is continuing and 11 postgraduates are under training.

The department had observers and post-graduate students from Kenya, Australia, Bangladesh and several Indian Medical Colleges to observe and learn Robotics, Endourology, Laparoscopy and Microsurgery.

The faculty of the department continues to be examiners for NBE and M.Ch. Urology in several universities and inspectors for the Medical Council of India and National Board for recognition of standard of examination and facilities for Urology postgraduate courses.

Continuing Medical Education (CME)

The faculty of the department participated in and delivered lectures in continuing medical education programmes, symposia, national and international conferences during the year.

Organized by the Department

The department conducted the following Workshops and participated as invited Faculty in CME Programs:

Prof NP Gupta

1. Participated in CME Programme on “Medical management of urinary calculi”, MPUH, Nadiad, 17 April, 2007.
2. Participated in CUE, Bangalore, 11-12 Aug, 2007.
3. Conducted Workshop at PGIMER, Chandigarh, 12-13 Oct, 2007. Performed live operative surgery Retroperitoneoscopic Nephrectomy. Delivered guest lecture on “Transition from open to laparoscopic to Robotic surgery”.
4. Participated in CME & Live Workshop on Lasers in Endourology, R&R Hospital, New Delhi.

Dr Rajeev Kumar

1. Idiopathic male factor management: Day to day infertility management, CME, Sir Ganga Ram Hospital, August 26, 2007.

2. Varicocele surgery: SIU-ICS Instructional courses, November 16-18, 2007, Mumbai.
3. Practical interpretation of semen analysis: AICOG Annual conference: CME and workshop on Day to Day management of infertility, February 01, 2008, New Delhi.

NATIONAL AND INTERNATIONAL CONFERENCES

Lectures delivered

Prof NP Gupta

1. Management of Stricture Urethra in children. International Congress of Bangladesh Assoc of Urological Surgeons, Dhaka, 20-23 June, 2007.
2. Moderator for Live surgery on Robotic Radical Prostatectomy. Annual Conference of South Zone Chapter of USI, Coimbatore, 13-15 July, 2007.
3. Robotic Pyeloplasty. Robotic Prostatic Symposium, Cornell University, USA, 20-21 July, 2007.
4. Advances in management of BPH. Urological Association of Asia Congress, Cambodia, 17-22 Aug, 2007.
5. Varicocelectomy. Annual Conference of *Societe Internationale d' Urologie*, Paris, 2-6 Sept, 2007.
6. Development of Robotic Urologic surgery at the AIIMS. Annual Conference of North Zone Chapter of USI, Lucknow, 2-4 Nov, 2007.
7. Surgical management of Neurogenic Bladder. SIU Indian Section meeting, Mumbai, 16-18 Nov, 2007.
8. Robotic Urologic surgery at the AIIMS. Annual Conference of East Zone Chapter of USI, Guwahati, 22-24 Nov, 2007.
9. UAA Guidelines for RCC. Asian Society of Uro-oncology Congress, Manila, Phillipines, 28-29 Nov, 2007.
10. Robotic Urological Surgery. ASICON, Bhubaneshwar, 26-30 Dec, 2007.
11. Bladder resection of prostate. USICON, Chennai, 17-20 Jan, 2008.
12. Robotic Urological Surgery. National Congress & Workshop on Minimal Access Surgery, Jaipur, 14-17 Feb, 2008.
13. Advances in management of RCC. Urology Fair, Singapore, 28 Feb – 1 March, 2008.
14. Robotic Urologic Surgery. NUTS of SAARC, Kathmandu, 6-8 March, 2008.
15. Management of PUDD. Robotic Pyeloplasty. Saudi Arabia Urological Association Conference, Saudi Arabia, 18-20 March, 2008.
16. Dorsal Buccal Mucosa Urethroplasty by Ventral Saggital Approach. European Assoc of Urology Congress, Milan, Italy, 26-29 March, 2008-04-04

Dr Amlesh Seth

1. Prognostic significance of Her2/neu Overexpression in patients of muscle invasive urinary bladder carcinoma treated with radical cystectomy
2. Oncological and functional outcome of radical cystectomy in patients with bladder cancer and obstructive uropathy
3. Papers presented in centenary conference of SIU at Paris September 2007.

Dr Rajeev Kumar

1. Role of surgical management of azoospermia: 7th Annual International Infertility Congress, Madras Medical Mission, August 10, 2007, Chennai.

2. Video CUE on reconstructive Urology: Microsurgical VEA; Annual conference, North Zone USI, November 1-4, 2007, Lucknow.
3. Symposium on Sexual Dysfunction in the Ageing Male: LUTS and sexual dysfunction; Annual conference, North Zone USI, November 1-4, 2007, Lucknow.
4. Panel on Medical Writing: How I review a paper; Annual conference, North Zone USI, November 1-4, 2007, Lucknow.
5. Evidence based approach to OATs; Annual Conference, Indian Fertility Society, December 8-9, 2007, New Delhi.

RESEARCH

Funded Projects

Completed

1. Homocysteine as a marker for male infertility: AIIMS Research Grant, 2006-2007, PI: Dr Rajeev Kumar

Ongoing

1. Her2/neu over expression and gene amplification in transitional cell carcinoma of urinary bladder. AIIMS research fund.

Departmental Projects

Completed

1. Prevalence of androgen deficiency and sexual function status in the ageing Indian male. Department of Urology, AIIMS
2. Sexual function status of patients before and after treatment of BPH. Department of Urology, AIIMS

Ongoing

1. Renal cell carcinoma – Evaluation of laparoscopic radical nephrectomy, nephron sparing surgery & long term follow up.
2. Evaluation of various types of intussusception techniques of microsurgical vasopididymostomy.
3. Understanding the health seeking behaviour of infertile men.
4. Evaluation of laparoscopy in the management of carcinoma bladder.
5. Effect of stone and pelvicalyceal system configuration on the morbidity and relook rates with PCNL and its impact on training
6. Development and Validation of a Stratification System to grade the degree of difficulty of PCNL
7. Evaluation of TRUS and TRUS - guided biopsy for early diagnosis of carcinoma prostate.
8. Evaluation of Holmium laser core - through urethrotomy in the management of obliterative strictures of the urethra
9. Evaluation of TUVRP and Holmium laser prostatectomy for BPH.

Collaborative Projects

Completed

1. Polymorphisms in hormone related and prostate cancer candidate genes. (with Punjab University, Chandigarh).

2. Genomics in male infertility: ICMR Task force project, ICMR New Delhi.

Ongoing

1. 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.
2. Mitochondrial genes and Y chromosome deletions in male infertility. (with Anatomy, AIIMS, New Delhi).
3. 3-dimensional Chemical shift imaging and Diffusion weighted imaging using Proton MRS in the diagnosis of carcinoma prostate (with NMR).
4. CFTR gene mutations in obstructive azoospermia (with Pediatrics).
5. Stone analysis using x-ray diffraction studies (with Biophysics).
6. Prospective randomized study of radical cystectomy versus concurrent chemo-radiotherapy in muscle invasive cancer of urinary bladder (Radiotherapy).
7. Molecular Epidemiology of Prostate Cancer: Polymorphism in hormone related and prostatic cancer candidate genes. (with Punjab University Chandigarh and PGI, Chandigarh).
8. Characterisation of Testis Specific Sperm associated antigen 9 (SPAG9) gene expression and humoral immune response in various human cancers. (with National Institute of Immunology, New Delhi and Safdarjung Hospital, New Delhi).
9. Multicentre Open-Label, Randomized, phase III trial comparing adjuvant Hormonal Therapy (Eligard-Leuprolide acetate) in combination with Taxotere (docetaxel) versus hormonal therapy alone versus deferred therapy in patients with prostate cancer at High Risk of Relapse after Radical Prostatectomy.
10. Core through urethrotomy with Holmium Yag laser in obliterated traumatic urethral stricture.
11. A Phase IV PMS study of SIIL-ONCO-BCG vaccine administration in patients of superficial bladder carcinoma following TURBT.

PUBLICATIONS

Journals

1. Gupta NP, Kumar A, Kumar R. Does position affect uroflowmetry parameters in women? *Urol Int.* 2008;80(1):37-40. Epub 2008 Jan 18.
2. Gupta NP, Singh A, Kumar R. Transurethral vapor resection of prostate is a good alternative for prostates >70g. *J Endourol.* 2007 Dec;21(12):1543-6.
3. Gupta NP, Yadav R, Singh A. Laparoscopic transmesocolic pyelolithotomy in an ectopic pelvic kidney. *JLS.* 2007 Apr-Jun;11(2):258-60.
4. Gupta NP, Kolla SB, Seth A, Hemal AK, Dogra PN, Kumar R. Oncological and functional outcome of radical cystectomy in patients with bladder cancer and obstructive uropathy. *J Urol.* 2007 Oct;178(4 Pt 1):1206-11; discussion 1211. Epub 2007 Aug 14.
5. Gupta NP, Yadav R. Renal sparing surgery for perirenal liposarcoma: 24 months recurrence free followup. *Int Braz J Urol.* 2007 Mar-Apr;33(2):188-91; discussion 192.
6. Gupta NP, Ansari MS, Nabi G. National survey on orthotopic neobladder. *Int Urol Nephrol.* 2007;39(1):143-8.
7. Wadhwa P, Aron M, Seth A, Dogra PN, Hemal AK, Gupta NP. Pediatric shockwave lithotripsy: size matters! *J Endourol.* 2007 Feb;21(2):141-4.

8. Hemal AK, Kumar A, Kumar R, Wadhwa P, Seth A, Gupta NP. Laparoscopic versus open radical nephrectomy for large renal tumors: a long-term prospective comparison. *J Urol*. 2007 Mar;177(3):862-6.
9. Aron M, Goel R, Gautam G, Seth A, Gupta NP. Percutaneous versus transurethral cystolithotripsy and TURP for large prostates and large vesical calculi: refinement of technique and updated data. *Int Urol Nephrol*. 2007;39(1):173-7.
10. Kumar A, Gupta NP, Hemal AK, Wadhwa P. Comparison of three analgesic regimens for pain control during shockwave lithotripsy using Dornier Delta Compact lithotripter: a randomized clinical trial. *J Endourol*. 2007 Jun;21(6):578-82.
11. Kumar V, Jagannathan NR, Kumar R, Thulkar S, Gupta SD, Dwivedi SN, Hemal AK, Gupta NP. Apparent diffusion coefficient of the prostate in men prior to biopsy: determination of a cut-off value to predict malignancy of the peripheral zone. *NMR Biomed*. 2007 Aug;20(5):505-11.
12. Dada R, Kumar R, Shamsi MB, Kumar R, Kucheria K, Sharma RK, Gupta SK, Gupta NP. Higher frequency of Yq microdeletions in sperm DNA as compared to DNA isolated from blood. *Asian J Androl*. 2007 Sep;9(5):720-2.
13. Wadhwa P, Aron M, Bal CS, Dhanpatty B, Gupta NP. Critical prospective appraisal of renal morphology and function in children undergoing shockwave lithotripsy and percutaneous nephrolithotomy. *J Endourol*. 2007 Sep;21(9):961-6.
14. Kolla SB, Seth A, Singh MK, Gupta NP, Hemal AK, Dogra PN, Kumar R. Prognostic significance of Her2/neu overexpression in patients with muscle invasive urinary bladder cancer treated with radical cystectomy. *Int Urol Nephrol*. 2007 Sep 26; [Epub ahead of print]
15. Hemal AK, Kumar A, Gupta NP, Kumar R. Oncologic outcome of 132 cases of laparoscopic radical nephrectomy with intact specimen removal for T1-2N0M0 renal cell carcinoma. *World J Urol*. 2007 Dec;25(6):619-26. Epub 2007 Sep 5.
16. Dada R, Kumar R, Shamsi MB, Sidhu T, Mitra A, Singh S, Kumar R, Sharma RS, Gupta SK, Gupta NP. Azoospermia factor deletions in varicocele cases with severe oligozoospermia. *Indian J Med Sci*. 2007 Sep;61(9):505-10.
17. Hemal AK, Kolla SB, Wadhwa P, Dogra PN, Gupta NP. Laparoscopic radical cystectomy and extracorporeal urinary diversion: a single center experience of 48 cases with three years of follow-up. *Urology*. 2008 Jan;71(1):41-6
18. Kumar R, Nayyar R, Kumar V, Gupta NP, Hemal AK, Jagannathan NR, Dattagupta S, Thulkar S. Potential of Magnetic Resonance Spectroscopic Imaging in Predicting Absence of Prostate Cancer in Men with Serum Prostate-Specific Antigen Between 4 and 10 ng/mL: A Follow-up Study. *Urology*. 2008 Mar 6;
19. Kumar R, Bhat A, Bamezai RN, Shamsi MB, Kumar R, Gupta NP, Ammini AC, Aron M, Sharma RK, Dada R. Necessity of nuclear and mitochondrial genome analysis prior to assisted reproductive techniques/intracytoplasmic sperm injection. *Indian J Biochem Biophys*. 2007 Dec;44(6):437-42.
20. Haresh KP, Julka PK, Sharma DN, Rath GK, Prabhakar R, Seth A. A prospective study evaluating surgery and chemo-radiation in muscle invasive bladder cancer. *J Cancer Res Ther*. 2007 Apr-Jun;3(2):81-5. PMID: 17998728
21. Chowdhury UK, Mishra AK, Seth A, Dogra PN, Honnakere JH, Subramaniam GK, Malhotra A, Malhotra P, Makhija N, Venugopal P. Novel techniques for tumor thrombectomy for renal cell carcinoma with intraatrial tumor thrombus. *Ann Thorac Surg*. 2007 May;83(5):1731-6.

22. Kumar R, Nehra A. Dual implantation of penile and sphincter implants in the post-prostatectomy patient. *Curr Urol Rep.* 2007 Nov;8(6):477-81.
23. Kumar R, Yadav R, Kolla SB. Case report: simultaneous bilateral robot-assisted dismembered pyeloplasties for bilateral ureteropelvic junction obstruction: technique and literature review. *J Endourol.* 2007 Jul;21(7):750-3.
24. Yadav R, Das AK, Kumar R. Malignant non-functional paraganglioma of the bladder presenting with azotemia. *Int Urol Nephrol.* 2007; 39(2): 449-451
25. Kumar A, Bhatti SS, Sharma S, Gupta SD, Kumar R. Inflammatory pseudotumor of urinary bladder - a diagnostic and management dilemma. *Int Urol Nephrol.* 2007; 39(3): 799-802
26. Rané A, Kommu SS, Kandaswamy SV, Rao P, Aron M, Kumar R, Gupta N. Initial clinical evaluation of a new pneumatic intracorporeal lithotripter. *BJU Int.* 2007 Sep;100(3):629-32.
27. Gautam G, Kothari A, Kumar R, Dogra PN. Purple urine bag syndrome: A rare clinical entity in patients with long term indwelling catheters. *Int Urol Nephrol.* 2007; 39(1):155-6.
28. Kumar R, Shamsi MB, Gaznavi MI, Jena M, Kucheria K, Sharma RK, Kumar R, Dada R. Structural chromosomal anomalies and their association with reproductive failure. *Obs Gynae Today* 2007; 12(3):152-4.
29. Kumar R. Increasing use of nephron sparing surgery for T1a renal tumors. *Ind J Urol* 2007;23(1):84.
30. Yadav R, Kumar R. Virtual versus real cystoscopy. *Ind J Urol* 2007;23(1):85.

AWARDS AND HONOURS

Prof NP Gupta

1. Elected as President-Elect of Urology Association of Asia (UAA)
2. Elected as Chairman of 9th Asian Congress of Urology – 2008
3. President of Urological Society of India - 2007
4. Awarded National Hindi Science Award

Dr Rajeev Kumar

1. Convenor for video CUE, Annual conference of the North Zone, Urological Society of India
2. Convenor for formulating guidelines on Male Infertility for the Urological Society of India
3. Served as organizing secretary, 9th Asian Congress of Urology
4. Invited as faculty for 7th Annual International Infertility Congress, Madras Medical Mission, August 10, 2007, Chennai.
5. Invited as faculty for Day to day infertility management, CME, Sir Ganga Ram Hospital, August 26, 2007.
6. Invited as faculty for Annual conference, North Zone USI, November 1-4, 2007, Lucknow.
7. Invited as faculty for SIU-ICS Instructional courses, November 16-18, 2007, Mumbai.
8. Invited as faculty for Annual Conference, Indian Fertility Society, December 8-9, 2007, New Delhi.
9. Invited as faculty for AICOG Annual conference workshop on Day to Day management of infertility, February 01, 2008, New Delhi.

COMMUNITY SERVICE

The faculty of department of Urology participated in (Programmes on Urological diseases in Doordarshan and All India Radio).

PATIENT CARE

Surgical procedures

Open	572
Endourology	1025
Lower tract	733
Upper tract	292
Percutaneous renal surgery	190
Ureterorenoscopy	102
Microsurgery	58
Laparoscopic Surgery	49
Robotic Surgery	116
Radical Prostatectomy	46
Pyeloplasty	32
Others	38

Minor OT

Cystoscopy	1745
Minor Cases	3584

Extra corporeal Shock Wave Lithotripsy (ESWL)

New cases	303
Re-do cases	578

Urodynamic procedures

Uroflowmetry	3164
Cystometrogram	286

Ultrasound procedures

Diagnostic and Interventional	297
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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

Milind Hote

Sachin Talwar

V. Devagourou

EDUCATION

Prof. A. Sampath Kumar prepared the following educational surgical videos on CTS Net.

Videos

- a) Bidirectional Glenn Shunt: A. Sampath Kumar and Sachin Talwar
- b) Aortic Valve Replacement with stentless autologous pericardium: A. Sampath Kumar and Carlos Duran.

Short Term Trainees

The following have undergone short term training in the department

- Dr. Peter Aseyo Sore from Nairobi, Kenya
- Dr. Santanu Dutta from Institute of Postgraduate Medical Education & Research, Kolkata
- Dr. Reyaz Ahmad Lone from Sher-I-Kashmir Institute of Medical Sciences, Srinagar
- Dr. Vikas Ahlawat from National Heart Institute, East of Kailash, New Delhi
- Technician in ICU/CCU from Ladakh Heart Foundation, Leh Ladakh
- Physiotherapist in Cardio Respiratory Physiotherapy from Indian Institute of Health Education & Research, Patna
- Physiotherapist from Icon Institute of Allied Health Sciences, K.P. Bhawan, Sadarapur Colony, NOIDA (U.P.)
- Postgraduate students in Physiotherapy from Jamia Hamdard University, New Delhi.
- 4 perfusionists from Becken Education, Centre, Baroda – An IACVTS accredited Institution.

National and International conferences

Prof. A. Sampath Kumar attended the 16th Annual Conference of Asian Society of Cardiovascular Surgery at Singapore from 13th-16th March, 2008.

He also attended the 54th Annual Conference of the Indian Association of Cardiovascular and Thoracic Surgeons at Pune from Feb. 24th -26th, 2008.

Prof Balram Airan delivered a lecture on “Robotic Cardiac Surgery” during 54th Annual Conference of Indian Association of Cardiovascular Thoracic Surgeons (CTCON 2008) at Pune 21-24th February 2008.

Lecture on “Mechanical Circulatory Assist in Chronic Cardiac failure” during Joint Annual Meeting of ISHR (Indian Section), International Academy of Cardiovascular Surgery (Indian Section) & Heart Failure Society of India held at PGIMER, Chandigarh from 29th Feb to 1st March 2008.

Lecture on “Role of Revascularization in Heart Failure” during the National Annual meeting of Heart Failure society at MCR Institute for Human Resource Development at Hyderabad from 3rd to 4th November 2007.

Lecture on “Stem Cell Therapy: A Clinician’s Perspective” DIA, ICRI & BCI 9th Annual Conference on Drug Discovery & Clinical Development in India. 19-21st November 2007, at Mumbai.

Lecture on “Evolution of the Fontan Enigma “during 9th Annual Conference of Pediatric Cardiological Society of India held at Kolkata November 23-25, 2007.

Inaugural Historical Meeting of the World Society of Congenital & Pediatric Cardiac Surgeons & attended Annual Meeting of the American Association of Thoracic Surgeons at Washington DC, USA 3rd to 9th May 2007.

Lecture on “Donor Maintainance during Workshop on Organ Donation held on 29th March 2008 at JPNATC, AIIMS, New Delhi

Dr. S.K. Choudhary delivered a lecture on “Tubercular Pseudoaneurysm of aorta and its branches” at the aortic Surgery Symposium, Tokyo, Japan October 13-14, 2007.

Dr. Sachin Talwar delivered a lecture on “Changing outcomes of pulmonary artery banding with adjustable pulmonary artery band” at the World Society of Pediatric and Congenital Heart surgery, Washington DC, 3-4th May, 2007.

Lecture on “The impact of Down’s syndrome on morbidity and mortality after surgery for AV Canal defects” at the World Society of Pediatric and Congenital Heart surgery, Washington DC, 3-4th May, 2007.

Lecture on “A new technique of Unidirectional valved patch for closure of septal defects in patients with severe pulmonary hypertension” at the 9th Annual Conference of the Pediatric Cardiac Society of India at Kolkatta between 23rd to 25th November 2007.

Lecture on “Aortic valve replacement with biological substitutes in Children” at the 9th Annual Conference of the Pediatric Cardiac Society of India at Kolkata from 23rd to 25th November 2007.

Lecture on “Total anomalous pulmonary venous connection beyond childhood” at the 9th Annual Conference of the Pediatric Cardiac Society of India at Kolkata between 23rd to 25th November 2007.

Lecture on “Successful outcome following adjustable pulmonary artery banding and subsequent closure of ventricular septal defect in a patient with Severe pulmonary hypertension and disseminated

sepsis” at the 9th Annual Conference of the Pediatric Cardiac Society of India at Kolkatta from 23rd to 25th November 2007.

Lecture on “Bioprosthetic heart valve implantation in India-indications, results and assessment of impact on quality of life” at 54th Annual Conference of the Indian Association of Cardiovascular and Thoracic Surgeons from 21st to 24th February 2008 at Pune

Dr. Milind Hote delivered a lecture on “Robotic ASD Closure” at 54th National Conference of Indian Association of Cardiovascular & Thoracic Surgeons at Pune 21-23rd Feb 2008.

Dr. Devagourou attended meet on “Transcatheter therapy for structural cardiovascular Disease October 4, 2007. Cleveland, Ohio, USA.

Varshney S, Hote M, Talwar S, Choudhary SK, Chowdhury UK, Airan B, Singh R, Saxena A, Kothari SS, Juneja R, Venugopal P. Impact of Down’s syndrome on clinical presentation, hemodynamics and outcome following repair of complete atrioventricular septal defect. Presented at the Inaugural Meeting of the World Society of Pediatrics and Congenital Heart Surgery, 3-4th May 2007, Washington DC.

RESEARCH

Projects completed

- Auditing of Early Goal Directed Therapy
- Bioprosthetic heart valve implantation in India – indications, results and assessment of quality of life.
- Nosocomial infections in the intensive care unit after pediatric cardiac surgery.
- The role of Transthoracic Echocardiography as a real time hemodynamic monitoring tool during induction of anesthesia in patients undergoing coronary artery bypass grafting surgery.
- Comparative study of Lactate, Pyruvate and Lactate Pyruvate ratio as Markers of myocardial Ischemia in Adult patients undergoing open heart surgery.
- Nosocomial infections in the intensive care unit after pediatric cardiac surgery.
- Tetralogy of Fallot with TAPVC.
- Changing outcome with adjustable pulmonary artery band.
- Cost reduction in patients undergoing pediatric cardiac surgery in developing countries.
- A new, simplified technique of unidirectional, valved patch.
- Tubercular pseudoaneurysm of aorta.

Ongoing Projects

- ICMR Funded Project Entitled “Myocardial preconditioning against infarction in patients undergoing coronary artery bypass surgery: A comparison of isoflurane and sevoflurane.
- A prospective safety & feasibility clinical evaluation of the Marrow miner for bone marrow harvesting.
- STICH Trial study
- Study of Human Mesenchymal Stem Cells with respect to its isolation, Characterization and in vitro differentiation to cardiomyogenic and neuronal cell lineage”
- Study of Epidermal Stem Cells (EpiSC) with respect to its isolation, Characterization and in vitro differentiation

- Bone Tissue Engineering by growing and differentiating Mesenchymal Stem Cells on Biocomposite scaffold
- Freedom Trial – An NIH study
- Use of autologous bone marrow stem cells in regeneration of damaged myocardium in patients undergoing CABG
- A single prophylactic dose of pentoxifylline in patients undergoing mitral valve surgery. A prospective double blind randomized controlled study.
- To study the effect of continuous pulmonary perfusion and low tidal volume ventilation on lung function in the adult patients undergoing open heart surgery.
- Surgery in infective endocarditis indications, results, and risk factors.
- Long term clinical and echo cardiac follow up of patients with histologically degenerative changes in ascending aorta and pulmonary trunk.
- Early results of aortic valve replacement with autologous glutaraldehyde treated pericardial stentless valve.
- Inhaled nitroglycerin versus inhaled milrinone in congenital heart disease children suffering from pulmonary arterial hypertension.
- 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.
- Efficacy of lactate concentration gradient from right atrium to pulmonary artery in goal-directed haemodynamic management in cardiac surgical patients.
- Long-term outcome of patients undergoing the Glenn shunt with preservation of antegrade flow.
- Effect of Cardiopulmonary bypass on the thyroid hormone profile.
- Randomized trial on use of Allopurinol in valvular heart surgery.
- Follow up of use of bioprosthesis in patients below fourth decade of life.
- Effect of antegrade pulmonary perfusion on lung function in patients undergoing Valvular heart surgery.
- Pulmonary artery morphology and long-term clinical outcome in patients with bicuspid aortic valve.
- On pump Vs off pump CABG. Long-term outcome.
- CABG vs multivessel PTCA: Long-term outcome.
- Role of steroids in patients with tubercular pericarditis.
- Follow-up results of different RVOT reconstruction techniques in pulmonary atresia.
- Blood conservation in open heart surgery: A retrospective study
- Results and follow-up of Hemitruncus repair.
- Pulmonary Artery size in supracardiac TAPVC and its effect on early mortality.
- Histopathology of pulmonary arteries in-patient of TOF undergoing BT shunt and correlation with growth potential of Pulmonary arteries – A Prospective study.
- Comparison of BT shunt using PTFE graft and homograft saphenous vein – A Randomized controlled trials.
- Histopathology of pulmonary arteries in patients of TOF undergoing total correction.

- Role of Nicorandil to prevent radial artery vasospasms in-patient undergoing CABG using radial artery.
- Autonomic functional assessment using heart Rate variability in patients undergoing single ventricle repair
- Role of sildenafil in patients undergoing mitral valve replacement with severe PAH by haemodynamics and echocardiographic assessment.
- Role of IABP in selected group of patients of CAD with EF <30% by haemodynamics and cardiac enzyme analysis.
- Histomorphometry of pulmonary arteries in lung biopsy specimens of patient undergoing BD Glenn and Fontan
- Mid term and long term results of homograft vein in CABG
- Results of ASO in AIIMS
- The randomized trial comparing the use of Carpentier's ring vs posterior segment annuloplasty using a C-shaped ring of Teflon felt for mitral valve repair.
- Effect of cardiopulmonary bypass on autonomic tone using heart rate variability.
- Effect of CPB on serum thyroid hormone profile in patient weight < 10Kgs.
- Evaluation of the effect of allopurinol in decreasing myocardial damage in patients undergoing surgery for valvular heart disease under CPB.
- Surgery for infective endocarditis- indications, results and risk factors
- Role of low molecular heparin in prevention of early prosthetic valve thrombosis
- Effect of pentoxifyllin on systemic inflammatory response in valve surgery – A randomized controlled study
- Effect of lung perfusion and low tidal volume ventilation in patients undergoing open heart surgery
- Comparative study of Histopathological changes in Ascending aorta and the risk factors related to histopathological conditions and aortic dilatation in patients with TOF and functionally univentricular heart.
- Significance of intra-op and immediate post op myocardial markers in determining the early outcome of patients undergoing surgery under cardiopulmonary bypass.
- Comparison of 3 different duration of prophylactic antibiotic in adult cardiac surgery: A Randomized prospective study.
- Comparison of Graham Nunn's, single patch Vs double patch repair in complete AVSD repair: A retrospective study.
- Idiopathic tricuspid regurgitation in pediatric & adult patient. A Retrospective analysis.
- Autologous pericardial valve conduits from Bovine pericardium in RVOT reconstruction: A prospective study.
- Long term clinical and echocardiographical follow-up study of patients with histopathologically degenerative changes in ascending in ascending aorta.
- Study of prospective role of remote ischaemic preconditioning in adults undergoing CABG in term of post-op Troponin- T level
- MVR with and without chordal preservation in rheumatic population. Evaluation of regional wall motion abnormality by dynamic radionuclide study and MRI
- Mitral valve replacement using Bioprosthetic valve in patients with RHD below 40 years.

- Evaluation of early thromboembolism and valve thrombosis in patients with RHD undergoing MVR using Bioprosthetic valve in presence of atrial fibrillation with or without LA/LAA clot.

PUBLICATIONS

1. Takkenberg JJ, Rajamannan NM, Rosenhek R, Kumar AS, Carapetis JR, Yacoub MH. The need for a global perspective on heart valve disease epidemiology. The SHVD working group on epidemiology of heart valve disease founding statement. *J Heart Valve Dis.* 2008;17:135-39.
2. Kumar AS. Robotic Surgery. *Ann Thorac Surg* 2007;84:714
3. Joshi K, Talwar S, Velayoudham D, Kumar AS Aortic valve replacement in predominant aortic stenosis: what is an appropriate size valve? *Ind J Thorac Cardiovasc Surg* 2007;23:141-45
4. Aggarwal NK, Kiran U, Malhotra P, Chowdhury UK. Intraoperative central venous oxygen saturation as a surrogate for mixed venous oxygen saturation in patients undergoing cardiac surgery. *J Anaesthesiol, Clin Pharmacol* 2007; 123(1): 29-33.
5. Chowdhury UK, Mishra A, Seth A, Dogra PN, Hannakere JKV, Subramaniam GK, Venugopal P. Novel techniques for tumour thrombectomy for renal cell carcinoma with intra-atrial tumour thrombus. *Ann Thorac Surg* 2007; 83: 1731-1736.
6. Chowdhury UK, Subramaniam G, Joshi K, Varshney S, Kumar G, Singh R, Venugopal P. Rechannelling of totally anomalous pulmonary venous connection with or without vertical vein ligation: Results and guidelines for candidate selection. *J Thorac Cardiovasc Surg* 2007; 133: 286-294.
7. Chowdhury UK, Malhotra A, Kothari SS, Reddy KS, Mishra A, Pradeep KK, Venugopal P. A suggested new surgical classification for mixed totally anomalous pulmonary venous connection. *Cardiol Young* 2007; 17: 342-53.
8. Bisoi AK, Murala JSK, Airan B, Chowdhury UK, Kothari SS, Pal H, Patel C, Krishna S, Chauhan S, Venugopal P. Tetralogy of Fallot in Teenagers and Adults-surgical experience and follow-up. *Gen J Thorac Cardiovasc Surg* 2007; 55: 105-112.
9. 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.
10. Chowdhury UK, Kothari SS, Patel C, Malhotra P, Mishra AK, Venugopal P. A novel technique of transfer of anomalous left coronary artery from the pulmonary artery in children and adults using autogenous aortic and pulmonary arterial flaps. *Cardiology in the Young* 2008; 18:1-12.
11. Makhija N, Choudhury M, Kiran U, Chowdhury UK. The stuck central venous catheter – A word of caution. Accepted for publication in *Heart, Lung and Circulation* 2007 (In press). HLC –D – 07-00063
12. Malhotra PK, Madhava K, Chowdhury UK, Kiran U. Efficacy of early goal directed therapy in moderate to high-risk cardiac surgical patients. *Ann Cardiac Anaesthesia* 2008; 11: 27-34.
13. Airan B, Talwar S, Chowdhury UK, Bisoi AK, Choudhary SK, Hote M, Seth S, Venugopal P. The application of stem cell technology at All India Institute of Medical Sciences, New Delhi, India. *Heart Surg Forum* 2007; 10: E231-4.
14. Thiruvankadam S, Malhotra PK, Krishna MT, Kiran U, Chowdhury UK, Seth S. congenital left atrial appendage aneurysms. *Ann Cardiac Anaesthesia* 2008; 11(1): 51.
15. Talwar S, Choudhary SK, Mathur A, Kumar AS. Autologous RA wall patch for closure of atrial septal defects. *Ann Thorac Surg* 2007: 84:913-6.

16. Talwar S, Mathur A, Choudhary SK, Singh R, Kumar AS. Aortic valve replacement with mitral valve repair compared to double valve replacement in patients with rheumatic heart disease. *Ann Thorac Surg* 2007; 84:1219-25.
17. Talwar S, Choudhary SK, Mathur A, et al. Changing outcomes of pulmonary artery banding with the percutaneously adjustable pulmonary artery band. *Ann Thorac Surg* 2008; 85:593-8.
18. Choudhary SK, Talwar S, Airan B. A simple technique of unidirectional valved patch for closure of septal defects. *J Thorac Cardiovasc Surg* 2007;134:1357-8.
19. Chaturvedi V, Talwar S, Airan B, Bhargava B. Interventional cardiology and cardiac surgery in India. *Heart Surg Forum* 2008;94:268-74.
20. 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.
21. Choudhary SK, Talwar S, Airan B, Yadav S, Venugopal P. A simplified circuit of modified ultrafiltration. *Heart Lung Circulation* 2007;16:113-5.
22. K. Ramachandran, M Maikhuri, S. Seth, A Vij, M Kumar, N. Srivastava, D Prabhakaran, B Airan, K Srinath Reddy. Impact of a comprehensive telephone based disease management programme on quality of life in patients with heart failure. *Natl Med J India* 2007;20(2):67-73.
23. Chowdhury UK, Airan B, Malhotra A, Saxena A, Kothari SS, Mishra AK, Kalaivani M, Venugopal P. Mixed total anomalous pulmonary venous connection: Anatomical variations, surgical approach, techniques and results. *J Thorac Cardiovasc Surg* 2008; 135: 106-116.
24. Talwar S, Choudhary SK, Airan B. Peri-operative antibiotic prophylaxis in pediatric cardiac surgery. *Cardiol Young* 2007;17:695-6.

Books

A. Sampath Kumar. *Techniques in Valvular Heart Surgery*. New Delhi, CBS Publishers; 2007.

PATIENT CARE

Total operations performed in 2007-2008

Open Heart Surgery	-	2470
Close Heart Surgery	-	0850
Total Operation	-	3320

31,869 patients attended the Cardiothoracic and Vascular Surgery out patient department.

AWARDS AND HONOURS

Prof. Balram Airan enrolled as member of The Asian Society of Cardiovascular & thoracic surgery; enrolled as Founding member of World Society of Congenital & Pediatric Cardiac Surgeons; elected Vice President (North) for Heart failure Society of India; Member of the Inspection team for accreditation of Heart Transplant Programme at Sir Ganga Ram Hospital, New Delhi.

Member Editorial Board of *Annals of Pediatric Cardiology*, the official publication of Pediatric Cardiac Society of India.

Member Task Force for evaluation of timing of operation in congenital cardiac diseases in India.

Dr. S.K. Choudhary awarded best paper award to the paper entitled "A new technique of Unidirectional valved patch for closure of septal defects in patients with severe pulmonary hypertension" at the 9th Annual Conference of the Pediatric Cardiac Society of India at Kolkatta between 23rd to 25th November 2007; Associate editor of *Annals of Pediatric Cardiology* the official

publication of the Pediatric Cardiac Society of India; Member of the task force for evolving guidelines for timing of interventions for congenital heart disease.

Dr. Sachin Talwar awarded the prestigious Evart's A Memorial Graham fellowship" by the American Association of Thoracic Surgery for the year 2008-09; awarded Young Investigator award for the paper entitled ""A new technique of unidirectional valved patch for closure of septal defects in patients with severe pulmonary hypertension" at the 9th Annual Conference of the Pediatric Cardiac Society of India at Kolkatta between 23rd to 25th November 2007; Associate Editor of "Annals of Pediatric Cardiology" the official publication of the Pediatric Cardiac Society of India; Founding member of the World Society for Pediatric & Congenital Heart Surgery, at the inaugural conference at Washington DC, US, May 3-4, 2007.

Dr. Milind Hote visited Innsbruck University Medical Hospital at Innsbruck Austria from 16th June to 10th July 2007 to undergo training in Robotic Cardiac Surgery under Prof. Johannes Bonatti

Dr. V. Devagourou awarded one month observership in Aortic Aneurysm in Cleveland Clinic, Ohio between 1st October 2007 to 30th October 2007.

Ms. Ritu Airan Perfusionist in the Department of CTVS presented a paper on "Relationship between internal jugular venous oxygen saturation and pump flow rates in children and adults undergoing corrective cardiac surgery under cardiopulmonary bypass". at the 8th Association of Indian Society of Extracorporeal Technology Conference and was awarded best paper for original research.

VISITING SCIENTISTS

Dr. Carl C. Backer, Professor Pediatric Cardiac Surgery Chicago Children Hospital, Chicago, USA

Dr. Johannes Bonatti, Associate Professor, Dept. of Cardiac Surgery, Innsbruck University, Medical Hospital, Innsbruck, Austria.

Dr. Nikolaos Bonaros, Clinical fellow, Dept. of Cardiac Surgery, Innsbruck University Medical Hospital, Innsbruck, Austria

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

EDUCATION

Conferences Organized

1. National consensus meeting on management of common congenital heart diseases in India on 26th August 2007
2. Workshop on live 3 D echocardiography in congenital heart diseases on 16th March 2008

RESEARCH

Funded Projects

Ongoing

1. Clinical validation of a of indigenously developed low cost telemedicine equipment (Remedi-kit) at a tertiary care hospital. Dr V K Bahl; Funding source: Neurosynaptics communications, Bangalore
2. Stem Cell Therapy in Heart Failure. Dr V K Bahl; Funding source – DBT
3. Intravascular Ultrasound for severe pulmonary artery hypertension in congenital heart diseases. Dr R Juneja; Funding source: Department of science and technology
4. Preliminary evaluation of the current 3-weekly penicillin prophylaxis. Dr R Juneja; Funding source - Faculty Research Grant (AIIMS).
5. Non-invasive detection of sub-clinical disease activity in patients with established rheumatic valvular heart disease. Dr G Karthikeyan; Funding source – DBT (06-08): Total Funds – Rs 22,00,000.
6. Role of SPECT in chest pain patients in casualty. Dr G Karthikeyan; Sponsored by IAEC
7. UKIERI project on heart failure changes in cytokines in untreated heart failure and before and after PTMC. Dr Sandeep Seth & Poole Wilson from UK.
8. Role of MRI for diagnosis of activity in NSAA. Dr Sandeep Seth; Funding source - Institute research grants (AIIMS)

9. Comparison of apical and RVOT Pacing by tissue Doppler imaging. Dr Gautam Sharma; Funding source - Institute research grants (AIIMS)
10. Role of MUGA vs ECHO in adriamycin toxicity diagnosis in children with acute leukemia with Dept of Pediatrics. Funding source - Institute research grants (AIIMS)
11. Evaluation of NT-pro-BNP levels in the differentiation of constrictive pericarditis from restrictive cardiomyopathy. Dr S Ramakrishnan; Funding source - Faculty research grant (AIIMS)

Departmental Projects

Completed

1. Positron Emission Tomography (PET) – CT in acute rheumatic fever
2. Assessment of Brain Natriuretic peptide (BNP) and inflammatory markers in patients with Eisenmenger Syndrome and its correlation with functional status and hemodynamic parameters
3. The hemodynamic effect of sildenafil on hemodynamics in dilated cardiomyopathy.

Ongoing

1. Study of labelled stem cells in heart failure
2. Positron Emission Tomography (PET) – CT in chronic constrictive pericarditis
3. Tissue Doppler evaluation of Transposition of Great Arteries
4. Tissue Doppler and 3D Echo Evaluation in Normal Neonates
5. Safety and Efficacy of Beta Blockers in Eisenmenger Syndrome
6. Assessment of Diastolic Function, Inflammatory markers and Myocardial Fibrosis in Patients with Acute Hypertensive Heart Failure’
7. VSD PHF – Propranolol for Heart failure in ventricular septal defect
8. Acute hemodynamic effects of tobacco chewing
9. Development of a rat heart failure model and assessing the role of various antioxidants and cytokine blockers in heart failure in rat models

Collaborative Projects

1. SPIRIT V - The SPIRIT Clinical Trial Program consists of six studies evaluating the XIENCE™ V Everolimus Eluting Coronary Stent System for the treatment of coronary artery disease. Our center is one of the chosen centers.
2. National coordinator – Evaluation of Ivabradine in patients with chronic stable angina – Funded by Institute de Recherches Internationales Servier, France
3. BIPPS Study (Bivalirudin Monotherapy in patients with STEMI undergoing a Primary PCI strategy) – Funded by Sun Pharma
4. 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, funded by the NIH, Bethesda, MD, USA National Co-ordinator (India)
5. Stanford India Biodesign – a collaborative effort between Stanford, Department of Science and Technology and IIT with Department of Cardiology, AIIMS.
6. Multi-Sensor Monitoring in Congestive Heart Failure Study (MUSIC)
7. TOPSS trial funded by EuroCOR
8. INDICOR Trial funded by B Braun

9. Multicentric Clinical Evaluation of an Indigenous Nanoporous carbon coated Paclitaxel-eluting cobalt chromium stent in De-novo Coronary Artery Stenosis.
10. Surgical Treatment of Ischemic Heart Failure (STICH) trial. NIH funded study of revascularization in heart failure
11. Cardiovascular Product Evaluation platform – funded by DBT, Government of India
12. The Hyperglycemia and its Effect after Acute Myocardial Infarction on Cardiovascular Outcomes in Patients with Type 2 Diabetes (HEART2D study) (Principal Investigator - Prof Nikhil Tandon, Endocrinology)
13. ASSIST Study – a multicentric study of Streptococcal diseases including rheumatic fever

PUBLICATIONS

1. Airan B, Talwar S, Choudhary SK, Bisoi AK, Chowdhury UK, Hote MP, Mohanty S, Seth S, Patel C, Venugopal P. Application of stem cell technology for coronary artery disease at the All India Institute of Medical Sciences, New Delhi, India. *Heart Surg Forum*. 2007;10(3):E231-4.
2. Bhan A, Gupta M, Abraham S, Sharma R, Kothari SS, Juneja R. Surgical experience of aortopulmonary window repair in infants. *Interact Cardiovasc Thorac Surg*. 2007 Apr;6(2):200-3.
3. Bhan A, Gupta M, Abraham S, Sharma R, Kothari SS, Juneja R. Surgical experience of aortopulmonary window repair in infants. *Interact Cardiovasc Thorac Surg* 2007; 6(2):200-3.
4. Chaturvedi V, Bhargava B. Health care delivery for coronary heart disease in India—Where are we headed? *Am Heart Hosp J* 2007; 5(1):32-7.
5. Chaturvedi V, Talwar S, Airan B, Bhargava B. Interventional cardiology and cardiac surgery in India. *Heart* 2008; 94(3):268-74.
6. Chowdhury UK, Airan B, Malhotra A, Bisoi AK, Saxena A, Kothari SS, Kalaivani M, Venugopal P. Mixed total anomalous pulmonary venous connection: anatomic variations, surgical approach, techniques, and results. *J Thorac Cardiovasc Surg* 2008; 135(1):106-16, 116.e1-5.
7. Chowdhury UK, Kothari SS, Bishnoi AK, Gupta R, Mittal CM, Reddy S. Successful Lobectomy for Pulmonary Arteriovenous Malformation Causing Recurrent Massive Haemoptysis. *Heart Lung Circ* 2008 Feb 20. [Epub ahead of print]
8. Chowdhury UK, Malhotra A, Kothari SS, Reddy SK, Mishra AK, Pradeep KK, Venugopal P. A suggested new surgical classification for mixed totally anomalous pulmonary venous connection. *Cardiol Young* 2007; 17(4):342-53.
9. Chowdhury UK, Mishra A, Saxena A, Kothari SS, Malhotra A, Mahajan R, Honnakere JH, Venugopal P: A novel percutaneously adjustable device for ligation of the vertical vein in the setting of obstructive totally anomalous pulmonary venous connection. *Cardiol Young* 2007; 17:380-6.
10. Dani S, Sinha N, Bhargava B, Jain V, Reddy YV, Biswas P, Pajapati J. The Report of the Coronary Cardiac Interventions Registry of India. The Cardiological Society of India for the year 2006. *Indian Heart J* 2007;59(6):528-32.
11. Karthikeyan G, Baalasubramanian S, Seth S, Das N. Low levels of plasma soluble complement receptor type 1 in patients receiving thrombolytic therapy for acute myocardial infarction. *J Thromb Thrombolysis*. 2007 Apr;23(2):115-20.
12. Karthikeyan G, Bhargava B. Taking Interventional Cardiology forward: Hindsight, foresight and insight. *Eurointervention* 2007; 3:424-5.

13. Math R, Singh S, Seth S, Shanker B, Bhargava B, Sharma S, Gulati G. Delayed response following coil embolisation for Hypertrophic obstructive cardiomyopathy, *Indian Heart J* 2007;59(4):383-5.
14. Poole-Wilson PA, Seth S. Rheumatic fever: the potential advantages of technology. *Nat Clin Pract Cardiovasc Med.* 2008 Apr 15; [Epub ahead of print]
15. Ramakrishnan S. Diabetic dyslipidemia. *Current Medical Journal of India* 2007 Nov.
16. Roy A, Yadav R, Bhargava B, Goswami KC. Rebound thrombocytosis causing MI following Dengue Fever. *Indian Heart J* 2007;59:94
17. Saxena A: Consensus on Timing of Interventions for Common Congenital Heart Diseases: Member and convener of Working Group on Management of Congenital Heart Diseases in India. *Indian Heart Journal* 2007; 59: 515-521.
18. Saxena A: Phosphodiesterase Type 5 inhibitors in pulmonary hypertension: A Hobson's choice for Indian patients. *Indian Heart J* 2007; 59: 299-301.
19. Selvaraj T, Kapoor PM, Krishna M, Kiran U, Chowdhury U, Seth S. Congenital left atrial appendage aneurysm. *Ann Card Anaesth.* 2008 Jan-Jun;11(1):51-2.
20. Talwar S, Choudhary SK, Mathur A, Airan B, Singh R, Juneja R, Kothari SS, Saxena A: Changing outcomes of pulmonary artery banding with the percutaneously adjustable pulmonary artery band. *Ann Thorac Surg* 2008; 85:593-8.
21. 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.

Chapters in Books

1. Reddy KS, Naik N, Roy A. Chapter 38. The Polypill. In: Fauci AS, Kasper DL, Longo DL, Braunwald E, Hauser SL, Jameson JL, Localzo J. *Harrison's Principles of Internal Medicine.* 17th Edition, McGraw Hill, 2008.
2. Reddy KS, Naik N, Prabhakaran D. Chapter 98. Treatment Guidelines: The Developing World. In: Lip GYH, Hall JE. *Comprehensive Hypertension.* Philadelphia: Mosby Elsevier, 2007. 1185-92.

PATIENT CARE

Total numbers

New OPD cases	26,771
Old Cases	75,159

Patient Services

• TMT	2407
• Holter	1696
• Echocardiography	24,169
• Fetal Echocardiography	298
• TEE	30
• ECG OPD	23, 125

Cath Lab Services

<i>Diagnostic</i>	5119
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Interventions

• Coronary interventions	753
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- Mitral Valve Dilatations 383
- Device Closures 41
- Other Interventions 402

AWARDS AND HONOURS

1. Bahl VK. President elect and Chairman Scientific Committee of Cardiological Society of India
2. Saxena A. Magnanimous Award given by IMA Academy of Medical Specialties, New Delhi Branch on 23rd September 2007; Visiting Professor at the University of Manitoba, Canada

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 Malik

EDUCATION

DM Cardiac Anaesthesia

Four new candidates were selected for postdoctoral training including one sponsored. Three DM candidates passed the examination successfully in July 2007 and two in December 2007. At present eight are pursuing DM Cardiac Anaesthesia course with ICU training as well. Two of the DM students are sponsored candidates.

P.G. Training

6 postgraduate students from the department of Anaesthesia, AIIMS were posted for a period of 2 months each for training in cardiac anaesthesia. Three postgraduate students from Lady Hardinge Medical College completed superspeciality training in cardiac anaesthesia for a period of 15 days each.

Short Term Superspeciality Training

Five faculty members from various medical colleges underwent short term training in cardiac anaesthesia.

M.Sc. Perfusion Technology

Classes coordinated by faculty of the department.

CME

Seminar/Workshop Organized by the Department

'Haemodynamic Monitoring' - a workshop in September 2007 at AIIMS.

“Arrhythmias” - a workshop and CME at Bangalore – 2nd June 2007.

“Practical Implications on haemodynamic monitoring” – a workshop held at AIIMS on 2nd September 2007.

Organized a quiz for postgraduates in capacity as Quiz Master & Director. This was the first IACTA quiz at the National level in IACTA Conference 2008 at Ahmedabad.

NATIONAL AND INTERNATIONAL CONFERENCES

Lectures delivered

Dr. Usha Kiran

1. ‘Role of Spiritual Empowerment for Parkinson Disease Patients and their Family’ on World Parkinson’s Day at JLN Auditorium, AIIMS, 1st April, 2007.
2. ‘Complications of Mechanical Ventilation during workshop on ‘Mechanical Ventilation’ at National Heart Institute, New Delhi on 19th August, 2007
3. ‘Three Dimension Care of Heart’ organized by Heart Care Foundation on 30th September, 2007.
4. Cardiac arrhythmia talk as chairperson at World Conference of Preventive and Clinical Cardiology on 30th September, 2007.
5. ‘Spinal Cord Protection’ at Asian Pacific Congress organized by Asian Society of Cardiac Anaesthesiologists on 20th October, 2007 at New Delhi.
6. ‘Mechanical Ventilation’ during the National Cardiopulmonary Physiotherapy Conference at Hamdard Jamia Milia University, New Delhi on 27th October, 2007.
7. ‘Congenital Heart Disease’ for Post Graduate Assembly at LHMC, New Delhi on 2nd November, 2007.
8. ‘Complete Health’ CME organized at School Health Institute of Municipal Corporation of Delhi by giving a talk on 20th October, 2007.
9. ‘Hypoplastic Left Heart Syndrome’ during Annual National Conference of Cardiac Anaesthesia on 22nd February, 2008.
10. Tension, Headache and Melatonin – Modulation by autogenic relaxation (meditation). World congress of Anaesthesia, Cape Town.
11. ‘Values for Complete Health’ Rosary Senior Secondary School, Radio Colony – Golden Jubilee Celebration on 5th October, 2007.

Dr. Sandeep Chauhan

1. ‘Pre operative ECMO use’ at 11th IACTA conference at Ahmedabad Feb. 14-17, 2008.
2. ‘The Integrated ECMO-circuit’ at American Society of Anaesthesia (ASA) at San Fransisco in October, 2007.
3. Pediatric Cardiac Anaesthesia talk as chairperson at 11th IACTA conference at Ahmedabad 14-17 Feb., 2008.
4. ‘Potpurri’ talk as chairperson at Asian Society of Cardiac Anaesthesia Conference at New Delhi in December, 2007.

Dr. Neeti Makhija

1. Best poster paper award for the paper. Makhija N, Pal N, Kiran U, Sandeep AJ, Chowdhary SK, Yadav SC. Pseudoaneurysm of Ascending Aorta following Coronary Artery Bypass Graft

- Surgery: An Anaesthetic Challenge. Presented in 46th annual conference of Indian Society of Anaesthesiologist (Delhi Chapter) held on 7-8th April 2007 at New Delhi.
2. Makhija N, Singh R, Kekani M, Choudhury M, Kiran U. Co-existing Coronary Artery Disease and Aorto-Iliac Disease: Perioperative Challenge. Presented in 46th annual conference of Indian Society of Anaesthesiologist (Delhi Chapter) held on 7-8th April 2007 at New Delhi.
 3. “Central Venous Pressure Monitoring and Pulmonary Artery Catheterization” in a workshop on “Practical Implications of Haemodynamic Monitoring” organized by the department of Cardiac Anaesthesia, All India Institute of Medical Sciences, New Delhi.
 4. Makhija N, Sen C, Kiran U, Lakshmy R, Hote M, Chowdhury SKM, Airan B. Role of Co-enzyme Q10 in Patients Undergoing Coronary Artery Bypass Graft Surgery. Presented in 7th Meeting of the Asian Society of Cardiothoracic Anaesthesia, held from 26-28 Oct. 2007, New Delhi, India.
 5. Makhija N, Kiran U. Atrial Septal Defect Device Closure: Role of Echocardiography. Presented in 2nd Annual Perioperative and Critical Care Transesophageal Echocardiography Workshop, held from 1-3rd Feb, 2008, at Chandigarh.
 6. Demonstrator in live workshop in Tran esophageal Echocardiography guided device implantation, in 2nd Annual Perioperative and Critical Care Transesophageal Echocardiography Workshop, held from 1-3rd Feb, 2008, at Chandigarh.
 7. Makhija N, Pal N, Kiran U, Sandeep AJ, Chowdhary SK, Yadav SC. Pseudoaneurysm of Ascending Aorta following Coronary Artery Bypass Graft Surgery: An Anaesthetic Challenge, was also presented in 11th Annual Conference of Indian Association of Cardiovascular & Thoracic Anaesthesia (IACTA) held at Ahmedabad from 22 to 24th Feb. 2008.

Dr. Poonam Malhotra: Guest Lectures/Chairing/Organising Secretary

1. “My Patient for emergency laparotomy had a cardiac arrest in the post operative period – what should I do now?” in CME at Bangalore – 2nd June 2007.
2. PRO-CON Session Lecture – “It is better to ventilate a cardiac patient after major surgery – CON and CME at Bangalore – 2nd June 2007.
3. “Sepsis in Cardiac Surgery” talk as a chairperson in CME at Bangalore – 2nd June 2007.
4. “Advanced haemodynamic monitoring” in Southcon conference, Kodaikanal – 16-18 Aug. 2007.
5. “Tran esophageal monitoring in cardiac surgical patients” talk as a chairperson in Southcon conferences, Kodaikanal – 16-18 Aug. 2007.
6. “Does semi Invasive method replace invasive and non invasive methods of cardiac output monitoring? In Workshop on “Practical Implications on haemodynamic monitoring” – at AIIMS, 2nd September.
7. Pro-Con Session Lecture – Is PAC cardiac output better than non Invasive cardiac output – In Asian Society of Cardiac Anaesthesiologists (ASCA) – 26-28th October 2007.
8. Pro-Con Session Lecture – Colloids are not the first choice of fluid therapy in cardiac surgical patients – Con. In Update in Cardiac Anaesthesia, Chennai, 1-2nd December 2007.
9. “Redo Valve Surgery” talk as chairperson in Update in Cardiac Anaesthesia, Chennai, 1-2nd December, 2007.
10. “Symposia on Paediatric Cardiac Surgery” talk as chairperson in Update in Cardiac Anaesthesia, Chennai, 1-2nd December, 2007.
11. “Can’t give heparin – then what?” in IACTA Conference Feb, 2008 at Ahmedabad.

Dr. Minati

1. The relationship between Plasma Endothelin-I, Nitric Oxide products and clinical outcome in cyanotic congenital heart disease children suffering from severe pulmonary hypertension. 7th meeting of the Asian Society of Cardiothoracic Anesthesia, October 26-28, 2007, New Delhi.
2. Echocardiography, an Accurate and Reliable diagnostic aid for ruptured Sinus Valsalva Aneurysm. The Annual Workshop on perioperative and critical care Trans Esophageal Echocardiography. Department of Anaesthesia and Intensive Care, PGIMER, Chandigarh, 1-3rd Feb. 2008.
3. Rheumatoid arthritis and Anaesthesia Management in Annual Conference of Indian Society of Anaesthesia Delhi branch April, 2007
4. Pulmonary Valve Balloon dilatation during Annual Conference ISA Visakhapatnam, December 2007.

Dr. Shambhu

1. "Preoperative Blood Sugar Status in Cardiac Surgical Patients" in International conference of Asian Society of Cardiac Anaesthetists October, 2007
2. "Heparin Unresponsiveness by Retro-Peritoneal Hematoma" in Annual Conference of Indian Association of Cardiac Anaesthetists February, 2008
3. Transesophageal Echocardiography as a hemodynamic tool during workshop on Haemodynamic Monitoring September 2007, AIIMS.

Dr. Parag

1. 'Invasive Monitoring' in CME on Haemodynamic Monitoring, September 2007, AIIMS.
2. Video presentation in TEE workshop 1-3rd Feb., 2008, Chandigarh.

Dr. Vishwas

1. Poster presentation "Anaesthetic Management of undiagnosed case of cold-agglutinin auto immune haemolytic athemia presented at 7th annual conference of Asian Society of Cardiothoracic Anaesthesia, 26-28th October 2007 at New Delhi.
2. Interesting Echo Clipping of Paediatric Congenital heart discussed at echocardiography workshop conducted at PGIMER, Chandigarh.
3. Information from Arterial Pressure Trace during Workshop on Haemodynamic Monitoring, September 2007, AIIMS

RESEARCH

Funded Research

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" of Institute Research Grant (2007-2008); Dr. Neeti Makhija. Three years (2006-2009); Funds: Rs 2 lakhs.
2. AIIMS Funded Research Project 2005-2007, Completed on 31st March 2007 entitled "Auditing of Early Goal Directed Therapy"; Dr. Poonam Malhotra Kapoor; 2 years (2005-07); Fund: Rs 2.11 lakhs
3. Myocardial preconditioning against infarction in patients undergoing coronary artery bypass surgery: A comparison of isoflurane and sevoflurane. Dr. Poonam Malhotra Kapoor, ICMR, 2 years (2006-08) – Ongoing, Funds Rs 8.00 lakhs

4. Effect of Rajyoga meditation on patients undergoing coronary artery bypass grafting: A clinicobiochemical correlation. Dr. A. Gupta, AIIMS –Research Grant, Funds Rs 2.5 lakhs
5. Imbalance between Endothelin-I and plasma nitric oxide products influences the clinical outcome in children suffering from severe pulmonary hypertension undergoing open heart surgery. Dr. Minati Choudhury, AIIMS Research Grant, Funds Rs 3 lakhs

Department Projects

1. Effect of fentanyl and sufentanil in off-pump coronary artery surgery.
2. Effect of caudal epidural sufentanil and bupivacaine combination on stress response in paediatric cardiac surgical patients.
3. Effect of caudal epidural sufentanil and bupivacaine combination on glycaemic response in paediatric cardiac surgical patients.
4. Nosocomial infection in intensive care unit in paediatric cardiac surgical patients.
5. Evaluation of prophylactic Vasopressin in patients on the angiotensin Converting Enzyme Inhibitor Ramipril undergoing Coronary Artery Bypass Surgery.
6. Rectal diclofenac suppository in postoperative pain relief in adult cardiac surgical patients.
7. Comparison of sevoflurane and isoflurane for myocardial preconditioning in CABG patients.
8. Role of Lactate, Pyruvate and Lactate-Pyruvate Ratio as Prognostic markers in Cardiac Surgery.
9. The role of Transthoracic Echocardiography as a real time hemodynamic monitoring tool during induction of anesthesia in patients undergoing coronary artery bypass grafting surgery.
10. Inhaled nitroglycerin versus inhaled milrinone in congenital heart disease children suffering from pulmonary arterial hypertension.

Collaborative Research

1. Comparison of effect of conventional ultrafiltration and modified ultrafiltration in patients undergoing cardiac surgery – Perfusion Technology.
2. Effect of fentanyl and sufentanil in off-pump coronary artery surgery – CTVS.
3. Effect of caudal epidural sufentanil and bupivacaine combination on stress response in paediatric cardiac surgical patients – CTVS and Cardiac Biochemistry.
4. Effect of caudal epidural sufentanil and bupivacaine combination on glycaemic response in paediatric cardiac surgical patients – CTVS.
5. Nosocomial infection in intensive care unit in paediatric cardiac surgical patients – CTVS and Microbiology.
6. Evaluation of prophylactic Vasopressin in patients on the angiotensin Converting Enzyme Inhibitor Ramipril undergoing Coronary Artery Bypass Surgery – CTVS.
7. Efficacy of Early Goal Directed Therapy in moderate to high risk cardiac surgical patients. This has been presented at National Conference IACTA, 2007 – Completed.
8. Cerebral Oxygen saturation related to pump flow rates during cardiopulmonary bypass, in patients undergoing cardiac surgery – with CTVS and perfusion.
9. Role of phenoxybenzamine in radial artery harvesting during CABG – with CTVS.
10. Short and Long term outcomes of Myocardial Lactate, Pyruvate and Lactate-Pyruvate ratio in adult cardiac surgery – with CTVS.

PUBLICATIONS

1. Usha Kiran, Arindam Dutta, Alok Mehra, Sambhu N. Das, Khalid Juber. Anaesthetic management of emergency pacemaker implantation in a case of neonatal lupus erythmatosus with complete congenital heart block and respiratory distress. *Ind. J. Anaesth.* 2007; 01: 240-243.
2. Poonam Malhotra Kapoor, Madhava Kakani, Ujjwal Chowdhury, Minati Choudhury, Lakshmi R. Usha Kiran. Early goal directed therapy in moderate to high risk cardiac surgery patients. *Annals of Cardiac Anaesthesia*, 2008; 11:1:27-34.
3. Selvaraj Thiruvankadam, Kapoor Poonam Malhotra, Murali Krishna T, Kiran Usha, Chowdhury Ujjwal, Seth Sandeep. Congenital left arterial appendage aneurysms. *Annals of Cardiac Anaesthesia*, 2008; 11:1:51-51.
4. Tapan Sahoo, Usha Kiran, Poonam Malhotra Kapoor, Shiv Choudhary, Minati Choudhary. Effects of combined conventional ultrafiltration and a simplified modified ultrafiltration in adults cardiac surgery. *IJTCVS* 2007; 23(2): 116-24.
5. Naresh Kumar Aggarwal, Poonam Malhotra Kapoor, Usha Kiran, Shiv Choudhary. Anaesthesia management of a case of Hypertrophic cardiomyopathy undergoing morrow's septal myectomy. *IJA* April, 2007, Vol 51, No. 2: 134-36.
6. Makhija N, Choudhury M, Usha Kiran, Choudhury U. The stuck central venous catheter. *Heart Lung and Circulation* 2007 July 10 E Pub
7. Nirvik Pal, Minati Choudhury, Usha Kiran, Chaitali Sen, Khalid Zuber; Acute Haemorrhagic shock; Direct right atrial transfusion. *The Internet Journal of Anaesthesiology* 2007 ISSN: 1092 E Pub.
8. Minati Choudhury, Nirvik Pal, Usha Kiran. Open heart surgery for cyanotic heart disease in a child with immense thrombocytopenic purpose. A care report. *Ind. J. Anaesthesia* 2007; 51: m54-45.
9. Sambhunath Das, Madhava K, Usha Kiran, AK Bisoi, R Airan. Aortic Cannula obstruction during pediatric cardiac surgery. *Annals of Cardiac Anaesth.* 2008 (Jan), 11(1): 51-52.
10. Joshi V, Chauhan S, Kiran U, Bisoi A, Kapoor PM. Comparison of Analgesic Efficacy of Fentanyl and Sufentanil for Chest Tube Removal after Cardiac Surgery. *Annals of Cardiac Anaesthesia*, 2007; 10:1:42-45.
11. S.T. Hussain, A. Bhan, S. Sapra, Rajnish Juneja, Sambhu Das, Sanjeev Sharma. The bidirectional (Glenn) Shunt without cardiopulmonary bypass: Is it safe option? *Interactive Cardiovasc. Thorac Surg*, 2007 (April); 6:77-82.
12. Ujjwal Choudhary, Anand Mishra, Amlesh Seth, P.N. Dogra, Poonam Malhotra Kapoor, Neeti Makhija, Venugopal P. Novel techniques of tumor thrombectomy for renal cell carcinoma with intraatrial extension. *ATS* Vol.83;2007:1731-1736

COMMUNITY TALKS AND SERVICES

Dr Usha Kiran

1. Bharat Vikas Foundation & Delhi Police – A joint programme – a talk on Society Spirituality for reducing crime on 22nd July, 2007.
2. Participated in Blood Donation Camp – A talk on 'High Self Esteem' for the community of Model Town on 15th March, 2008.

3. Complete health and role of Rajyoga at Delhi University Community Centre on 24th February, 2008.
4. 'Self Confidence' through self realization at Sector 3, Rohini on 19th March, 2008.
5. Coordinated a panel discussion on 'Role of Women in World transformation' on 28th June, 2007.
6. A speech on 'Foundation of World Transformation is spirituality' on 25th June, 2007.
7. A workshop on 'Balance of freedom and discipline' on 28th June, 2007 at Mount Abu.
8. New Dimensions in Health on 16th July, 2007.
9. Panel discussion on Role of Meditation for sleep disturbance on 14th April, 2007.
10. 'Disciplinize yourself' during a children personality development camp on 2nd June, 2007.
11. 'Stress management' at Student Training College, University of Cape Town, South Africa, March 2008.
12. 'Headache and Relaxation therapy' at Cape Town, South Africa, March 2008.
13. Role of Spiritual based medicine for complete health at Samaj, Cape Town, South Africa, March 2008.

Dr. Poonam

1. Provides charitable services at clinic and school at Ram Memorial Clinic, Delhi and Noida (Sector -55, Shiv Shakti Mandir) every Sunday.

AWARDS AND HONOURS

1. Dr. Usha Kiran received Rashtriya Gaurav Award
2. Dr. Neeti Makhija received best paper award in 46th Annual Conference (Delhi Chapter) Indian Society of Anaesthesiologist held on 7th-8th April 2007 for presenting paper entitled "Pseudoaneurysm of Ascending Aorta following coronary Artery Bypass Graft Surgery : An Anaesthetic Challenge
3. Dr. Minati Choudhry received best paper award for the paper in Asian Society of Cardiovascular Anaesthesiologist for the work on "The relationship between plasma Endothelial and nitric oxide products on the clinical outcome of cyanotic congenital heart disease children suffering from severe pulmonary hypertension.
4. Dr. Thiruhandom S. Received Janak Mehta Award for the best paper co-authored by Dr. Usha Kiran, Dr. S.N.Das & titled "Single dose intraventricular Amiodarone for converting atrial fibrillation into sinus rhythm during mitral valve surgery" at Annual Conference of Indian Society of Cardiac Anaesthesia at Ahmedabad.
5. Dr. Poonam Malhotra – coauthor on paper entitled "Cerebral Oxygen saturation related to pump flow rates during cardiopulmonary bypass, in patients undergoing cardiac surgery" received gold Medal for best paper award (Read by Ritu Airan) at Annual Indian Society of Extracorporeal Technology meeting, at Pune-Feb 2008.
6. Dr. Bikash Sahu, Dr. Thiru Venkendam S-won consolation prize at first National IACTA Quiz competition at Ahmedabad – Feb 2008.
7. Dr. Bikash Sahu won 1st prize and Dr. Thiru Venkendam S the 3rd prize for the quiz organized the 1st Annual National IACTA TEE workshop held at Narayan Hridayalaya, Bangalore on 26th-28th March 2008.
8. Dr. Poonam Malhotra – The first Quiz Master of First National IACTA Quiz Competition at Ahmedabad – Feb 2008.

SIGNIFICANT EVENTS

Dr. Usha Kiran continues to be the Vice President of 'PRAN'; Honorary Co-editor of International Journal of Bio-Sciences; Reviewer for articles of Indian Journal of Anaesthesia.

Dr. Chauhan elected as Associate Vice President of IACTA

Dr. Poonam elected as treasurer of Indian Association of Cardiac Anaesthesiologists at their National Conference organized at Ahmedabad 2008 for a period of three years.

Dr. Minati Choudhary invited member in the review board of International Journal of Medical Monitors and Journal of Clinical Anaesthesia; Member in the Panel of Scientist in the World Scientific forum.

Member of Education Committee of IACTA for the working of fellowship of IACTA (FIACTA) guidelines and Academic work and FIACTA examination.

Member on Editorial Board – Annals of Cardiac Anaesthesia.

PATIENT CARE

- 7 operation theatres work from 8 am to 5 pm from Monday to Friday and till 2 pm on Saturday.
- 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 from 6.30 to 8.30 pm for all the patients planned for operation.
- General anaesthesia/LA/MAC for children undergoing ASD/VSD/PSD closure.
- 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.
- In MRI angio room under general anaesthesia and/or monitored anaesthesia care. All MRI compatible equipment is kept inside.
- Stress management program for patients and their family Medical education in CT5 Ward Meditation Room on Saturday.
- Emergency Services by the residents and faculty for emergency surgery.
- Resuscitative and ventilatory management in CCU, CTVS, ICU A and ICU B and CT 5 recovery room.

Blood Transfusion Services

Chief Medical Officer and In-charge

Rama Bhasin

Chief Medical Officer

Anjali Hazarika

Technical Officers

Kalpana Misra

Gulshan Mehta

P.S. Rajput

Bijay Majhi

G.S. Chauhan

Anita Rani

Suresh Kumar

Avdesh K. Tangri

PATIENT CARE

Blood Units Collected

Replacement donors	:	17258
Voluntary donors in the department	:	124
Voluntary donors through blood mobiles	:	810
Blood received from IRCS	:	79
Blood received from Blood Bank, AIIMS	:	121
Blood received from other hospitals	:	426

Total no. of blood units collected **18818**

Blood Units Issued

Blood Units issued to CTVS/NS	:	21773
Blood Units issued Blood Bank, AIIMS	:	1447
Blood Units issued to Trauma Centre	:	2184
Blood Units issued to IRCS	:	8
Blood Units issued to other hospitals	:	780
Discarded units HIV/HB2Ag/HCV/VDRL	:	643

Total no. of blood units issued **26835**

Lab. Procedures

Total no. of blood grouping (ABO)	:	75702
Number of Rh grouping	:	56854
Total no. of cross matching done	:	78278

Infection Markers

HIV Testing	:	22977
HBV Testing	:	23283
HCV Testing	:	23557
VDRL Testing	:	20841
CMV Testing	:	16

HBV confirmatory Testing	:	616
Total		91290

GRAND TOTAL 245270

Total No. of Blood Components

Fresh frozen plasma (FFP)	:	15522
Platelet rich plasma (PRP)	:	428
Platelet concentrate	:	14132
Recovered plasma	:	1368
Cryoprecipitate	:	533
Packed red blood cells	:	15991
Total		47974

Special Procedures

Single donor plateletpheresis	:	30
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SIGNIFICANT EVENTS

- I BTS CNC helped to set up JPNATC Blood Storage Centre by
- imparting practical as well as theoretical training for technicians and staff nurses of JPNATC from April 2007 to March 2008.
 - Designing the premises of the department
 - Selection of equipments for the department.
 - Supervising the working of the newly set up blood storage centre.
 - helped in obtaining licence for the storage centre and later for the full fledged blood bank JPNATC
- II Imparted training to technician recruited in ORBO, AIIMS from July, 2007 till date.

Dr. Rama Bhasin was nominated as expert to review standards for accreditation of Blood Banks by NABH(National Accreditation and Board of hospitals); Member of State Blood Transfusion Council for past five years; Resource person during National training programme on blood safety by NACO (National Aids Control Organisation); Member of Doctoral Committee for two PhD students in Department of Biochemistry, AIIMS.

Dr. Anjali Hazarika got elected and continued as Secretary ISBTI, Delhi; organised a day long motivational programme for voluntary blood donors as part of the global celebration of World blood donor's day on 14th June, 2007 at JL Auditorium, AIIMS; Workshop for donor motivators of Delhi on 8th September, 2007 at Ramalingaswamy Board Room, AIIMS; Half day symposium on Safe blood at India Habitat Centre on occasion of National voluntary blood donation day on 1st October, 2007; completed her diploma in hospital administration from Medvarsity Apollo Hospital.

III Following staff attended National training programme on Blood Safety by NACO

- Mr. William Massey : Technician
- Mr. Upender Singh : Technician
- Mrs. Louly Jacob : Staff Nurse

Cardiac Radiology

Professor and Head

Sanjiv Sharma

Associate Professor

Gurpreet Singh Gulati

Assistant Professor

Priya Jagia

EDUCATION

Continuing Medical Education, Conferences and Workshops

Lectures Delivered

Dr. Sanjiv Sharma

1. Guest faculty in the Workshop on Clinical & Biomedical MRI on August 1st to 5th , 2007 in SCTIMST, Trivandrum and delivered talks on following topics:
 - i) Image strategies and algorithm for assessment of peripheral vascular disease
 - ii) Current status of CT and MRI in Congenital heart disease
 - iii) Imaging assessment of cardiomyopathies
2. Faculty member of Dr. Harnam Singh Mid Term CME of ICRI being organized by UP State Branch of IRIA on 4th & 5th August, 2007 and delivered talks on
 - i) Clinical & Catheter Angiography
 - ii) Reporting Standards of Peri.Doppler
 - iii) MR of Congenital Heart Diseases
3. Attended CME organized by Delhi State Branch of the Indian Society of Vascular and Interventional Radiology on “CTA of the Coronaries” on 16th August, 2007 at New Delhi
4. Annual Conference of Indian Radiological & Imaging Association in Bangalore from January 16-20, 2008
5. ‘World Experience of Uterine fibroid Embolization” on 14th October, 2007 at New Delhi on the occasion of Interventional Radiology CME conducted by AOGD, Forum of Gynecologist of Delhi.
6. “CT Angiography, Current applications” on November 17-18,2007 at Meerut, hosted by IMA Meerut
7. Guest faculty in 10th Annual meeting of ISVIR held at Hyderabad, from 1-4, 2007.
8. ‘MRI of Congenital Heart diseases’ in Magnetic Resonance Imaging-2008 organised by Sultan Qaboos University and Hospital Muscat, Oman on February 20-22, 2008 and Visiting Professor to the department of Radiology in this university from February 23-25, 2008.

Dr. Gurpreet Gulati

1. Doppler US evaluation of the lower limb arteries. CME organized by the Punjab and Chandigarh Branch of the Indian Radiological and Imaging Association, 25 March, 2007 at Patiala, Punjab, India.

2. Color Doppler evaluation of Renal Vessels. Dr Harnam Singh Mid-term CME of the Indian College of Radiology and Imaging, 4-5 August 2007 at Agra.
3. Dual Source CT in Clinical Use. 3rd Cardiac CT and MRI Review Course, Organized by the Radiology Education Foundation, 17-19th August 2007 at Worli, Mumbai.
4. Viability Imaging. 3rd Cardiac CT and MRI Review Course, Organized by the Radiology Education Foundation, 17-19th August 2007 at Worli, Mumbai.
5. Cardiac MRI in the Assessment of Cardiomyopathies. 3rd Cardiac CT and MRI Review Course, Organized by the Radiology Education Foundation, 17-19th August 2007 at Worli, Mumbai.
6. Cardiac MRI for Cardiac Tumors. 3rd Cardiac CT and MRI Review Course, Organized by the Radiology Education Foundation, 17-19th August 2007 at Worli, Mumbai.
7. Clinical Applications of Coronary CT. CME organized by the Indian Society of Vascular and Interventional Radiology, 16th August, 2007 at Delhi.
8. Cardiac MRI. CME organized by the Kashmir Branch of the Indian Radiological Imaging Association, 1-3 september 2007 at Srinagar.
9. Peripheral Arterial Doppler. CME organized by the Kashmir Branch of the Indian Radiological Imaging Association, 1-3 september 2007 at Srinagar.
10. Radiology in case of Neonatal Thrombosis. Monthly meeting of the Neonatology Forum of Delhi, 25th October, 2007.
11. Interventions in Hepatic veno-occlusive disease. 61st Annual National conference of the Indian Radiological and Imaging Association on 17-20th January 2008, IRIA held at Bangalore, India.

Dr. Priya Jagia

1. Doppler US evaluation of the lower limb arteries CME organized by the Punjab and Chandigarh Branch of the Indian Radiological and Imaging Association, 25 March, 2007 at Patiala, Punjab, India.
2. Asia Pacific Radiology Technologists meeting held at All India Institute of Medical sciences, Delhi in 1st December 2007.
3. Annual Radiology CME held by Indian Association of Radiology at Safdurjung hospital , Delhi in Feb 2008.
4. Annual Radiology CME held by Haryana branch of Indian Association of Radiology at Rohtak Medical college, Rohtak in 30th March, 2008.

RESEARCH

Funded Projects

Ongoing

1. Induction Of therapeutic angiogenesis In Critical Limb Ischemia by intra-arterial delivery of autologous bone-marrow derived stem cells - with financial grant by the Department of Biotechnology, Ministry of Science and Technology, Government of India.
2. Feasibility, safety and efficacy of cell-based therapy for the treatment of diabetes mellitus by local intra-arterial delivery of autologous bone marrow-derived adult stem cells in the pancreas with financial grant by the Department of Biotechnology, Ministry of Science and Technology, Government of India.
3. MRI for in vivo-tracking of iron oxide labeled mesenchymal stem cells in a rat model of heart failure. Under financial grant by the Department of Biotechnology, Ministry of Science and Technology, Govt of India.

Departmental Projects

Ongoing

1. "Utility of cardiac MRI in RV function evaluation in Indian Population".
2. "Correlation of Clinical Disease Activity with Imaging Modalities in Takayasu Arteritis".

Completed

1. Quantification of volume of pulmonary regurgitation with flow velocity-mapping technique on vec-MRI in patients following total correction for tetralogy of Fallot (TOF)
2. Hepatic venous outflow tract obstruction: magnitude, etiology, clinical presentation and results of angioplasty in North India.
3. Normal coronary artery dimensions in Indians.

PUBLICATIONS

Journals

1. Gulati GS, Jain T, Gulati MS. Interventional Radiology in Hematuria. Journal of International Medical Science Academy 2007; 20(1):49-55.
2. Gulati GS. Isolation fo Radiologists: Who is to blame and what needs to be done. Am J Roentgenol 2007; 188:W572.
3. Gulati GS, Ramamurthy S, Sharma S. Utility of Multislice Computed Tomography in the diagnosis of a right coronary artery fistula to the right atrium. Journal of Postgraduate Medicine 2007Jul-Sep; 53(3):191-2.
4. Bhatt SP, Handa R, Gulati G, S, Sharma S, Pandey RM, Aggarwal P, Ramakrishnan L, Shankar S. Peripheral vascular disease in systemic lupus erythematosus. Lupus 2007; 16:720-23.
5. Math RS, Singh S, Seth S, Shankar B, Bhargava B, Sharma S, Gulati G. Delayed response following trans-catheter coil embolization in HOCM. Indian Heart Journal 2007; 59(4):383-385.
6. Gulati GS. Editorial on "Cardiac Magnetic Resonance-from protons to the pulsating heart!" Indian Journal of Radiology and Imaging 2007;17(2):84-5.
7. Jagia P, Gulati GS, Sharma S. Cardiac Magnetic Resonance in the assessment of cardiomyopathies. Indian Journal of Radiology and Imaging 2007; 17(2):109-19.

Abstracts

8. Sharma S, Jagia P, Gulati GS. Renovascular hypertension caused by renal artery stenosis due to nonspecific arteritis: predictors of restenosis after treatment with balloon angioplasty. Abstract (1309.2) accepted for oral presentation and published in the supplement of the CIRSE 2007 meeting 8-12 September, 2007 at Athens, Greece.
9. Gulati GS, Sharma S, Jagia P, Bhargava P, Chowdhary U, Kothari SS. Volumetric quantification of pulmonary regurgitation with flow velocity-mapping technique on magnetic resonance imaging in patients with total correction for tetralogy of Fallot. Abstract (2002.4) accepted for oral presentation and published in the supplement of the CIRSE 2007 meeting 8-12 September, 2007 at Athens, Greece.
10. Mishra AK, Sharma S, Gulati GS, Sampathkumar AS. Angiographic and per-operative assessment of the coronary artery diameters in Indian patients with coronary artery disease. Abstract (2002.6) accepted for oral presentation and published in the supplement of the CIRSE 2007 meeting 8-12 September, 2007 at Athens, Greece.

11. Sharma S, Kothari SS, Juneja R, Saxena A, Gulati G, Jagia P, Venugopal P. Acute and follow up results of peri-operative transcatheter embolization of systemic-to-pulmonary artery collateral vessels in presence of cyanotic congenital heart diseases. Abstract (2004.1) accepted for oral presentation and published in the supplement of the CIRSE 2007 meeting 8-12 September, 2007 at Athens, Greece.
12. Gulati GS, Gupta A, Mahadasyam SC, Jagia P, Acharya SK, Sharma S. Balloon angioplasty and stenting for Budd Chiari Syndrome: Mid-term results. Presented as an oral paper and abstract published in the souvenir (page 106) of the 10th Annual Meeting of the Indian Society of Vascular and Interventional Radiology, 1-4th November, 2007 at Hyderabad, India.
13. Mahajan R, Sharma S, Gulati GS, Jagia P, Kothari SS, Juneja R, Saxena A. Acute outcomes of transcatheter treatment of aorto-pulmonary collateral arteries in presence of cyanotic congenital heart disease. Presented as an oral paper and abstract published in the souvenir (page 107) of the 10th Annual Meeting of the Indian Society of Vascular and Interventional Radiology, 1-4th November, 2007 at Hyderabad, India.
14. Sheorain V, Sharma S, Gulati GS, Jagia P. Endovenous treatment of lower extremity venous incompetence by using a prosthetic venous valve. Presented as an oral paper and abstract published in the souvenir (page 104) of the 10th Annual Meeting of the Indian Society of Vascular and Interventional Radiology, 1-4th November, 2007 at Hyderabad, India.
15. Jagia P, Gulati GS, Sharma S. Cardiac Magnetic Resonance in the assessment of cardiomyopathies. *Indian Journal of Radiology and Imaging* 2007; 17(2):109-19.
16. Chowdhury UK, Kothari SS, Patel CD, Mishra AK, Jagia P et al. An alternative technique for transfer of anomalous left coronary artery from the pulmonary trunk in children and adults using autogenous aortic and pulmonary arterial flaps. *Cardiol Young*. 2008 Feb 14;:1-12 [Epub ahead of print]
17. Gulati GS, Singh S, Arepalli CD, Sharma S, Kothari SS, Airan B, Jagia P. Superior vena caval obstruction after complete resolution of cardiac tuberculoma. *Clin Radiol*. 2008 May; 63(5):605-9. Epub 2007 Nov 19
18. Singh CK, Sharma S, Kothari SS, Jagia P. Case report: Multi-detector CT of left pulmonary artery sling. *Indian J Radiol Imaging* [serial online] 2008 [cited 2008 Apr 8]; 18:124-5.
19. Sharma S, Jagia P, Gulati GS. Renovascular hypertension caused by renal artery stenosis due to nonspecific arteritis: predictors of restenosis after treatment with balloon angioplasty. Abstract (1309.2) accepted for oral presentation and published in the supplement of the CIRSE 2007 meeting 8-12 September, 2007 at Athens, Greece.
20. Gulati GS, Sharma S, Jagia P, Bhargava P, Chowdhary U, Kothari SS. Volumetric quantification of pulmonary regurgitation with flow velocity-mapping technique on magnetic resonance imaging in patients with total correction for tetralogy of Fallot. Abstract (2002.4) accepted for oral presentation and published in the supplement of the CIRSE 2007 meeting 8-12 September, 2007 at Athens, Greece.
21. Sharma S, Kothari SS, Juneja R, Saxena A, Gulati G, Jagia P, Venugopal P. Acute and follow up results of peri-operative transcatheter embolization of systemic-to-pulmonary artery collateral vessels in presence of cyanotic congenital heart diseases. Abstract (2004.1) accepted for oral presentation and published in the supplement of the CIRSE 2007 meeting 8-12 September, 2007 at Athens, Greece.

22. Gulati GS, Gupta A, Mahadasyam SC, Jagia P, Acharya SK, Sharma S. Balloon angioplasty and stenting for Budd Chiari Syndrome: Mid-term results. Presented as an oral paper and abstract published in the souvenir (page 106) of the 10th Annual Meeting of the Indian Society of Vascular and Interventional Radiology, 1-4th November, 2007 at Hyderabad, India.
23. Mahajan R, Sharma S, Gulati GS, Jagia P, Kothari SS, Juneja R, Saxena A. Acute outcomes of transcatheter treatment of aorto-pulmonary collateral arteries in presence of cyanotic congenital heart disease. Presented as an oral paper and abstract published in the souvenir (page 107) of the 10th Annual Meeting of the Indian Society of Vascular and Interventional Radiology, 1-4th November, 2007 at Hyderabad, India.
24. Sheorain V, Sharma S, Gulati GS, Jagia P. Endovenous treatment of lower extremity venous incompetence by using a prosthetic venous valve. Presented as an oral paper and abstract published in the souvenir (page 104) of the 10th Annual Meeting of the Indian Society of Vascular and Interventional Radiology, 1-4th November, 2007 at Hyderabad, India.

Chapter in Books

Sharma S, Jagia P. Endovascular Management Of Non-Specific Aorto-Arteritis. In *Peripheral vascular interventions*. Kandarpa K. (eds) & published by Wolters Kluwer (*Lippincott Williams and Wilkins*)

AWARDS AND HONOURS

Prof Sanjiv Sharma is an Expert for assisting the Commission in the conduct of interview of candidates for the post of Lecturer Radio Diagnosis in Health & Medical Education at J&K PSC Polo Ground, Srinagar on 23rd July, 2007; External Expert in the technical evaluation committee for purchase of Multi Detector CT Scanner on 13th October, 2007 at Hyderabad; Expert Member on Selection Committee meeting on 6th November, 2007 for Senior Resident in Radiology in UCMS, GTB Hospital, Delhi; External Examiner for MD (Radiodiagnosis) practical examination on 5th & 6th December, 2007 in PGI, Chandigarh; Appointed member of technical scrutiny committee for the purchase of 64 slice CT scan machine for IGMC, Shimla and the meeting on 16th February, 2008 at Shimla.

Dr Gurpreet Singh Gulati was awarded the Dr Ashok Mukherjee Memorial Award and Gold Medal for 2007 of the Indian Radiological and Imaging Association for the best research paper “Cardiac MRI for evaluation of ventricular function in patients of non-ischemic dilated cardiomyopathy undergoing stem cell therapy”. Presented at the 61st Annual Conference of the IRIA, 17-20th January 2008, at Bangalore, India; Advanced Cardiac Life Support (ACLS) Provider and Healthcare Provider (Basic Life Support) certified by the American Heart Association (2007-2009); Member – Editorial Board for Cardiovascular Imaging Section of Indian Journal of Radiology and Imaging; Guest Editor for a symposium on “Cardiac MRI” for the May 2007 issue of the Indian Journal of Radiology and Imaging; Selected as member of the Working Group on Cardiovascular Magnetic Resonance of the European Society of Cardiology; Name included in the Marquis Who’s Who Collection (24th Edition) for the year 2007; Reviewer for Heart, Indian Heart Journal, Indian Journal of Thoracic and Cardiovascular Surgery and the Indian Journal of Radiology and Imaging; Member, European Society of Cardiology (2007); Life Membership to the Indian College of Radiology and Imaging 2007. (membership no. R3/G10-A); Annual membership of Society of Cardiovascular Magnetic Resonance 2007-2008.

Dr Priya Jagia was included in the Marquis Who's Who Collection (24th Edition) for the year 2007; Reviewer for the Indian Journal of Radiology and Imaging.

PATIENT CARE

Total Number of cine-angiography done for the period from 1.4.2007 to 31.3.2008:

Cine Fluoroscopy	:	8640
Vascular catheter procedures	:	7338
Ultrasound	:	2146
CT	:	1113
MRI	:	328
OPD Data: Routine X-ray for CTVS and Cardiology	:	66281

Cardiac Nuclear Medicine

Assistant Professor
Chetan D. Patel

EDUCATION

No. of Postgraduate students: 3 (training of post graduates on rotational basis in Nuclear Cardiology)	
No. of Thesis/research papers completed:	1
No. of lectures for postgraduate students:	10
Moderator in Journal Club/Seminars:	10
No. of lectures for undergraduate/paramedical:	0
No. of new thesis started:	2

RESEARCH

Funded Project:

Role of radionuclide techniques in diagnosis of early dementia. (ONGOING Duration 4 years
International Atomic Energy Agency (Funds: Euro 1700 for 2007–8)

Collaborative projects

Ongoing

1. Role of F-18 FDG in acute Rheumatic heart disease. (Nuclear Medicine & Cardiology)
2. Correlation between cardiovascular autonomic function and indicators of myocardial ischemia in patients presenting anginal symptoms. (Physiology, Nuclear Medicine & Cardiology).
3. F-18 FDG in detecting ischemia at rest in patients with known coronary artery disease. (Nuclear Medicine & Cardiology)
4. Prevalence of symptomatic and asymptomatic coronary artery disease in stroke patients. (Neurology, Cardiology & Nuclear Medicine)
5. Role of F-18 FDG PET in cardiomyopathies. (Cardiology & Nuclear Medicine).
6. Correlation between cardiovascular autonomic function and indicators of Myocardial ischemia in patients presenting anginal symptoms. (Physiology)

7. Role of PET-CT in initial staging and post therapy assessment in patients of carcinoma ovary. (Nuclear Medicine)
8. Role of F-18 FDG PET in cardiomyopathies. (Cardiology & Nuclear Medicine).

Completed

1. Role of F-18 FDG in acute Rheumatic heart disease. Co-guide in DM research paper of Dr Nagesh (Cardiology & Nuclear Medicine)

PUBLICATIONS

Journals

1. Murali R Nadig, Chetan D Patel, Arun Malhotra. Comparison between Dobutamine stress and combination of hand-grip exercise with Dobutamine stress in Myocardial Perfusion SPECT. Nucl Med Commun. 2007; 28(4): 301–4
2. Chetan D. Patel, Madhavi Chawla, Murali Nadig, A K Mahapatra, Chandrasekhar Bal. Direct radionuclide cystography and renal scintigraphy in evaluation of urinary tract in patients of meningomyelocele. Hell J Nucl Med. 2007; 10(2): 102–4
3. C.D.Patel,G.R.M. Reddy, Summary on the diagnostic value of FDG PET-CT for primary ovarian cancer-A prospective study, Indian Journal of medical and Paediatric oncology. 2007, 28 (2), 37–39.
4. Chetan Patel, Rakesh Kumar. Positron emission tomography and positron emission tomography-computerized tomography in pediatric patients. J Indian Assoc Pediatr Surg,2007,12:121–125
5. Chowdhury UK, Kothari SS, Patel CD, Mishra AK, Jagia P, Subramaniam GK, Pradeep KK, Govindappa RM. An alternative technique for transfer of anomalous left coronary artery from the pulmonary trunk in children and adults using autogenous aortic and pulmonary arterial flaps. Cardiol Young. 14 February 2008; 1–12.

Abstracts

1. Patel CD, Tripathi M, Garg A, and Watanabe N. Role of 99mTc-ECD-Brain SPECT in evaluation of patients with dementia and mild cognitive impairment: Baseline and Follow-up study. Presented at Joint Molecular imaging Conference, USA, September 2007
2. Nadig MR, Chawla M, Kumar R, Patel CD, Balakrishnan V, Bal C and Malhotra A.. Role of F18-FDG PET-CT in the evaluation of patients with suspected recurrence of ovarian carcinoma on the basis of rising serum tumor markers. J Nucl Med. May 2007; 48 (6): 87P (294).
3. Nadig MR, Kumar R, Patel CD, Shamim SA, Bal C, Malhotra A. Detection of contralateral breast cancer in patients with known breast cancer undergoing PET-CT scan for restaging. J Nuclear Med., May 2007; 48 (6): 367P (1572)
4. Tanada S, Watanabe N, Sanchez C, Kraft O, Gyorke T and Patel CD. Statistical analysis of multi-center study for the Coordinated Research Project of IAEA: Role of radionuclide techniques in the diagnosis of early dementia. J Nuclear Med., May 2007; 48 (6): 255P (1170)
5. Khadka R, Narang R, Patel CD, Jaryal A, Deepak KK. Effects of presence of angina like symptoms on heart rate variability in patients with diabetes mellitus. Clinical Autonomic Research, October 2007; 17(5): 314. Presented at 2nd Joint meeting of the European Federation of Autonomic Societies & the American Autonomic Society, 2007.
6. Jaryal AK, Khadka R, Narang R, Patel CD, Deepak KK. Thallium-201 positive patients with coronary artery disease show high rate variability. Heart 2007; (93): 3.

7. Chawla M, Nadig M, Shamim SA, Patel CD, Kumar R, Malhotra A. Role of PET-CT in assessment of response to therapy in high grade lymphomas. Presented at Joint Molecular Imaging Conference, USA, September 2007.

PATIENT CARE

The department is equipped with a dual head SPECT Gamma camera catering to patients referred for cardiac studies from CN center 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 center and from IRCH for cardiac evaluation in patients receiving chemotherapy.

Total Number of patients investigated in Nuclear Cardiology from 1/4/07 to 31/3/2008

Stress Thallium:	957
Stress Tetro/MIBI:	373
MUGA study:	1145
Misc:	30
Total number of studies performed:	2505

Stem Cell Facility

Assistant Professor
Sujata Mohanty

ACHIEVEMENTS

- At present, the Facility is collaborating with 10 departments of AIIMS and 3 institutions outside AIIMS viz IIT Delhi and National Institute of Immunology Delhi (NII) and Reliance Life Sciences Pvt Ltd.
- 3 students are enrolled in the PhD programme in the Stem Cell Facility. Apart from this, 6 PhD students from various departments of AIIMS are also doing research in Stem Cells.
- Under the 'Short term Training' programme of the AIIMS, 12 graduate and post-graduate students have been trained at the Facility in this field.
- At present 7 projects are ongoing at the Facility, which have been approved by various funding agencies such as DBT, ICMR, DST. Three more projects have been initiated in the current financial year.
- Clinical trials using autologous hematopoietic stem cells are ongoing to evaluate the safety & feasibility of stem cell in various disorders such as myocardial infarct, diabetes, muscular dystrophy, peripheral vascular disease, cardiomyopathies, retinitis pigmentosa, macular degeneration cerebral palsy. 132 patients have received Stem cell for various disorders in this current financial year 2007-08.
- Cryo-preservation of stem cells: Stem Cell Facility has also started in-house Cord Blood Banking for Cryo-preservation of cord blood stem cells.
- Limbal stem cell culture for corneal epithelial transplantation has been extended to 16 patients.

RESEARCH

Ongoing Projects

1. Induction of therapeutic angiogenesis in critical limb ischemia by intra-arterial delivery of autologous bone marrow derived stem cells
2. Intravenous autologous bone marrow stromal or mononuclear cells for patients with acute ischemic stroke: A multi-institutional project
3. Use of autologous bone marrow stem cells for myocardium regeneration
4. Culture of limbal stem cell for ocular surface reconstruction in stem cell deficiency disorder.
5. To study the role of bone marrow derived pluripotent cells in peripheral nerve repair in adult rats
6. Effect of bone marrow stromal cells transplantation and magnetic stimulation in the sensory motor functional recovery of spinalised rats
7. Intra-arterial Autologous bone marrow MNC infusion in patients with non progressive (static) encephalopathy with special reference to cerebral palsy

Fresh Projects

1. Isolation and expansion of Mesenchymal stem cells (MSC) from human bone marrow/umbilical cord and evaluation of its cardiomyogenic and neurogenic differentiation potential
2. Expression status of HLA molecules on undifferentiated and differentiated Mesenchymal stem cells: An *in vivo* study
3. Mobilization of stem cells using GCSF for acute ischemic stroke: A randomized trial
4. To evaluate the potential role of biopolymer to support the culture of corneal epithelial cells
5. Molecular characterization of fanconi anemia: a pilot study
6. Isolation, characterization and evaluation of differentiation potential of human hair follicle stem cells
7. Analysis of TGF-beta pathway component mutation and expression in glioma
8. Establishment of Center for Excellence in the field of stem cells

PUBLICATIONS

1. Articular cartilage defect: Cell based therapy. *Orthopaedics Today*. 2007, Vol. IX, No 4, 184-89.
2. Application of Stem cells technology for coronary artery disease at the All India Institute of Medical Sciences, New Delhi, India. *Heart Surg Forum* 10 (2), 1-4, 2007
3. Stem Cells as a Therapeutic Modality in Pediatric Malformations. *Transplantation Proceedings*, 39, 700–702 (2007)
4. Are therapeutic stem cells justified in bilateral multicystic kidney disease? A review of literature with insights into the embryology. *Pediatr Surg Int* (2007) 23:801–806

10.2 Centre for Behavioural Sciences (National Drug Dependence Treatment Centre)

Professor and Chief

Rajat Ray

B.M. Tripathi

Professor

Raka Jain

Rakesh Lal

Additional Professor

Meera Vaswani

Associate Professor

Anju Dhawan

N. Kaw

Assistant Professor

Sonali Jhanjee

Atul Ambekar

Scientist

H.K. Sharma

Anita Chopra

Hem Sethi

Clinical Psychologist Medical Social Service Officer

Brahm Prakash

Deepak Yadav

Seema Yadav

Ratnesh Kumar

Biochemist and supporting Laboratory personnel Finance and Accounts Officer

S.P. Mahla (Additional Charge)

Assistant Administrative Officer

Roshan Lal (till February 2008)

Assistant Store Officer

Kishan Chand

Medical Record Officer

N. Bisht

Pharmacist

Parveen Kumar

Pharmacist

Ruby Mishra

Anita Gulati

Secretarial Staff

Mahinder Pal

Meera Kaul

Suman Bhatia

EDUCATION

Undergraduates

During their posting in the department of Psychiatry, they are posted for a day at the Centre.

Postgraduates

Residents doing MD (Psychiatry) are posted for 6 months during their entire course duration.

Combined teaching activity of the National Drug Dependence Treatment Centre (NDDTC) and the department of Psychiatry

Journal discussion: Weekly

Seminar: Weekly

Case Conference: Weekly

Faculty/Staff presentation: Weekly

Combined Clinical Round & Combined Grand Round: two in every semester

Specific teaching activity at NDDTC

Seminars: Weekly

Specific teaching activity of the department of Psychiatry

Psychotherapy supervision for M.D. (Psychiatry) and Ph.D. (Clinical Psychology) students

The department has introduced supervised Consultation-Liaison training for junior residents

Short and Long Term Training

Sensitization, training of local doctors and initiation of treatment for substance use disorder. Anantnag, Jammu and Kashmir, 21-22 April 2007.

Training Programme on “Oral Substitution with Buprenorphine.” Sponsored by United Nations Office on Drugs and Crime, Regional Office for South Asia. New Delhi, 9-11 July 2007.

Seminar on “Substitution Treatment” for delegates from Bangladesh attending study tour on “Oral Substitution Treatment.” Sponsored by United Nations Office on Drugs and Crime, Regional Office for South Asia. NDDTC, AIIMS, New Delhi, 21-22 September 2007.

Training of students of Social Work. NDDTC, AIIMS, New Delhi, 22-30 September.

In-house training for nurses in” Motivation Enhancement.” NDDTC, AIIMS, New Delhi, 11-12 October, 2007.

One-day training workshop for doctors from the National Institute of Health and Family Welfare. NDDTC, AIIMS, New Delhi, 2 November 2007.

Training of medical doctors from Central Reserve Police force (CRPF) on “Substance Use Disorder.” NDDTC, AIIMS, New Delhi, 12-17 November.

One-day training workshop on “Development of Policy on Drug and Alcohol Abuse Treatment.” NDDTC, AIIMS, New Delhi, 22 November 2007.

Training course for psychiatrists nominated by the Punjab Government. NDDTC, AIIMS, New Delhi, 3-8 December, 2007.

Continuing Medical Education

Conferences, Workshops, Seminars, Symposium organized by the Centre

National Workshop on “Development of Policy on Drug and Alcohol Abuse Treatment.” Sponsored by WHO (India Office) and Ministry of Health and Family Welfare, Government of India. NDDTC, AIIMS, New Delhi, 22nd November 2007.

Symposium on “Community Treatment for Substance Use Disorders” (on the occasion of the Annual Day of the NDDTC). NDDTC AIIMS, New Delhi, 12 April 2007.

Lectures delivered

Dr. R. Ray

- “Concept, Effectiveness & Need for Agonist Maintenance as a Treatment for Opiate Dependence.” Training programme on Oral Substitution – Buprenorphine. United Nations Office on Drugs and Crime (UNODC), Regional Office for South Asia (ROSA), New Delhi, 6 July 2007.
- “Current Drug Abuse Scenario.” The National Institute of Criminology and Forensic Sciences, Delhi, 12 July 2007.

Dr. R. Ray, Dr. R Lal, Dr. A. Ambekar and Mr. H.K. Sharma acted as resource persons for the training courses organized for doctors in “Substance Abuse Management.” NDDTC, Mandsaur, 10-15 March 2008.

Dr. B.M. Tripathi acted as a resource person for various training programmes at NDDTC, AIIMS, New Delhi.

Dr. Anju Dhawan

- “Community Based Treatment - Trilokpuri Experience” (Dhawan A, Sethi H, Yadav D, Yadav S). Symposium on Community Treatment for Substance Use Disorders, NDDTC, AIIMS, New Delhi, 12 April 2007.
- “Oral Substitution with Buprenorphine” (Dhawan A, Chopra A, Jhanjee S, Yadav D, Jain R). Inter-country Consultation on Preventing HIV among Injection Drug Users – From Evidence to Action, World Bank, 10-13 April 2007.
- “Oral Substitution with Buprenorphine” (Dhawan A, Chopra A, Jhanjee S, Yadav D, Jain R). Steering Committee Meeting, National Institute of Social Defence (NISD), Ministry of Social Justice and Empowerment (MSJE), 9 May 2007.
- “Oral Substitution Treatment.” National Steering Committee Meeting, Dacca (Bangladesh), 14th August 2007.
- “Overview of Drug Addiction.” Dayal Singh College, New Delhi, 1 November 2008.
- “Effectiveness of Yoga in Treatment of Opiate Dependence.” Department of Ayurveda, Yoga & Naturopathy, Unani, Siddha and Homoeopathy (AYUSH), Ministry of Health & Family Welfare (MOHFW), New Delhi, 15 December 2008.

- “Indian Experience with Buprenorphine Substitution.” National AIDS Control Organization (NACO), New Delhi, January 2008 and February 2008.

Dr. S. Jhanjee

- “Tobacco Use in Drug Dependent Patients” (Jhanjee S, Balhara YP, Sethi H). International Symposium on Forensic Sciences, Amity International, New Delhi, 1-4 August 2007.

National and International Conferences

National Workshops/ Conferences/Symposium/Seminars/Training Courses

Dr. Anju Dhawan was a resource person for the conference on “Response Beyond Borders - The First Asian Consultation on the Prevention of HIV Related to Drug Use.” Response beyond Borders, Goa, 29 January 2008.

Dr. Atul Ambekar

- “Methodology for conducting Size Estimation using RDS Training Programme for NGOs” and “Size Estimation of Injecting Drug Use at Punjab and Haryana.” Society for Promotion of Youth and Masses (SPYM), Regional Resource & Training Centre (RRTC) - North Zone, MSJE, 6-8 April, 2007.
- “National Workshop on Substance Use and Burden among Women.” NISD, MSJE, 25 June 2007.
- “Drug Abuse among Youth.” National Sensitization Workshop for Police Officers and Prison Officials, National Institute of Criminology and Forensic Sciences & NISD, MSJE, New Delhi, 14 July 2007.
- “Oral Substitution Treatment Orientation Meeting for Doctors.” SPYM, RRTC - North Zone & MSJE, 30 October 2007.
- “Stages of Addiction Management of Substance Abuse Disorder.” Training Course on Drug Abuse Prevention, SPYM, RRTC – North Zone & NISD, MSJE, 14 December 2007.
- “Factors leading to Relapse and Techniques of Relapse Prevention.” Training Course on Relapse Prevention, SPYM, RRTC - North Zone & MSJE, 16 January 2008.
- “Drug, HIV and Harm Reduction.” Sensitization Workshop for District Commissioners and Chief Medical Officers, Government of Punjab & Punjab State AIDS Control Society, 20 February 2008.
- “Diagnosis and Management of Amphetamine Type Stimulants (ATS) Dependence.” Training Course on ATS and Related Issues, SPYM, RRTC - North Zone & MSJE, 27 February 2008.
- “Training of Medical Doctors on Substance Use and HIV.” Government of Madhya Pradesh, Bhopal, 9-12 March 2008.

Dr. Yatan Balhara

- “Relation of Opioid Use and the Use of Tobacco Products” (Balhara YP, Jhanjee S, Majumdar P). 60th Annual National Conference of Indian Psychiatric Society (ANCIPS), Kolkata, 3-6 January 2008.

- “Factors associated with Initiation, Maintenance and Decision to quit in Tobacco” (Balhara YPS, Jhanjee S, Verma R). 60th Annual National Conference of Indian Psychiatric Society (ANCIPS), Kolkata, 3-6 January 2008.

Ms. A. Chopra and Ms. S. Sethi were resource persons for a workshop on “Qualitative Research Methodology and its Application in Health Research.” Indian Council for Medical research (ICMR), Department of Anthropology, Delhi University, 26-29 February 2008.

International Conferences

Dr. Rajat Ray

- Resource person for the “Symposium on Reducing Harm due to Alcohol.” World Health organization, South East Asia Regional Office (WHO-SEARO), Bali (Indonesia), 4-6 December 2007.
- “Regional Meeting on Drug Demand Reduction.” UNODC, ROSA, Colombo (Sri Lanka), 15-16 November 2007.
- “Symposium on Mental Health and Substance Use Disorder.” WHO-SEARO, Jakarta (Indonesia), 14-15 December 2007.

Dr. Raka Jain

- “Patterns of Drug Use: Role of Urine Testing” (Jain R, Sethi H). International Symposium on Forensic Science, Amity Institute of Advanced Forensic Science Research and Training, NOIDA, 1-4 August 2007.
- “Concordance between Urinary cotinine levels and self-reported tobacco use among drug dependents: A Pilot study” (Jain R, Balhara YPS, Jhanjee S, Sethi H). 5th World Assembly on Tobacco Counters Health, New Delhi, 2-5 Decembr 2007.
- “Comparison of Self-Report of Tobacco Use and Urinary Cotinine Levels among Drug Dependents: A Pilot Study” (Jain R, Balhara YPS, Jhanjee S, Sethi H). 14th Annual Meeting of Society for Research on Nicotine and Tobacco, Portland (Oregon, USA), 27 Feb - 1 March, 2008.

Dr. Rakesh Lal

- “Management of Substance Abuse in a Community Setting in Delhi – Economic Dimensions.” Annual Meeting of International Society of Addiction Medicine (ISAM), Cairo (Egypt), 22-25 Oct 2007.

Dr. Anju Dhawan

- “Buprenorphine Maintenance among Opiate Users having High Risk Behaviors: a 36-week outcome” (Dhawan A, Chopra A, Jain R). 8th International Congress on AIDS in Asia and the Pacific, Colombo (Sri Lanka), 20-22 August 2007.
- “Scaling up of Oral Substitution with Buprenorphine in India” (Dhawan A, Chopra A). Workshop on Practical Responses and Approaches to Drug Addiction in Asia, Siem Reap (Cambodia), 13-15 September 2007.

Dr. Sonali Jhanjee

- “Tobacco Use in Drug Dependent Patients” (Jhanjee S, Balhara YPS, Sethi H). International Symposium on Forensic Science, Amity Institute of Advanced Forensic Science Research & Training (AIAFRST), NOIDA, 1-4 August 2007.
- “Tobacco use severity among drug dependent patients in treatment setting” (Jhanjee S, Sethi H). Annual Meeting of the International Society of Addiction Medicine (ISAM), Cairo (Egypt) 22-25 October 2007).
- “Tobacco Use in Drug Dependent Patients - Findings from a Tobacco Cessation Clinic” (Jhanjee S, Balhara YPS, Sethi H). 14th Annual Meeting of Society for Research on Nicotine and Tobacco, Portland (Oregon, USA), 27 February - 1 March 2008.

Dr. Atul Ambekar

- Resource person in the International Congress on AIDS in Asia and Pacific. Joint United Nations Programme on HIV/AIDS (UNAIDS) - AIDS Strategy & Action Plan (ASAP) and Government of Sri Lanka Colombo (Sri Lanka), 9-23 August 2007.
- Resource person for “International Capacity Building Workshop for Substance Abuse.” World Health Organisation, Geneva and Government of Valencia, Spain, 19-23 November 2007.

Ms. Anita Chopra

- “An Association between Type of Beverage and Risk Drinking in Indian Context” (Mohan D, Chopra A, Dhawan A, Sethi H). 33rd Annual Alcohol Epidemiology Symposium of the Kettil Bruun Society for Social and Epidemiological Research on Alcohol, Budapest, 28 May - 1 June 2007.
- “Smoking patterns of household members with children in Jodhpur district, Rajasthan (India)” (Chopra A, Dhawan A, Sethi H Mohan D). World Assembly on Tobacco Concerns Health - 2007, New Delhi, 3-7 December 2007.

RESEARCH

Funded Projects

Ongoing

1. Post Marketing Surveillance of Addnok-N (Combination of Buprenorphine and Naloxone) (Dr. Rajat Ray, Dr. Meera Vaswani). Funded by Rusan Pharma, Funds: Rs. 10 lakhs, 2007.
2. Workplace Intervention for Management of Alcohol Abuse (Dr. Rakesh Lal, Dr. Atul Ambekar, Mr. H. K. Sharma, Mr. Deepak Yadav, Ms. Hem Sethi). Funded by World health Organization (India), Funds: Rs. 5 lakhs; 2008-2009.
3. Database on Drug Abuse and HIV/AIDS (Dr. Anju Dhawan). Funded by UNODC, ROSA, Funds: Rs.10 lakhs; 2004-2009.
4. Oral Substitution Treatment with Buprenorphine (Dr. Anju Dhawan, Dr. Raka Jain, MS. Anita Chopra, Dr. Sonali Jhanjee). Funded by UNODC, ROSA, Funds: Rs. 13 lakhs; November 2006 – September 2008.

5. Size Estimation of Injecting Drug Use in Punjab and Haryana (Dr. Atul Ambekar, Dr. B. M. Tripathi). Funded by UNAIDS, Funds: Approx. 2 lakhs for 2007-2008.

Completed

1. Size Estimation of Injection Drug Use at 300 Sites in India (Dr. B. M. Tripathi, Dr. Atul Ambekar). Funded by SPYM, RRTC- North Zone & MSJE.
2. Knowledge Attitude and Practices of Drug Users at 300 Sites in India (Dr. B. M. Tripathi, Dr. Atul Ambekar). Funded by SPYM & Department for International Development, 2006-2007.
3. Size Estimation of Injecting Drug Use in Punjab and Haryana (Dr. B. M. Tripathi, Dr. Atul Ambekar). Funded by UNAIDS & SPYM, 2007.

Departmental Projects

Ongoing

1. Effect of Nitric Oxide Synthase Inhibitor 7-NI on Sensitization to the Operant Decrement Produced by Naloxone in Morphine Treated Rats (Dr. Raka Jain).
2. Evaluation of Illicit Drug Use in the Opioid Dependent Subjects Maintained on Sublingual Buprenorphine: Role of Urine Screening (Dr. Raka Jain, Dr. Y. P. S. Balhara).
3. Molecular Genetics of Alcohol Dependence: Contribution of Polymorphisms in Dopaminergic and Serotonergic Pathway Genes (Dr. Meera Vaswani).

Completed

1. Validity of self-reported tobacco use among opioid dependent subjects (Dr. Raka Jain, Dr. Sonali Jhanjee, Dr. Y. P. S. Balhara, Ms. Hem Sethi).
2. Evaluation of Abuse of Prescription Drugs among Opioid Dependent Patients based on Urinalysis (Dr. Raka Jain, Ms. Hem Sethi).
3. Studying severity and treatment outcome of tobacco use among drug dependent patients in treatment setting (Dr. Sonali Jhanjee, Y. P. S. Balhara, Ms. Hem Sethi).

Collaborative Projects

Ongoing

1. Genetic basis of Alcohol induced Pancreatic Disorders. With Department of Gastroenterology. Funded by ICMR (Dr. Meera Vaswani).

Publications

1. 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.
2. Jain R, Mukherjee K, Mohan D. Effects of nitric oxide synthase inhibitors in attenuating nicotine withdrawals in rats. *Pharmacol Biochem Behav* 2008; 88:473-80.

3. 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.
4. Jain R. Book Review entitled "WHO Expert Committee on Drug Dependence, Thirty-fourth Report". *Indian J Med Res* 2008; 127:96-7.
5. Lal R. Substance use disorders in women. *Current Med J India* 2007; 13:7-12.
6. Lal R. Nicotine dependence. *Current Med J India* 2008; 14:48-58.
7. Rao R, Vaswani M. Metabolic syndrome in schizophrenia? A study from India. *World J Biol Psychiatry* 2007; 8:140.
8. Sharma HK, Lal R. Treatment retention factors amongst substance users. *Indian J Preventive Soc Med* 2007; 38:75-9.
9. Shyangwa PM, Joshi D, Lal R. Alcohol and other substance use/abuse among junior doctors and medical students in a teaching institute. *J Nepal Med Assoc* 2007; 46:126-9.
10. Singhal A, Tripathi BM, Pal HR, Jena R, Jain R. Subjective effects of additional doses of buprenorphine in patients on buprenorphine maintenance. *Addictive Behav* 2007; 32:320-31.
11. Vaswani M, Kapur S, Kapoor M, Sharad S. Distribution of alleles at the Human ALDH2 and ADH2 loci in alcohol dependent subjects: first Indian study. *Alcohol Clin Exp Res* 2007; 31:72.
12. Vaswani M, Assanangkornchai S, Choi YS, Higuchi S, Robert A. Pattern of alcohol consumption and management systems in diverse countries: role of gender and sociocultural environment. *Aust N Z J Psychiatry* 2007; 41:139-40.

Books Chapters In Books Reports

1. Ambekar A, Kattimani S. Anti craving medications in the treatment of alcoholism. In: Dhawan A, Jhanjee S (Eds): *Manual for Long Term Pharmacotherapy*. New Delhi: NDDTC (AIIMS), 2007.
2. Ambekar A, Ballhara YPS. Harm Reduction. In: Lal R, Gupta S (Eds.): *Substance Use Disorder: A Manual for Nursing Personnel*. New Delhi: NDDTC (AIIMS), WHO (India) & MOHFW, 2007.
3. Ambekar A, Tripathi BM. *Size estimation of Injecting Drug use in Punjab and Haryana*. New Delhi: SPYM & UNAIDS, 2008.
4. Dhawan A, Jhanjee S. *Manual for long term pharmacotherapy*. New Delhi: NDDTC (AIIMS), WHO (India) & MOHFW, 2007.
5. Dhawan A, Chopra A. *Findings of the Project on Oral Substitution with Buprenorphine - Draft Report*. New Delhi: UNODC, ROSA, 2007.
6. Jain R. Role of laboratory services in management of substance use disorder. In: Lal R, Gupta S (Eds.): *Substance Abuse Disorder: Manual for Nurses*. New Delhi: NDDTC (AIIMS), 2007.
7. Lal R, Gupta G. (Eds.). *Substance Use Disorder: A Manual for Nursing Personnel*. New Delhi: NDDTC (AIIMS), WHO (India) & MOHFW, 2007.

8. Ray R, Dhawan A, Chopra A. *Report of WHO Biennium Activities*. New Delhi: NDDTC (AIIMS), 2007-2008.
9. Tripathi BM, Ambekar A. Sexual behaviour and sexually transmitted diseases. In: Sharma VK (Ed.): *Sexually Transmitted Diseases and AIDS*. 2nd edition. New Delhi: Viva Books Pvt Ltd, 2007.
10. Tripathi BM, Kumar A. Follow-up and aftercare issues in persons with substance use disorder. In: Murthy P, Nikketha SBS (Eds.): *Psychosocial intervention for persons with substance abuse: theory and practice*. Bangalore: National Institute of Mental Health and Neuro-Sciences (NIMHANS) Publication No. 64, 2007; pp 50-61.
11. Yadav S, Dhawan A. Planning psychosocial intervention. In: Murthy P, Nikketha SBS (Eds): *Psychosocial Interventions for Persons with Substance Use: Theory and Practice*. Bangalore: NIMHANS Publication No.64 (Developed under WHO-GOI Collaborative Programme), 2007.

PATIENT CARE

General Information

1. Total No. of beds	:	50
2. General Ward beds	:	50
3. Private Ward beds	:	Nil
4. OPD Attendance		
NDDTC, Ghaziabad	:	36513
Trilokpuri Community	:	32871
Sundar Nagri Mobile Clinic	:	3309
5. Admission	:	1134

OPD & Specialty Clinics Attendance

	New Cases	Old Cases	Total
General OPD	3366	33147	36513
<i>Specialty Clinic</i>			
Tobacco Use Cessation Clinic	108	610	718
Adolescent Clinic	16	23	39
Dual Diagnosis Clinic	48	148	196
Total	3538	33928	37466
Trilokpuri Community Clinic	180	32691	32871
Sundar Nagri Mobile Clinic	91	3218	3309

Laboratory Investigations for Patient Care

Total Number of Drugs of Abuse Screened in urine Samples : 19841

Drugs	Numbers
Morphine	: 2450
Codeine	: 2450
Buprenorphine	: 2450
Detropoxyphene	: 2450
Pentazocine	: 62

Naltrexone	:	37
Naloxone	:	72
Pheniramine (Avil)	:	2450
Nitrazepam	:	2450
Diazepam	:	2450
Chlordiazepoxide	:	2450
Canabinoids	:	70
b) Biochemical investigations	:	15000
c) Hematological investigations	:	8000
d) HIV screening	:	500

AWARDS, HONOURS AND SIGNIFICANT EVENTS

The centre coordinated various activities under the WHO Biennium Activities (2007-09) as a part of its commitment to National Drug Abuse Control Programme. These included development of resource materials like the manual on “Pharmacotherapy for Alcohol and Opiate Dependence” and the “Manual for Nurses on Substance Use Disorders,” Training by Trainers Programmes and the institution of the Drug Abuse Monitoring System. Various faculty members of the centre took part in the assessment of functioning of various Government De-addiction Centres including site visits to Mumbai (16-19 August 2007), Guwahati (18-21 February 2008), Mandasaur (10-15 March 2008), and Jorhat and Dibrugarh (23-25 March 2008) by Dr. Rakesh Lal. The centre (Editors: Dr. B. M. Tripathi and Dr. A. Ambekar) published three (half-yearly) newsletters “*Drug Abuse: News and Views*” on “Minimum Standards of Care” (April 2007), “Drug Abuse and Women” (October 2007) and “Harm Reduction: Prevention of HIV among Drug Users” (March 2008).

Dr. Rajat Ray was a resource person for the Expert Group Meeting on Treatment and Rehabilitation of Drug Addicts-TREATNET at Vienna, Austria (13-14 September 2007), the Third Meeting of Technical Guidelines Development Group (TDG) on Pharmacotherapy of Opioid Dependence in Geneva, Switzerland (17-21 September 2007). He co-ordinated the project entitled Evaluation of Buprenorphine Substitution Treatment Sites in India under the aegis of UNODC & NACO (September 2007). He visited China and Thailand as a part of Inter-Ministerial Delegation of the Ministry of Health & Family Welfare (June 2007). He also visited the Central Institute of Psychiatry, Ranchi (April 2007) and the Dr. D.Y. Patil Medical College, Navi Mumbai (June 2007) for inspection. He became a member of the Sub-Committee for Postgraduate Medical Education, Medical Council of India (May 2007) and of the Expert Advisory Panel to Punjab State Planning Board, Government of Punjab (June 2007 activity).

Dr. B. M. Tripathi was appointed as a member of the Technical Resource Group on Injecting Drug Use of the NACO, MOHFW; and the Task Force for Research in Ayurveda and Siddha, Department of AYUSH, MOHFW. He was also appointed as a consultant for the SPYM study on Injection Drug Use Size Estimation at 300 PLI sites (sponsored by Department for International Development, United Kingdom) and for the Size Estimation of Injecting Drug Use in Punjab and Haryana (sponsored by UNAIDS and SPYM).

Dr. Raka Jain chaired a scientific session of the International Symposium on Forensic Science at Amity Institute of Advance Forensic Science Research and Training (1-4 August 2007). She was

invited by the Indian Journal of Medical Research to review the Book entitled “WHO Expert Committee on Drug Dependence, Thirty-fourth Report”. She received the membership of Asia Pacific Society for Alcohol and addiction (APSAAR) and the fellowship of the Indian Association for Social Psychiatry. She peer reviewed articles for Brain Research Bulletin.

Dr. Rakesh Lal attended a meeting on National Policy on Drug Abuse at Central Institute of Psychiatry, Ranchi (28 March 2008). He was the coordinator for the workshop for doctors from The National Institute of Health and Family Welfare (2 November 2007) and for the workshop on Development of Policy on Drug and Alcohol Abuse Treatment (22 November 2007).

Dr. Meera Vaswani was awarded the Distinguished International Scientist Collaborative Award (DISCA) from National Institute of Drug Abuse, National Institute for health, USA. She was invited by the International Society of Biological Research on Alcoholism (ISBRA) to represent India in the formation of Asia Pacific Society of Biological Research on Alcoholism (APSBRA). She was elected as a member of Board of Directors for Asia Pacific Society for Alcohol and Addiction Research (APSAAR). She was elected as a member of the Editorial Board of International Journal of Biosciences & Technology. She was invited by the Japanese Society for Psychiatric Research on Alcoholism to speak in a symposium on “Alcohol Research in Asia” held in Shiga, Japan; and as a speaker in a symposium organized by World Psychiatric Association meeting held in Melbourne (November 2007). She chaired four scientific sessions in the American Psychiatric Association meeting held in San-Diego, USA (May 2007).

Dr. Anju Dhawan became a member of the WHO Expert Advisory Panel on Drug Dependence (Abuse Liability Evaluation). She participated in an Expert Group Meeting on Planning Maintenance Treatment under NACO (January 2008, February 2008). She was involved as an expert in the evaluation of the functioning of Programmes on Oral Substitution with Buprenorphine through site visits made to Mumbai, Pune and Goa, sponsored by UNODC ROSA (1-5 September 2007); and the “Outcome of Drug Dependent Patients following Treatment” for the Parliamentary Committee Report through on-site visits made to de-addiction centres (March 2008). She was the coordinator for WHO biennium Activities in Substance Use Disorder for year 2007-2008; including the “Training by Trainers Programme” held at KEM Hospital, Mumbai (18-23 June 2007). She was the Organizing Secretary for the training programme on “Oral Substitution with Buprenorphine” sponsored by UNODC, ROSA at New Delhi (9-11 July 2007); for the seminar on “Substitution Treatment” for delegates from Bangladesh attending the “Study Tour on Oral Substitution Treatment” sponsored by UNODC, ROSA at the NDDTC, AIIMS (21-22 September 2007); for sensitization and training of local doctors and initiation of treatment for substance use disorder at Anantnag, Jammu and Kashmir (21-22 April 2007); and for the “National Workshop on Development of Policy on Drug and Alcohol Abuse Treatment” sponsored by WHO (India) and MOHFW at NDDTC, AIIMS (22 November 2007). She is a peer reviewer for the National Medical Journal of India. She also provided technical inputs for organizing about 20 free detoxification camps on drug abuse treatment in various cities in northern India in collaboration with NGOs.

Dr. Sonali Jhanjee received the National Institute of Drug Abuse - International Society of Addiction Medicine travel fellowship award for attending the Annual Meeting of the International Society of Addiction Medicine (22-25 October, 2007) in Cairo, Egypt. She was nominated as an expert to a team convened by UNODC, ROSA to evaluate oral substitution (with buprenorphine) sites in India.

Dr. Atul Ambekar provided inputs to the document “Mapping and Size Estimation of IDU in India: Proposed Methodology.” Jointly submitted by NDDTC (AIIMS), the Family Health International (India) & SPYM to NACO (April 2007). He was a resource person for the NACO-UNODC exercise on evaluation of buprenorphine substitution treatment sites in India. He evaluated six sites in Kerala and Tamil Nadu (26-30 August 2007). He was nominated as a member of the Reference Group to United Nations on HIV and Injecting Drug Use by the University of New South Wales, Australia. He became a member of the Asia Pacific Society of Alcohol and Addiction Research (APSSAR) and a fellow of the Indian Association for Social Psychiatry.

VISITING SCIENTISTS

Dr. Juana Tomas Rossello, Expert from Global Challenge Section, UNODC (Vienna) visited NDDTC to explore the possibility of collaborative projects (1 May 2007).

Dr. Robert Newman lectured on planning Maintenance Treatment (8 January 2008)

Dr. Nick Croft lectured on planning Maintenance Treatment (February 2008)

Dr. Syed F. Ali, Senior Biomedical Research Scientist & Head, Neurochemistry Laboratory, Division of Neurotoxicology, HFT-132, National Center for Toxicological Research/ FDA 3900 NCTR Road Jefferson AR 72079-9502, USA delivered a lecture (11 February 2008).

10.3 Centre for Dental Education & Research

Chief

Naseem Shah

Professor

O.P. Kharbanda

Additional Professor

Ritu Duggal

Associate Professors

Ajoy Roychoudhury

Veena Jain

Assistant Professors

Ongkila Bhutia

Vijay Prakash Mathur

Ajay Logani

EDUCATION

Undergraduate

The Centre conducted the teaching programme of MBBS undergraduate students during their clinical posting in VIIth Semester.

Postgraduate

At present the centre is conducting Postgraduate programmes in Orthodontics, Prosthodontics, Conservative Dentistry & Endodontics and Oral and Maxillofacial Surgery.

Short Term Training

Nine undergraduate students from India, one sponsored candidate from Nepal & 3 sponsored candidates from England have undergone short term training, varying from 3 to 6 months in Dental Surgery and Oral Health Education Programme.

Continuing Medical Education

Conferences, seminars, workshops

- The Centre organized Expert Group Meeting on “Integration of Oral health in National Rural Health Mission” on 28-29 March, 2008, supported by Ministry of H & FW, Govt. of India.
- Co-organized Hands-on course on Cast Partial Denture organized by ITS Centre for Dental Studies and Research under the aegis of Indian Prosthodontics Society from 10-11 October, 2007.
- Conducted a CME on “Full Mouth Rehabilitation” during 35th Indian Prosthodontic Society Conference from 8–11 September, 2007 at New Delhi.
- Co-organized a workshop on Continuing Dental Education: Roadmap to Accreditation at Maulana Azad Institute of Dental Sciences, New Delhi on 11 September, 2007.
- Conducted a CME on “Implant supported Over-Denture” during 9th National Post Graduate Convention of Indian Prosthodontic Society held during 21–24 June, 2007.
- Faculty for Residents’ Orientation Programme, AIIMS, January 2008.

Lectures delivered

Professor Naseem Shah

- “Efficacy of revascularization to induce apexification / apexogenesis in infected, non vital immature teeth – A pilot clinical study” presented at the 7th World Endodontic Congress, Vancouver, Canada on 25-27 August, 2007
- “Oral Health Surveillance” at the SEANET-NED meeting on “Scaling up prevention and control of non-communicable diseases” held at Phuket, Thailand from 22-26 October, 2007
- “Oral Health Promotion and Disease Prevention” at the International Symposium on “Research Priorities in Dental Science and Technology in Asia and Africa” held on 1-3 December, 2007 at Hyderabad.

Prof. O.P. Kharbanda

- “Non extraction treatment with intraoral maxillary distalization” at 21st Australian Orthodontic Society Conference, Brisbane, Australia 1–5 March, 2008 and
- Series of lectures taken over 2 days on “Management of cleft lip and palate” as a visiting professor at Department of Orthodontics, Faculty of Dentistry, University of Sydney, Australia. 1–5 March, 2008
- “Orthodontic treatment challenges and possible solutions for developing countries in the management of Cleft lip and palate: AIIMS experience” at 7th Asian Pacific Cleft Palate Congress at Goa, 2-5 September, 2007.
- Early interception of Class II Malocclusion at the 4th Postgraduate Convention of Indian Society of Pedodontics and Preventive Dentistry from 9-10 June, 2007 at PGIMER, Chandigarh.
- “Orthodontic aspects of secondary alveolar bone graft in CLP patients” at the 12th Indian Orthodontic Society and 1st SAARC Post Graduate Convention, Pune, 2-4 November, 2007.
- “Intraoral maxillary molar distalization; what is the ultimate outcome? and CME on Intraoral molar distraction” at the 42nd Indian Orthodontic Society Conference at Nagpur, 4-6 January, 2008.
- “Purpose of Inspection and Experience and difficulties during Inspection at a workshop” by Dental Council of India at King George’s Medical College, 2 April, 2007.
- “Continuing Professional Development: UK and Australia Experience” at the workshop on Continuing Dental Education: Roadmap to Accreditation at Maulana Azad Institute of Dental Sciences, New Delhi on 11 September, 2007.

Dr. Ritu Duggal

- “Global Congress on Dental Education III : Staff recruitment, development and global mobility” held at Dublin Castle, Ireland, September 2007 as Expert Member

Dr. Ajoy Roychoudhury

- “Treatment of Mandibular fractures” at Advanced Cranio-maxillofacial trauma Course (ACMF) at Bangalore during International Conference of Oral & Maxillofacial Surgeons.

Dr. Veena Jain

- “Occlusal rehabilitation in patients with defective development of dentition” during 35th Indian Prosthodontic Society Conference from 8–11 September 2007 at New Delhi.

Dr. Vijay Prakash Mathur

- Resource person in Group Discussion in the Group on “Balancing the role of Dental Schools in Teaching, Research and Patient Care, including care for underserved areas” during the Global Congress in Dental Education at Dublin, Ireland, September 2007

- Gave an introductory overview of the Workshop on Tobacco Cessation conducted by Indian Dental Association on 2 June, 2007 at Maulana Azad Institute of Dental Sciences, New Delhi
- “Research Funding Opportunities in Oral Health in India” during ISPPD - PG Convention, Chandigarh, June 2007
- “Lessons learnt from Multi-centric Oral Health Survey” during ISDR International Symposium, Hyderabad, November 2007

Dr. Ajoy Logani

- “Endodontic sealer placement, distribution and apical extrusion using finishing Protaper files” the FDI Annual World Dental Congress. Dubai, UAE, 24-27 October, 2007
- “Treatment options and management of severely infected immature teeth” the FDI Annual World Dental Congress. Dubai, UAE, 24-27 October, 2007
- “Patients’ expectations from their dentist- Change in the winds” at the International symposium on Research priorities in Dental Science & Technology in Asia and Africa held at Hyderabad on 1-3rd December, 2007
- “Domestic violence – can we dentist help?” at the 5th National conference of Indian association of Forensic Odontology on 19 -20 January, 2008

Paper presented by the residents

- **Singhla M** “Labial access opening in mandibular anterior teeth - rule rather than exception!” at the 8th National Postgraduate Students’ Convention of Federation of Operative Dentists of India (FODI) & Indian Endodontic Society (IES) held on 18-20 May, 2007 at Nanital, U.P.
- **Sinha N** “21st century endodontics” at the 8th National Postgraduate Students’ Convention of Federation of Operative Dentists of India (FODI) & Indian Endodontic Society (IES) held on 18-20, May 2007 at Nanital, U.P.
- **Gupta A** “Determination of working length and width - Current concepts” 8th National Postgraduate Students’ Convention of Federation of Operative Dentists of India (FODI) & Indian Endodontic Society (IES) held on 18-20 May, 2007 at Nanital, U.P.
- **Aggarwal V** “An unusual case of maxillary first molar with two palatal canals and importance of spiral CT scan in diagnosis of extra canals” 8th National Postgraduate Students’ Convention of Federation of Operative Dentists of India (FODI) & Indian Endodontic Society (IES) held on 18-20 May, 2007 at Nanital, U.P.
- **Aggarwal V** “Evaluation of role of CT scans and ultra sound in differential diagnosis of periapical lesions” Aggarwal V, Logani A, Shah N. Federation of Dentistry Internationale (FDI)’s Annual World Dental Congress held at Dubai, UAE on 24-27 October, 2007.
- **Singh A** “An in vitro study to evaluate antibacterial and remineralization efficacy of sodium fluoride solution- A new endodontic irrigant?” 8th National Postgraduate Students’ Convention of Federation of Operative Dentists of India (FODI) & Indian Endodontic Society (IES) held on 18-20 May, 2007 at Nanital, U.P.
- **Singh A** “Dental caries: A pandemic disease and its research priorities” International Symposium on Research Priorities in Dental Science & Technology in Asia and Africa held at Hyderabad on 1-3 December, 2007

- **Bhushan S** “Non carious destruction and disfigurement of teeth - Etiology and prevention” .8th National Postgraduate Students’ Convention of Federation of Operative Dentists of India (FODI) & Indian Endodontic Society (IES) held on 18-20 May, 2007 at Nanital, U.P.
- **Bhushan S** “Powder dentifrices – Oral Health aid?” presented at the International Symposium on Research Priorities in Dental Science & Technology in Asia and Africa held at Hyderabad on 1-3 December, 2007
- **Wadhawan N** “TMJ Adaptation following functional appliance therapy: MRI study”, 12th Indian Orthodontic Society and 1st SAARC Post Graduate Convention at Pune, November 2007.
- **Kumar G** “Prosthodontic Rehabilitation of Patients of Maxillo- Mandibular Defects” IX National convention of Prosthodontics Post Graduate Students from 22–24 June, 2007
- **Kumar G** “Prosthodontic rehabilitation of patients with compromised ridge foundation”, 35th Indian Prosthodontic Society Conference from 8–11 September, 2007 at New Delhi.
- **Kumar G** “Prosthodontic post surgical management of orbital mucormycosis- A Case Report” at the X National Post Graduate Convention, from 8-10 February, 2008 at Darshan Dental College, Udaipur (Material science and techniques in Prosthodontics)
- **Rehan S** “Prosthodontic Management of Developmental disorders affecting Dentition” at the IX National convention of Prosthodontics Post Graduate Students from 22–24 June, 2007
- **Rehan S** “Prosthodontic management of cleft lip and palate patients” at the 35th Indian Prosthodontic Society Conference from 8–11 September, 2007 at New Delhi.
- Pruthi G “Recording Vertical Jaw relations: Significance Indeed- But a challenge” at the IX National Convention of Prosthodontics Post Graduate Students from 22–24 June, 2007
- Pruthi G “Prosthodontic rehabilitation of patients with acquired mandibular defects: case report.” 35th Indian Prosthodontic Society Conference from 8–11 September, 2007 at New Delhi.
- **Thakur M** “A comparative evaluation of centric relation and condylar guidance by conventional method versus Gothic arch tracing- A clinical study.” 35th Indian Prosthodontic Society Conference from 8–11 September, 2007 at New Delhi.
- **Nanda A** “FRC: A novel Innovation in teeth replacement.” Poster Presented at 35th Indian Prosthodontic Society Conference from 8–11 September, 2007 at New Delhi.

RESEARCH

Funded Projects

Completed

1. Analysis of data for multicentric oral health survey for the Biennium 2006-2007. Investigators: Dr. Naseem Shah, Dr. R. N.Pandey, Dr.Ritu Duggal and Dr. Vijay P Mathur Funding Agency – Ministry of Health and Family Welfare, GOI Total funding –2,59,600 lacs Duration – 6 months

Ongoing

1. National Oral Health Care Programme - Project in collaboration with Directorate General of Health Services and Ministry of Health & Family Welfare. AIIMS has been declared as a Nodal Agency.

2. “Development of visual Analog Scale for smile characteristics following orthodontic treatment and its correlation with the treatment outcome” Prof. OP Kharbanda An ICMR project, Total funding – 4.5 lacs, Duration – 3 Years
3. “A randomized, double blind placebo controlled study of efficacy of Lactobacillus CD2 lozenges in patients with chronic periodontitis”. Ajoy Roychoudhury, Ongkila Bhutia, Ajay Logani. Funded by CD Pharma India. Funds Rs. 9.8 lacs, Duration – 2 years
4. Detection of apoptosis in human periodontal ligament during orthodontic tooth movement – An ICMR Project – Investigator. Dr.Ritu Duggal, Total funding – 2.6 lacs, Duration – 3 Years
5. “To develop an indigenous bite force measuring appliance and to test in patients with different clinical conditions. Investigators: Dr. Veena Jain and Dr. Vijay P Mathur Funding Agency – Dept of Biotechnology, Total funding – 7.82 lacs, Duration – 2 Year
6. “Oral health status of drug-addicts attending a de-addiction centre” Investigators: Dr. Naseem Shah and Dr. Vijay P Mathur, Intramural funding, Duration- 1 year
7. “Assessment of Safety Profile for Dental Procedures in India” Investigators: Dr. Ritu Duggal and Dr. Vijay P Mathur, Funding Agency – Ministry of Health and Family Welfare, GOI, Total funding – 65.23 lacs, Duration – 2 years

Departmental Project

Completed

1. An in-vitro study to evaluate the effect of different impression techniques on dimensional accuracy and surface detail reproduction using additional silicone impression materials.

Ongoing

1. Equivalence randomized controlled trial of bioresorbable plates and titanium plates in the osteosynthesis of mandibular fracture: a pilot study.
2. Effect of different design preparation on flexural and fracture strength of fiber reinforced composite fixed partial dentures: an in-vitro study.
3. Effectiveness of home bleaching agents on the color change and surface characteristics of direct composite veneering materials and discoloration: A Gonioreflectrometer and SEM Study.
4. An evaluation of restoration of lost vertical on EMG activity of masseter and Temporalis muscle in patients with generalized attrition of teeth.
5. 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
6. An in vitro comparative evaluation of marginal adaptation and Fracture resistance of fiber-reinforced and all – ceramic crowns.
7. 3D finite element study of stress distribution and displacement of various craniofacial structures following application of transverse force in cleft lip and palate patients
8. A clinical and cephalometric study of temporary anchorage device (TAD) supported anchorage in the management of maximum discrepancy extraction cases
9. A comparative evaluation of ultrasonographic dimension of masseter muscle with electromyographic activity prior and subsequent to Twin block therapy
10. Levels of Interleukin-1 α in GCF after active Orthodontic treatment
11. ‘Temporomandibular Joint adaptations following Functional Appliance Therapy: A clinical and MRI study’.

12. Comparative evaluation of remineralization and rehardening potential of high fluoride releasing Glass ionomer Silver diamine fluoride and Calcium Hydroxide on demineralized dentin –An ex- vivo study
13. An In vivo comparative evaluation of antimicrobial and remineralizing potential of high fluoride releasing Glass ionomer, Silver diamine fluoride and Calcium Hydroxide on carious dentin –A pilot study
14. Lamotrigine Vs Pregabalin in the management of trigeminal neuralgia refractory to carbamazepine: an open label, randomized active-comparator controlled crossover trial.

Collaborative Projects

- 1.. “Dentofacial development of cleft lip and palate patients” (with the University of Manchester, UK).
2. Occular surface reconstruction with alternative autografts of non-ocular surface origin. (DST funded) collaborating with RP Center

PUBLICATIONS

Journals

1. Kaushik M, Jaiswal A, Shah N and Mahal A. High end physician migration from India. Bull World Health Organ 2008; 86: 40-45
2. Jayan B, Prasad BNBM, Kotwal Atul, Kharbanda OP, Chowdhury SK Roy, Gupta S. The Role of Cephalometric Analysis in obese and non Obese Urban Indian Adults with Obstructive Sleep Apnea Syndrome: A Pilot Study. Ind J of Sleep Medicine. 2007; 2:59-63
3. Jayan B, Chowdhury S K Roy, Kharbanda O P, Kotwal A. Orthodontics in Intraoral Bilateral Sagittal Mandibular Distraction Osteogenesis. Journal of Dentistry, Indian Dental Association, Defense Section. 2007;2:4-13
4. Duggal R. et al Staff recruitment, development and global mobility. European Journal of Dental Education 2008;12(1):149-60
5. Jena A K, Duggal R. Post-Orthodontic occlusion, esthetic and functional aspects following single mandibular incisor extraction. J Pierre Fauch Acad (Ind) 2007; 21: 149-52
6. Matta A, Bahadur S, Duggal R, Gupta SD, Ralhan R. Over-expression of 14-3-3 zeta is an early event in oral cancer. BMC Cancer.2007 Sept 2; 7: 169
7. Patro BK, Ravi KB, Goswami A, Mathur V, Nongkyrinh B. Prevalence of Dental Caries among the adults and elderly in an urban resettlement colony of New Delhi. Indian J Dent Res 2008;19(2):96-99
8. Holbrook WP, Broding P, Balciuniene I, Mathur V et al. Balancing the role of the Dental Schools in Teaching, Research and Patient Care; including care for underserved areas. Eur J Dent Educat 2008;12(1):161-66
9. Bhutia O, Roychoudhury A. Adenomatoid Odontogenic Tumour of the Mandible: Report of Two Cases. Journal of Maxillofacial and Oral Surgery 2007;6(2):34-35

Book

1. Shah N, Pandey RM, Duggal R, Mathur VP, Rajan K. Ed Oral health in India: A Report of Multi Centric Study. Report of GOI-WHO Collaborative Programme. Dte GHS, Ministry of Health and Family Welfare, Govt of India, New Delhi. December 2007. New Delhi

PATIENT CARE

The Centre provides following advanced treatment procedures

Conservative Dentistry & Endodontics

Advanced restorative procedures
Cast metal, inlays/ onlays and crowns
Composite inlay/only/veneers
Ceramic inlay/onlay/ veneers
Esthetic Restoration and Bleaching of teeth
Root canal treatment in anterior & posterior teeth
Surgical endodontics, replantation of teeth

Orthodontics

Dentofacial orthopaedics and cleft palate orthodontics
Removable and Fixed orthodontics
Myofunctional therapy
Orthodontic Implants assisted treatment

Prosthodontics

Complete Dentures, Partial dentures, fixed prosthodontics
Total Mouth rehabilitation
Maxillofacial Prosthesis
Implant supported prosthesis

Oral & Maxillofacial Surgery

Craniofacial Trauma management
Facial esthetic surgery
Maxillofacial Pathology treatment
Cleft lip & palate repair
Distraction osteogenesis and Obstructive sleep apnea management
Temporo-mandibular Joint surgery
Simple & Complicated exodontia.
Trigeminal Neuralgia management.
Dental Implants.

Paediatric Dentistry

Prevention and Management of Dental problems in children.
Preventive Orthodontics, Serial extractions, Space maintainers & Regainers
Paediatric Dentistry for children with Special needs

Periodontics

Oral Prophylaxis
Advanced bone grafting and Flap surgery procedures.

Special Laboratory Facilities

Orthodontic laboratory
Prosthodontic Laboratory

Conservative Dentistry Laboratory

COMMUNITY SERVICES/CAMPS

Oral Health Education programme organized at AADI School on 28th July, 2007

AWARDS AND HONOURS

Professor Naseem Shah Was given The Best Teacher's Award by the Academy of Continuing Dental education and Indian Society for Dental Research

Professor Kharbanda was Elected President-elect of the Indian Orthodontic Society and unanimously nominated as Vice President of the Indian Society of Cleft Lip, Palate and Craniofacial Anomalies. He continues to be on the International Editorial Board of the American Journal of Orthodontics and Dentofacial Orthopedics, Journal of Orthodontics (British) and Australian Orthodontic Journal and Associate Editor of the J Clinical Pediatric Dentistry. The poster presentation at AOC has been adjudged the Best Poster. Participated in meeting organized by WHO collaborating center at 6th Asian Pacific Conference in Goa India, 2-5 Sept 07

Dr. Vijay Prakash Mathur was Awarded Travel grant from Centre for Cooperation in Science and Technology among Developing Societies, (CCSTDS), Chennai for attending FDI World Dental Congress at Dubai. Honored with Fellowship of Pierre Fouchard Academy, India Section.

SIGNIFICANT EVENTS

Prof. Naseem Shah was invited as Temporary Advisor by WHO to participate in the SEANET-NED meeting held at Phuket, Thailand from 22nd -26th Oct. 2007 on "Scaling up prevention and control of non-communicable diseases" Was the Scientific Chairperson of International Symposium on "Research Priorities in Dental Sciences and Technology in Asia and Africa" held on 1-3rd December at Hyderabad, organized by the Indian Society for Dental Research (ISDR) and supported by Ministry of Health and Family Welfare, Government of India. She moderated a symposium on "Roadmap to Oral Health Policy" wherein recommendations were compiled to guide the Oral Health Policy in India. Gave a radio talk on "Ill Effects of Drug abuse on Health" on AIR. Organized an Expert Group meeting on "Integration of Oral Health into NRHM" on 28-29th March, 2008 at the CDER. Chief Editor of "Oral health in India: A report of the Multi-centric Study" It was published and released by the DGHS, Ministry of Health and Family Welfare, GOI and WHO at India Habitat Centre, New Delhi on Dec. 2007

Prof. O.P. Kharbanda was invited as the Visiting Professor at the Department of Orthodontics, Faculty of Dentistry, University of Sydney, Australia and as a Guest Speaker at the 21st Australian Orthodontic Conference. He was invited by ICMR as subject expert to review the research projects in the field of Oral Health and on the Advisory Committee to award research grant to the postgraduates. He also served Department of Biotechnology as an expert in the field of Biomedical Engineering. He was an expert member on the Selection Committee, Punjab University, Chandigarh and Government of M.P. and HRD ministry for the selection of Commonwealth Fellowship. He was a special nominee of the Indian Orthodontic Society to Asian Pacific Executive Committee meeting at Bali (Indonesia) in August 2007, where he was instrumental in successfully obtaining the Asian Pacific Conference at Delhi to be held in 2012. As a Vice President of the 6th Asian Pacific Cleft Palate Congress, the conference was held successfully. He has been nominated as Scientific

Chairman of the 44th Indian Orthodontic Conference to be held in Delhi 2009. He advised Dental Council of India on issues of equalization of foreign masters degrees earned from Thailand, UK, Australia and Russia. He has also served DCI as an Inspector.

Dr. Ritu Duggal was appointed Dental Council Inspector for approval of M.D.S courses at various Dental colleges. Member of an expert group meeting on “Integration of oral health in the National Rural Health Mission” organized at the Centre for Dental Education and Research with objectives to give guidelines and a draft template to the states for implementation of Oral Health plan for the states.

Dr. Vijay Mathur was appointed by the Ministry of Health and Family Welfare, Govt of India to conduct inspection of the physical facilities such as building, space, teaching staff, their qualifications and experience, equipment and other infrastructural facilities available as per MDS course regulations, 2007 for starting MDS courses in various specialties at Al-badar Rural Dental College and Hospital, Gulbarga, Karnataka and Sri Hasanamba Dental College & Hospital, Vidya Nagar, Hassan, Karnataka. He was also invited as member of Expert Committee for selection of Senior Residents at Maulana Azad Institute of Dental Sciences, New Delhi. Co-coordinator for an expert group meeting on “Integration of oral health in the National Rural Health Mission’ organized at the Centre for Dental Education and Research with objectives to give guidelines and a draft template to the states for implementation of oral health plan for the states.

VISITING SCIENTISTS

1. Lecture on “CAD-CAM and 3-D imaging” on 28 June, 2007
2. Guest Lecture by Dr. Peter Mossey, Head of Orthodontics, Dundee School, U.K. on 7-9-November, 2007.
3. Guest Lecture by Dr. Pramod Sinha, University of Washington on 23 November, 2007.
4. Guest Lecture by of Dr. Ram Nanda, University of Oklahloma on 7 November, 2007.
5. Course on IMTEC implants by Harold I Sussman from NY on 2 November, 2007
6. Guest Lecture by Dr. H.L. Koster Van Groos from Holland on 6 December, 2007.
7. Dr. Roelant Reizevoort on digital models from Orthoproof , Netherlands in November 2007.
8. Lecture on “Polymer science in Dental science” by Dr. Naimul Karim, Scientist from 3M Minnesota, USA on 31 January, 2008.

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
(Radiation 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 AM
- Unit Seminar - Every Monday at 2.30 PM
- Unit Journal Club - Every Saturday at 10:00 AM
- Unit Radio Conference - Every Saturday at 9:00 AM

Laboratory Oncology

- Department provides training to students of MD Pathology and DM Medical Oncology.
- Combined clinico-pathological discussions are held with the department of Pediatrics.

Medical Oncology

- Medical Oncology is running a DM programme under which there are 13 regular and 2 sponsored students and 5 students are undergoing PhD training.

Others

- Dr. Kunjahari Medhi, Senior Research Associate (Pool Officer), C.S.I.R.
- 8 Research Officers on various projects.

Short- and Long-term training

- Lt. Col. Amul Kapoor from Ministry of Defence, New Delhi joined the Dept. of Medical Oncology as long-term trainee for a period of 2 years w.e.f. 30.12.2005 – completed in Dec. 07.

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, B.Sc. (Hons.) Nursing, B.Sc. (Hons.) Radiography. In addition, the unit has 2 Ph.D students undergoing training. The faculty and staff participated in Unit's and Dr.BRA IRCH Seminars.

Short term Training

The unit imparted short-term training to WHO trainees –Dr. Poonam Vohra, Radiologist, RML Hospital and Dr. Amita Malik, Radiologist, Safdarjung Hospital, Delhi for 2 months in Radiation Safety and Quality in Diagnostic Medical Physics course. The training included practical demonstrations, small projects and (theoretical) seminars on the topics of diagnostic imaging-physics.

Radiation Oncology

Undergraduate and postgraduate training

The department is involved in Undergraduate, Post graduate, B.Sc. Nursing and PhD teaching programmes

Short term training was given to

- Kang SUN Chol, Kim In HYOK, Kim Sin IL, Gynecologists and Oncologist in Pyongyang Maternity Hospital, DPR Korea
- Dr. Praveen Kumar Mishra, Medical Physicist, G.R.Medical College Gwalior (MP)
- Mr. Ram Kumar Sharma, Radiotherapy Technologist, G.R.Medical College Gwalior (MP)
- Dr. Anil Kumar Goel, Asst. Prof., Radiotherapy, Govt Medical College & G.G.Hospital, Jamnagar, Gujarat
- Dr.Santanu Sapru, Dr. Anshu Kumar Goel, JR, Radiotherapy, SGPGI, Lucknow
- Dr. Rahul Sharma, Lecturer in Radiotherapy, Govt Medical College, Jammu
- Dr. Harjot Kaur Bagga, Professor and Head, Dept of Radiotherapy, Govt Medical College, Patiala
- Dr.Vinod Kumar Dangwal, Assoc. Professor (Medical Physicist), Dept of Radiotherapy, Govt Medical College, Patiala
- Ms.Caroline Barry, Medical Student, University of York, UK
- Dr. B.A.Sharma, Dr. N.K.Singh, Medical Physicist, RIMS, Imphal
- Dr. M.K.Bharti, Dr. Md. AA.Ansari, PG in Radiotherapy, Patna Medical College, Patna
- Dr. Rohini Khurana, SR in Radiotherapy, SGPGI, Lucknow
- Dr.T.K.Mitra, Dr. Kakali Choudhury, PG in Radiotherapy, IPGMER, Kolkata
- Dr. Manoj Gupta, DNB Resident, Yashoda Hospital, Secunderabad, Andhra Pradesh
- Dr. Kanika Sharma, Dr. Anju Malhotra, SR in Radiotherapy, MAMC & LN Hospital, Delhi

- Dr. Robin Khosa, PG in Radiotherapy, MGM Medical College, Indore
- Mr Muthu Kumar and Mr Rajagopal, 2nd year M.Sc Medical Physics Students from Anna University, Chennai

Surgical Oncology

Undergraduate teaching

The faculty were involved in undergraduate teaching by giving didactic lectures and participating/moderating seminars on oncological topics.

Post graduate teaching

The faculty were involved in teaching and training of 6 surgical oncology senior residents, DM medical oncology residents, MD radiotherapy junior residents by giving didactic lectures, moderating seminars, journal clubs etc. & clinical teaching during ward rounds and in special cancer clinics of IRCH. Both Dr. Shukla & Dr. Deo acted as Co-guide and Co-supervisors in DM medical oncology thesis, MD radiation oncology thesis & Ph.D students from different dept. of IRCH & AIIMS.

Para clinical teaching/training

Both faculty members were involved in the teaching of the B.Sc nursing students.

Continuing Medical Education

Anaesthesiology

- 3rd Meeting of Interventional Pain Management Club on March 8th, 2008 at Conference Hall, First Floor, IRCH, AIIMS
- Organized 7th Foundation Course on Palliative Care on 16th-17th Feb 2008 for Medical Practitioners and Nursing Staff treating Cancer patients in & around Delhi
- Lectures for Nursing Staff deputed at IRCH from all over the Country for Undergoing Advance Courses in Oncology

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

- ‘Role of CT scan in management of Ovarian Cancer’ at Symposium on Ovarian Cancer, AIIMS, New Delhi April 14, 2007.
- ‘Breast MRI’ at CME on breast imaging organized by IRIA Bihar State and IGIMS, Patna at IGIMS, Patna on March 2, 2008.
- ‘Breast Interventions’ at CME on breast imaging organized by IRIA Bihar State and IGIMS, Patna at IGIMS, Patna on March 2, 2008.
- ‘Imaging and diagnostic procedures in breast diseases’ at workshop of CGHS doctors organized by dept of Surgery AIIMS, New Delhi March 8, 2008.

Radiotherapy

Department of Radiation Oncology organized the 1st SAARC & XI National conference of Association of Radiation Therapy Technologists of India (AARTICON) at AIIMS, New Delhi, 5 to 7 October 2007

Surgical Oncology

- Dr. N.K.Shukla chaired Breast Cancer Focus Meet on early stage breast cancer at New-Delhi on August 11, 2007
- Dr. N.K. Shukla attended CME Programme of Indian Association of Surgical Oncology and Delhi Oncology Group on 27 January 2008 and chaired a Scientific Session on Gastrointestinal malignancies.
- Dr. SVS Deo participated in a panel discussion on “Colorectal cancers” during the CME on Colorectal cancers held on 18 th April 2007 at India Habitat Center, New Delhi.
- Dr. SVS Deo delivered a lecture on “Prognostic & Predictive factors in Breast cancer” during the Astra Zeneca Symposium on Breast cancer on 11th August, 2007 at India Habitat Center , New delhi.
- Dr. SVS Deo delivered a lecture on “Computerized Database development in Oncology” during the Delhi Oncology group meeting held in India International center on 10th September 2007.
- Dr. SVS Deo participated in a Investigators meeting of “EGF 102988 Trial in Head and Neck cancer” held in Hong Kong , 22nd to 25th July 2008.

NATIONAL AND INTERNATIONAL CONFERENCES

Lectures delivered

Anesthesiology

- “Management of terminal cases of cancer Gall bladder”- at IGIMS, Patna on 13th May, 2007 by Dr .Sushma Bhatnagar.
- Oncological Emergencies. Nursing Oncology Updates, AIIMS, New Delhi 22-23rd Nov.2007 by Dr. Seema Mishra.
- “Coeliac Plexus Block” at Lady Harding Medical College. Dec. 2007 by Dr. Sushma Bhatnagar.
- “General Aspects of Palliative care” in “Comprehensive Cancer care conference.” 19th -20th Jan 2008 Gorakhpur .U.P. by Dr. Seema Mishra.
- “Interventional Pain Management technique in advance stage cancer patients”. At Kochi on 9th Feb.2008. Dr. Sushma Bhatnagar.
- “Cancer Pain management.” On 7th cancer foundation course on Pain and palliative care 17th - 18th Feb.2008, Delhi by Dr. Seema Mishra.
- “Introduction to Palliative Care” 7th cancer foundation course on Pain and palliative care 17th - 18th Feb.2008, Delhi by Dr. Sushma Bhatnagar.
- “Challenges faced in cancer pain management” at St. Stephen Hospital, New Delhi on 28th March, 2008 Dr. Sushma Bhatnagar.
- “Ultrasound guided block in Cancer Pain Management”- at SMS Medical College,Jaipur on 29th March,2008. Dr. Sushma Bhatnagar.
- Attended Mid term EC meeting from 1-2nd sept.2007 by Dr. Sushma Bhatnagar
- Attended National Workshop of Faculty group at Calicut on 12-13th Jan.2008. by Dr. Sushma Bhatnagar.

Delhi Cancer Registry

Training Programme/ Meetings Attended

- Dr. B. B. Tyagi and Mr. N. Manoharan attended a seminar on “Time Trends in Cancer Incidence

Rates” and a Meeting on Population Based Cancer Registry data processing and quality checks on Delhi cancer registry data for the year 2004 at Bangalore organized by National Cancer Registry Programme, Indian Council of Medical Research, Bangalore from 28th June 2007 to 6th July 2007.

- Dr. V. Raina, Dr. B. B. Tyagi and Mr. N. Manoharan attended the XXIII Annual Review Meeting (ARM) of National cancer registry Program, Indian Council of Medical Research held at Civil Hospital, Aizwal, Mizoram from 14th to 17th November 2007.

Laboratory Oncology

Dr. Rajive Kumar

- ‘Monoclonal protein Detection and Serum Free Light Chains’, at the National Hematology Update 2008, AIIMS, New Delhi, Feb 2008.
- Invited to participate as faculty in panel discussion on ‘Acute Leukemias’, in the conference on ‘First Indian Guidelines on Immunophenotyping’, March 13 to 15, 2008 at Tata Memorial Hospital, Mumbai
- Invited to attend 22nd Annual Clinical Cytometry Course and Meeting of the Clinical Cytometry Society, at Washington, DC, October 2007.

Dr. Ritu Gupta

- ‘Flow Cytometric methods for Red cell dysfunction’ at the 8th Indo-US Cytometry Workshop on clinical applications of flow cytometry, SGPGIMS, Lucknow; December 2007.

Medical Oncology

Prof. V. Raina

- Attended XI International Myeloma and Waldenstroms Workshop held in Kos. Greece from 25-30 June 2007.
- Attended Investigator Meeting with Biogen IDEC on 114-NH-301 ‘TARGET STUDY’ in Bangalore from 7-9 September 2007.
- Appointed DM examiner Gujarat Cancer Research Institute, Ahmedabad on 4 August 2007.
- Attended Investigator meeting on protocol CTI – PIX 301 in Mumbai on 28-29 September 2007.
- Attended XXIII Annual Review Meeting of National Cancer Registry Programme in Aizawl, Mizoram on 14-17 November 2007. Gave a talk on “Data of Delhi Cancer Registry.
- Gave a talk on “Challenges of Clinical Trials in India” in the Annual Conference of Drug Discovery & Development of Innovative Therapies in India at Hyderabad from 10-12 October 2007.
- Gave a talk on “Conducting Oncology Trials in India” in the International Conference on Drug Discovery & Clinical Development in India in Mumbai on 19-21 November 2007.
- Appointed Co-Chair ATLAS Trial Steering Committee, Oxford

Prof. Lalit Kumar

- Invited lecture on “ Reduced intensity allogeneic BMT “ on 8th Sept 2007 during he CME on Haemato-Oncology at Kolkata , organized by Netaji Subhash Chandra Bose Cancer Research Institute, Kolkata.

- Delivered a guest lecture on Cancer Stem cells on 11th Aug 2007 during the Annual Meeting of Delhi Society of Haematology organized by Sir Ganga Ram Hospital, New Delhi.
- Invited lecture on “Refractory Anemia and Multiple Myeloma” on 30th Sept. 2007 during the Annual meeting of the Association of Physicians of India- Saharanpur branch, UP held at Mussoorie.
- Participated as a panelist during the panel discussion on data safety Monitoring Board (DSMB) on 15th Sept 2007 at AIIMS, organized by the Department of Pharmacology, AIIMS.
- Invited lecture on “Aggressive non Hodgkin’s lymphoma: Management” on 6th Oct 2007 during the symposium on lymphoma held at Vivekanand Institute of Medical sciences, Kolkata.
- Chairperson during the Conference on breast/Ovarian cancer organized by Tata Memorial Hospital, Mumbai on 27-28th Oct.08
- Invited lecture on “Chemotherapy of Ovarian Cancer” on 2nd Nov 2007 during the 29th Annual conference of the Association of Obstetrics and Gynaecologists of Delhi, held at AIIMS, New Delhi.
- Gave an invited talk on “Stem cell therapy in Obstetrics” on 4th Nov 2007 during the 29th Annual conference of the Association of Obstetrics and Gynaecologists of Delhi, held at AIIMS, New Delhi.
- Gave an invited talk on “Chronic Lymphocytic Leukemia – Current management” on 15th Nov 2007 during the 48th annual conference of the Indian Society of Haematology & Blood transfusion Medicine (ISHTM 2007) held at CSM Medical University (KGMC) , Lucknow.
- Chairperson during the”Update on Adjuvant Therapy of Breast cancer’ organized by Sir Ganga Ram Hospital, New Delhi on 2nd Dec 2007.
- Delivered a talk on “ Recent Advances in the treatment of Chronic Myelogenous Leukemia” during the 34th Annual National conference of Association of Clinical Biochemists of India” on 18-12-07 at New Delhi.
- Chaired a session during the ‘Ranbaxy Science Foundation Symposium’ on 14-1-08 held at National Institute of Immunology.
- Chairperson during the CME programme of the Indian Association of Surgical Oncology held at Army Hospital (R&R) on 27-1-08.
- Invited talk on “Risk Stratification and role of stem cell transplantation in multiple myeloma” during the annual meeting of the Stem cell Transplantation Group at Christian Medical College, Vellore on 15-3-08.
- Delivered a Guest lecture on “Chronic Myeloid Leukemia: Recent Advances” on 28-3-08 at Maulana Azad Medical College, Delhi during the Molecular Medicine Update.

Dr. Atul Sharma

- Participated in Panel Discussion on Metastatic Ovarian Cancer during Symposium on Ovarian cancer on 13-14th April 2007 at AIIMS.
- Co chaired and delivered a talk “GI cancers in India: Effect of Geographical boundaries” during 3rd Sister Institution Conference at M D Anderson cancer center 5-8th June 2007.
- Delivered a talk on targeted therapy in Head and Neck cancer organized by Artemis Hospital on 15th July 2007 at Le Merridean.
- Delivered a talk on Recent advances in Advanced Colorectal Cancer at Indraprastha Apollo Hospital, New Delhi on 11.08.2007

- Delivered a talk on “Management of Lymphoma” organized by RGCRI at India Habitat Center, New Delhi on 16.09.2007
- Chaired a session “weekly versus 3 weekly Taxanes” during update on Adjuvant Therapy In Breast cancer hosted by Sir ganga Ram Hospital, New Delhi On 2nd December 2007.
- Delivered a talk on “Role and Limitations of Transplants in Multiple Myeloma- during Hematology Update” organized by Hematology Department AIIMS, New Delhi on 24.02.2008
- Delivered a talk on “Risk stratification in Colorectal Cancer during 8th RGCON at IHC “ organized by RGCRI, New Delhi on 09.03.2008

Dr. Sameer Bakhshi

- Chairperson for “Germ Cell Tumors: Case discussion” in Symposium on Ovarian Cancer. Organized by Department of Medical Oncology, IRCH, AIIMS (April 14th, 2007).
- Guest Lecture on “Bone Marrow Transplantation” in Subharti Medical College, Meerut on 12th May 2007.
- Panelist: Fixed Dose Combinations in Antibiotics and Fixed Combinations in Oncology in “Brainstorming Workshop on Rationality Assessment and Guidelines for Fixed Dose Combinations” organized by Department of Pharmacology, AIIMS and Central Drugs Standard Control Organization at AIIMS, New Delhi on 25th and 26th June 2007.
- “Management of Lymphoblastic Lymphoma” in IAP National Consensus Meeting on Pediatric Non Hodgkin’s Lymphoma at Mumbai on 30th June and 1st July 2007.
- Expert panelist for IAP National Consensus Meeting on Pediatric Hodgkin’s Lymphoma at Mumbai on 11th and 12th Aug 2007.
- “Overview of Pediatric Malignancies” in Second regional symposium on management of cancer in countries with limited resources on 11th Sept 2007 at Srinagar (11th-12th Sept 2007).
- “Recent advances in Chemotherapy of Retinoblastoma” in CME titled “Retinoblastoma-Enlightenment to Lighten Life” at Gujarat Cancer and Research Institute, Ahmedabad on 22nd Sept 2007.
- “Clinical Trials in Oncology” in Mini Symposium on ‘Essentials of Phase I Clinical Trials’ organized by Dept of Pharmacology, AIIMS on 29th Sept 2007.
- “Bone marrow transplantation in pediatric oncology-AIIMS experience” in ‘International Symposium on Recent Advances in Pediatric Oncology’ organized by Department of Pediatric Surgery at AIIMS on 27th Oct 2007.
- “Compliance in Retinoblastoma Patients: Impact of Socioeconomic Factors” in Retinoblastoma Symposium, SIOP 2007 at Mumbai on 30th Oct 2007.
- “Hematology of Infections” in UP PEDICON at Moradabad on 17th Nov 2007.

Medical Physics Unit

Dr. Pratik Kumar

- Radiation issues in radiology from technologists’ perspectives. Proceedings of 16th Asian Conference of Radiological Technologists & 9th National Conference of Indian Association of radiological Technologists, 15-18th Nov. 2007, Chandigarh.
- Digital Radiography: An Overview of Characteristics and Practice Guidelines. International Conference on Medical Physics & 28th Annual Conference of association of Medical Physicists of India (AMPI), Nov. 2-4, 2007, SKIMS, Srinagar.

- Safety measures for radiation workers in medicine. 2nd Asia – Pacific Conference of Radiological Technologists, 30th Nov. – 2nd Dec. 2007, AIIMS, New Delhi.
- Recent advances in instrumentation of computed tomography. National Seminar on Radiation Protection & Workshop on QA in Diagnostic Radiology. Gandhi Medical College, Bhopal, 8-10 Feb. 2008.
- Radiation Protection in Radiodiagnosis: Principles and Practices. Imaging Carnival 2008, Annual Congress of Indian Radiological and Imaging Association, Delhi State, VMCC & Safdarjung Hospital, Feb 22-23, 2008.
- 4D Computed Tomography: An Introduction. Symposium on Radiation treatment: Recent Advances & Perspectives. XIII Annual Convention of Northern Chapter of AMPI, KNMH, Allahabad, March 01, 2008.
- Radiation protection and quality assurance in interventional procedures. Seminar on radiation hazards and protection, SMS Medical College & Hospital, Jaipur, 15-16 March 2008.
- Chaired a session at 2nd Asia – Pacific Conference of Radiological Technologists, 30th Nov. – 2nd Dec. 2007, AIIMS, New Delhi.
- Panelist in the panel discussion “Neoadjuvant chemotherapy in ovarian cancer” at Symposium on Ovarian Cancer, 13-14th April 2007, All India Institute of Medical Sciences, New Delhi.

Radiology

Dr. Sanjay Thulkar

- ‘Multimodality imaging for radiotherapy planning’ at 11th National Conference of Association of Radiation Therapy Technologists of India, AIIMS, New Delhi, October 6, 2007.
- ‘Imaging in locally advanced breast cancer’ at 5th TMH-WCI (Tata Memorial Centre-Women’s Cancer Initiative) Conference at Tata Memorial Centre, Mumbai, October 26, 2007.
- ‘Imaging in Multiple Myeloma’ at National Hematology update –VII at AIIMS, New Delhi, February 24, 2008.

Radiation Oncology

Dr. G.K. Rath

- Chaired a session at “The first National Radiosurgery Update”, New Delhi, 7 April 2007.
- An invited lecture on “Combined modality therapy with surgery and radiotherapy in locally advanced head and neck cancer “at the teaching programme of Indian College of Radiation Oncologists, Kolkata, 26 May 2007
- An invited lecture on “Recent advances in Radiotherapy “at the teaching programme of Indian College of Radiation Oncologists, Kolkata, 27 May 2007
- An invited lecture on “Hazards of tobacco” at Bhubaneswar on 31 May 2007
- Chaired a session on “Patient Issues” during the 12th International Conference on Modern Radiotherapy Technology, Rome, June 2007.
- An invited lecture on “Role of Radiotherapy in carcinoma of prostate, esophagus and cervix”, Heidelberg, 9- 15th July 2007
- An invited lecture on “Advances in technology of radiation therapy” at the meeting of Indian Cooperative Oncology Network (ICON) , Mumbai 11-12 August 2007
- An invited lecture on “National cancer control programme” at Govt. Medical College, Jammu, 26 August 2007.

- An invited lecture on “Practice of Radiotherapy in low resource setting”, Srinagar, 12-13 September 2007
- An invited lecture on “Strategies in cancer control in India” at the North East Zonal chapter meeting of AROI, Agartala, 30 September – 1 October 2007
- An invited lecture on “Imaging in Radiation Oncology” at the workshop organized by International Union Against Cancer (UICC), Kolkata, 8 October 2007
- An invited lecture on “Role of Radiotherapy in ano-rectal cancers” at the Andhra Pradesh Chapter of Association of Radiation Oncologists of India, Hyderabad, 18th November 2007
- Chaired a Session on “Comparison of 3 Dimensional conformal radiotherapy, Intensity Modulated Radiation Therapy, Image Guided Radiotherapy, and Tomotherapy” at the Annual Conference of the Association of Radiation Oncologists of India, Chennai on 30 Nov 2007
- An invited lecture on “Radiotherapy facility in India” at the Annual Conference of AROI, Chennai, 29 November – 1 December 2007
- An invited lecture on “Brain Tumors” at the State chapter conference of the Association of Radiation Oncologists of India, Jaipur, 8 Dec 2007
- An invited lecture on “Radiotherapy Today” at the Narayana Cancer Hospital, Nellore, 12 December 2007.
- An invited lecture on “Recent advances in Radiotherapy” at the Annual meet of the Association of Radiation Oncologists of India, Orissa Chapter, Cuttack, 26-27 January 2008
- An invited lecture on “Inverse Planning in Brachytherapy” at the Clinical Oncology and Radiation Physics conference (CORPCON) 2008, CMC, Vellore, 7-9 Feb 2008
- An invited lecture on “Stomach Cancer” at Civil Hospital, Aizwal, 16 Feb 2008
- Delivered the Key note address on “Radiation treatment: recent advances and perspectives” at the conference of the Northern Chapter of Association of Medical Physicists of India, Allahabad, 1 March 2008.
- An invited lecture on “Current status and future prospects of IMRT in India” at the North Zonal Chapter meeting of AROI, Delhi, 16 March 2008,
- Conducted telemedicine sessions with three Regional Cancer Centers namely Dr B Baruah Cancer Hospital Guwahati, Acharya Harihar Regional Cancer Centre, Cuttack and Sher-I-Kashmir Institute of Medical Sciences, Srinagar.

Dr. P.K. Julka

- Guest Lecture on “Neo-adjuvant Chemotherapy in Ca Cervix”, RGCI, Delhi, 1st April 2007.
- Guest Lecture on “Stereotactic Radiosurgery” at Stereotactic RT Conference, 7th April 2007.
- Conducted telemedicine sessions with Susheela Tiwari Forest Hospital, Haldwani on Breast Cancer.
- Guest Lecture on “Recent Advancement in Breast Cancer and Early Detection of Breast Cancer” at NEIGRIMS, Shillong, 18th May 2007.
- Panelist on Breast Cancer at ARTEMIS Conference, New Delhi, 15th July 2007.
- Acted as Moderator and Chairperson for Panel Discussion “Breast Cancer” Artemis Oncology CME, 16th July 2007.
- Guest Lecture on Cetuximab - an emerging standard in locally advanced Head & Neck Cancer, 25th July 2007.
- Guest Lecture on Cetuximab + RT in Head & Neck Cancer, Chandigarh, 4th August 2007.

- Guest Lecture on “Recent Advancement in Management of Breast Cancer” for CMOs (CGHS), 11th August 2007.
- Chairperson for Session on Target Volume in Radiotherapy, Delhi-UP Chapter AMPI Meeting, 8th September 2007.
- Guest Lectures on “Targeted Therapy and Brain Tumor Chemotherapy” at AROI Meeting (Northern Chapter), 16th September 2007.
- Chairperson for Breast Cancer Symposium on Hormonal Therapy, New Delhi, 21st September 2007.
- Guest Lecture on Breast Cancer Awareness for CGHS Doctors, New Delhi, 27th September 2007.
- Guest Lecture on “Adjuvant Therapy in Rectal Cancer” at XVII, MAMC Surgical Update 2007, New Delhi, 30th September 2007
- Chairperson of Breast Cancer Symposium at Tata Memorial Hospital, Mumbai, 27th October 2007.
- Guest Lecture on “Drug Discovery at AIIMS”, New Delhi, 30th October 2007.
- Guest Lecture on “Recent Advances in Lung Cancer Management”, Lala Ram Swarup Institute of Tuberculosis and Respiratory Diseases, New Delhi, 17th November 2007.
- Chairperson and Panelist of Brain Tumor Session, AROI Meeting, 29th – 30th November 2007.
- Presented Research Paper in San Antonio Breast Cancer Symposium, Texas, 13 –16th December 2007.

Dr. B.K. Mohanti

- Acted as Moderator for Panel Discussion “Head and Neck Cancer” Artemis Oncology CME, 15th July 2007.
- Invited talk “Radiotherapy and Chemotherapy in Palliation for Esophageal Cancer”, at XVII National Conference of Indian Association of Surgical Gastro-Enterology, Delhi 28th September 2007.
- Invited talk “Role of Radical Radiotherapy in Non-small cell Lung Cancer” at National Lung Cancer Meet 2007, Amby Valley, Lonavala, 6th -7th October 2007.
- Attended Viventia TARGET Research Group Meeting, at Bangalore, 12th October 2007.
- “Course material for Certificate Course in essentials of Palliative Care” at National Faculty Workshop for IAPC course, Institute of Palliative Medicine, Calicut, 12-13, January 2008
- Invited talk “Practice of Radiotherapy in India”, 20th Conference of UP Chapter of Association of Radiation Oncologists of India, SGPGI, Lucknow, 16th February 2008.
- Invited talk “Transition from Curative to Palliative Care”, at 7th Foundation Course on Palliative Care, Can Support- IRCH, Delhi, 17th February 2008.
- Invited talk “Chemo-radiotherapy in Head and Neck Cancer – present status”, at Annual Conference of WB Chapter of AROI, Kolkata, 8th March 2008.
- Invited talk “How to organize the transition from cure to Palliation” at 10th Anniversary of Dean Foundation, Chennai, 9th March 2008.
- Delivered a lecture “Introduction to Head and neck cancer care in India” and chaired a scientific session at the AIIMS Head and Neck Cancer CME, 15-17 March 2008.
- Carried out the live demonstration of “Interstitial Brachytherapy in head and neck cancer” at the AIIMS Head and Neck Cancer CME, 15-17 March 2008.

- Conducted Tele-medicine teaching sessions with the faculty and post-graduate residents of Regional Cancer Centre, Cuttack and SKIMS, Srinagar.

Dr. D.N. Sharma

- Role of radiotherapy in gynecological malignancies”, preparatory course for MRCOG part II, organized by deptt. of obstetrics and gynecology, AIIMS, Oct 2007.
- “TRUS guided interstitial brachytherapy in cervical cancer”, 12th International Conference on Modern Radiotherapy Technology, Rome, Italy, June 2007.
- “Role of radiotherapy in lung cancer”, CME held at medical college Jammu, Aug 2007.
- “Role of radiation technologist in brachytherapy”, AARTICON 2007, held at AIIMS, New Delhi, Oct. 2007.
- “Interstitial Brachytherapy Guided IMRT (IBGIMRT) in cervical cancer”, 49th Annual conference of ASTRO 2007, Los Angeles, USA, Oct 2007.
- “Role of radiotherapy in carcinoma of cervix”, Conference held at Gorakhpur, Feb 2008.
- “Role of radiotherapy in carcinoma of gall bladder”, Conference held at Gorakhpur, Feb 2008.
- “Role of radiotherapy in carcinoma of anorectum”, CME organized by Association of Surgeons of India (Delhi Chapter) held at Shanti Mukund Hospital, New Delhi, March 2008.

Dr. V. Subramani (Medical Physicist)

- “Comparison of CT versus Radiography based treatment planning in intracavitary HDR brachytherapy for cervical cancer: Dosimetric study” in RGCON-2007 was held at New Delhi, India on 31st March and 1st April 2007
- “Intensity Modulated stereotactic Radiosurgery/Radiotherapy for intracranial brain tumors” in 1st National Neurosurgery Update was held at New Delhi on 7-8 April, 2007
- “Recent advances in Brachytherapy practices: Physicist’s Perspectives” in Up-Delhi AMPI Chapter annual conference was held at New Delhi on 8th September, 2007
- Chaired the session on IGRT in annual conference of Association of medical Physicists of India (AMPI) which was held at Srinagar, Kashmir on 1-4th November, 2007,
- “Stereotactic Body Radiosurgery and Radiotherapy” in ICTP-Medical Physics teaching programme which was held at BARC, Mumbai, 19-24, November 2007.
- As Chairperson in “International conference on High precision Radiotherapy” held, KL, Malaysia, 24-26 November 2007.
- Presented paper on “Image Guided Brachytherapy: AIIMS experience” in Clinical Oncology and Radiation Physics conference which was held at Christian Medical College, Vellore, Tamilnadu on 7-9th February, 2008
- Presented paper on “Current perspectives on interstitial brachytherapy and implementation of ICRU-58 Recommendations” at Northern AMPI chapter annual meeting held at Allahabad 1st March, 2008.

Dr. R. Prabhakar (Medical Physicist)

- “A Technique for Verification of Isocenter Position in Tangential Field Breast Radiotherapy” at AAPM meeting, 22-26 July 2007
- “Stereotactic radiotherapy”, at the 1st SAARC conference and XIth National conference of Association of Radiotherapy Technologists of India, New Delhi, 5 – 7th Oct 2007.

- “Impact of Patient Setup Error in the Treatment of Head and Neck Cancer with Intensity Modulated Radiation Therapy” at AROICON 2007, Chennai, Dec 2008.
- “A simple technique for cranio-spinal irradiation in young pediatric patients” at the 2007 ASCO Annual Meeting, USA, May 2007.

Dr. Haresh KP (Senior Research Associate)

- “A comparative Analysis of Quality of Life of Patients Treated by Radical Cystectomy and Sigmoid Neobladder Versus Chemoradiation in Muscle Invasive Cancer of Urinary Bladder”. At the 49 th Annual Meeting of the ASTRO 2007 at Los Angeles, California, Oct 2007.
- “P53 in muscle invasive cancer of Urinary bladder”. At the 2008 Genitourinary Symposium Co sponsored by ASCO,ASTRO and SUO at San Francisco, California, Feb 2008

Dr. Amit Bahl (Senior Research Associate)

- “Management of advanced oral cancer” at Comprehensive cancer care conference, HPPCHRI, Gorakhpur 18 January 2008
- “Role of radiotherapy in management of Breast cancer” at Comprehensive cancer care conference, HPPCHRI, Gorakhpur 19 January 2008

Mr. JPS Manav

- Organizing secretary 1st SAARC & XI National conference of Association of Radiation Therapy Technologists of India (AARTICON) held at AIIMS, New Delhi, India, on October 5-7, 2007

Surgical Oncology

Dr. S.V. S. Deo

- Delivered a guest lecture during the International Society of Surgery annual Conference held at Montreal, Canada between Aug-25-30 2007 on “Breast oncoplasty – Status in India”.
- Delivered a guest lecture on “Management of mandibular defects in oral cancer patients” during the Asia Pacific congress on craniofacial surgery” held at Maldives, April 29- May 4, 2007.
- Delivered a lecture during the “Symposium on Ovarian Cancer “held at AIIMS, 14-15 th April, 2007, on “Electronic Database Development in Oncology”.
- Delivered a lecture on Prognostic and predictive factors in Breast cancer during the Breast cancer expert forum meeting held at Bangalore, June 2007.
- Chaired a scientific session during the Asia Pacific congress on craniofacial surgery” held at Maldives, April 29- May 4, 2007.

RESEARCH

Funded Projects

Anaesthesiology

Completed

1. Management of neuropathic cancer pain following WHO guidelines. P. I.:Dr. Seema Mishra, Funding:Institute Research Grant, Fumds: 1, 00,000.

Laboratory Oncology

Ongoing

1. Immunophenotypic characterization of plasma cells by flow cytometry in health & disease

- with particular reference to plasma cell myeloma. PI: Dr. Ritu Gupta. Duration : 3 years (2006-2009), Funded by DST. Funds: 8,70,000
2. Assessment of multi-drug resistance pattern in acute myeloid leukemia and response to therapy. PI: Dr Ritu Gupta. Duration : 2 years (2006-2008), Funded by AIIMS. Funds: 1,90,000
 3. Regulatory T-cell repertoire in plasma cell myeloma. PI-Dr. Ritu Gupta. Duration : 3 years (2007-2010), Funded by DBT. Funds: 14, 82,000.
 4. Endothelial progenitor cells as biomarker of disease activity in multiple myeloma. PI : Dr. Lalit Kumar, Co-investigator- Dr. Ritu Gupta. Duration : 3 years (2007-2010), Funded by DBT. Funds: 16, 79,000
 5. To study the molecular biology of multiple myeloma. PI : Dr. Lalit Kumar, Co-investigator- Dr. Ritu Gupta. Duration : 3 years (2007-2010), Funded by DBT, Funds: 33, 00,000.

Medical Oncology

Completed

- 1 A SU011248 Expanded Access Protocol for Systemic Therapy of Patients with Metastatic Renal Cell Carcinoma Who are Ineligible for Participation in Other SU011248 Protocols but May Derive Benefit from the Treatment with SU011248. Protocol No. A6181037, Principal Investigator: Dr.V. Raina, Funded by : Pfizer, Funds : 7 Lakhs, Duration: 1 year (2007)
- 2 A Randomized Phase 3 Trial of ALIMTA (Pemetrexed) and Carboplatin versus Etoposide and Carboplatin in Extensive-Stage Small Cell Lung Cancer". Principal Investigator: Dr. V. Raina, Funded by : Eli Lilly, Funds : 5 Lakhs, Duration : 1 year (2007)
- 3 A multicentric open comparative randomized study to optimize dose duration safety efficacy and cost of two treatment regimens with liposomal amphotericin B(fungisome) in the treatment of systemic fungal infections in India., Principal Investigator : Dr. Atul Sharma, Funded by : DBT, Govt. of India, Funds : 10.00 lacs, Duration : 2006-2007
- 4 Study of her-2-neu and p-53 expression in osteosarcoma by immunohistochemical methods: in collaboration with Department of Pathology., Principal Investigator: Dr. Sameer Bakhshi, Funded by : AIIMS Research Grant, Funds: One Lac, Duration : One year, 2007

Ongoing

- 1 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. Dr.V. Raina, Funded by : GSK, Funds: 30 Lakhs, 5 years, 2007-2011.
- 2 A Randomised, Double-blind, Multicentre, Placebo-controlled Study of Adjuvant Lapatinib in Women with Early-Stage ErbB2 Overexpressing Breast Cancer. Dr. V. Raina. Funded by GSK, Funds: 20 Lakhs, Duration : 2 years, 2008-2009.
- 3 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. Dr. V. Raina. Funded by Reliance. Fund: 15 Lakhs, Duration : 2 years 2008-2010.
- 4 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. V. Raina. Funded by Nicholas. Funds: Rs 10 Lakhs. Duration: 1 year, 2008-2009.
- 5 A Randomized, Open Label Multi-Center Study of Single Agent Larotaxel (XRP9881) Compared to Continuous Administration of 5-FU For The Treatment of Patients With Advanced Pancreatic

- Cancer Previously Treated With A Gemcitabine-Containing Regimen. Dr. V. Raina. Funded by Sanofi Aventis. Funds: 15 Lakhs, Duration : 1 year 2008-2009.
- 6 INDOX (India – Oxford collaboration). Dr.V. Raina. Funded by Oxford University. Funds: Rs 30 lakhs, Duration: 3 years, 2006-2009.
 - 7 Immunophenotypic and cytogenetic analysis for analysis of correlation among the prognostic markers in acute lymphoblastic leukemia. Dr. V. Raina. Funded by Terry Fox. Funds: 6 Lakhs, Duration: 3 years, 2007-2010.
 - 8 ABC (Adjuvant Breast Cancer Trial). Dr. V. Raina. Funded by Institute of Cancer Research, London. Funds: 10 Lakhs, continuing since 1997.
 - 9 ATLAS (Adjuvant Tamoxifen Long against Short). Dr.V. Raina. Funded by Oxford University, Funds: 30 Lakhs, Duration: 10 years, 1998-2008.
 - 10 A study of the prevalence and type of anemia in patients with lymphoid malignancies. Dr. Lalit Kumar. Funded by Global Cancer Concern India. Funds: Rs. 60,000, Duration: 2007-2008.
 - 11 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). Dr. Lalit Kumar. Funded by ICMR, Funds: Rs. 70,34,900, Duration: Till 2009
 - 12 Elucidation of molecular mechanisms causing or favoring resistance to STI-571 in Philadelphia chromosome positive Indian leukemia patients. Dr. Lalit Kumar. Funded by Terry Fox, Funds: Rs 5 Lac.
 - 13 Molecular Biology of Multiple Myeloma. Dr. Lalit Kumar, DBT, Govt. of India, *common funding Rs. 50 lacs* Duration : Till 2010,
 - 14 Role of Endothelial progenitor cells as biomarkers of disease activity in multiple myeloma. Dr. Lalit Kumar, Funded by DBT, Govt of India, Funds: *common funding Rs. 50 lacs* Duration: Till 2010,
 - 15 Combination of P53, EGFR and tumor grading in determining the outcome of early stage epithelial ovarian cancer. Dr. Lalit Kumar, Funded by DBT, Govt of India, *common funding Rs. 50 lacs* Duration: Till 2010,
 - 16 Expansion of bone marrow and cord blood hematopoietic stem cells and their differentiation into hepatocytes. Dr. Lalit Kumar, Funded by ICMR, Funds: Rs 8.9 Lac, Duration: Till 2009.
 - 17 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-P 0501. Dr Atul Sharma, Funded by CD Pharma India Private Limited, Funds: 4,75,448, Duration: 2006–continuing,
 - 18 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. Dr Atul Sharma, Funded by Parexel International on behalf of HGS, USA, Funds: Rs 8.8 Lacs, Duration: 2007-continue.
 - 19 Treatment and Characterization of Acute Lymphoblastic Leukemia in Children, Adolescents and Young Adults. Dr. Sameer Bakhshi, Funded by: International Network of Cancer Treatment and Research & Sir Ratan Tata Trust, Funds: 4.5 lacs/year for Clinical Management, Duration: Ongoing (2005 onwards).

- 20 An open label multicentric study to assess the efficacy and safety of recombinant human granulocyte colony stimulating factor (Filgrastim) injections in patients undergoing myelosuppressive chemotherapy. Dr. Sameer Bakhshi, Funded by Cadilla, Funds: 2.85 lacs per year, Duration: Ongoing since April 2007.
- 21 Detection of mitochondrial mutations in acute myeloid leukemia. Dr. Sameer Bakhshi, Funded by Terry Fox, Funds: Rs. 3 lacs, Duration: Ongoing since June 2007.
- 22 To study chromosomal abnormalities and FLT3 Internal Tandem Duplication (ITD) mutations in acute myeloid leukemia. Dr. Sameer Bakhshi, AIIMS Research Grant, Rs. 3 lacs over 3 years, 2007-2010.
- 23 Evaluation of Prognostic Value of FDG-PET after Two Cycles of Chemotherapy in Pediatric and Adolescent High Grade Lymphomas. Dr. Sameer Bakhshi Funded by DBT for 3 years, Funds: 19.45 lacs Duration: 3 years Ongoing since March 2008

Radiotherapy

Completed

1. A randomized, controlled, open label study to evaluate the efficacy and safety of Herceptin® (Trastuzumab) in combination with the oral aromatase inhibitor Arimidex® (Anastrozole) compared with Arimidex® alone as first and second line treatment administered to postmenopausal, hormone receptor positive (ER+ve and/or PR+ve) patients with HER2 over expressing metastatic breast cancer". Dr. P. K. Julka, Dr. G. K. Rath, Dr. O. Nair, Dr. R. Parshad, Dr. R. Bhamrah. Funded by – Quintiles, Funding:

Ongoing

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 G K Rath, Dr PK Julka, Dr DN Sharma, Dr Omana Nair, Dr Tarun Puri, Dr Haresh KP, Sponsor : Dr Reddys. Funds: Rs.155001.
2. 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) (ACTH) 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 G K Rath, Dr Rajinder Parshad, Dr Omana Nair, Dr Simran Sponsor : Aventis.Funds:Rs.162313
3. A centrally randomized open multi center study evaluating the efficacy and safety of combination therapy with intermex Alpha™ and vinblastine versus vinblastine monotherapy in patients with Advanced Renal Cell Carcinoma. Dr PK Julka, Dr G K Rath, Dr Amlesh Seth, Dr Omana Nair, Dr Renita Bhamrah Dr Ashish Chaudhary Sponsor : Sterling. Funds: Rs.618000
4. A phase 2 study of Sequential Neoadjuvant Gemcitabine plus Doxorubicin and Gemcitabine plus Cisplatin in large T₂ (e" 3cm) and Locally Advanced (T₃, T₄ or N₂) operable Breast Cancer. Dr PK Julka, Dr G K Rath, Dr Rajinder Parshad, Dr. Ramesh Dawar, Dr Omana Nair, Dr Renita Bhamrah Sponsor : Eli Lilly Funds:Rs.472000
5. 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. Dr PK Julka, Dr G K Rath, Dr Rajinder Parshad, Dr Omana Nair, Dr Gursimran Kaur Sponsor: Quintiles. Funds:Rs.245700

6. 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 G K Rath, Dr N R Dash, Dr Omana Nair, Dr Tarun Puri, Dr Renita Bhamrah, Dr Gursimran Kaur Dr Amit Bahl, Dr Pushpa Lata Sponsor : Siro. Funds:Rs.150000
7. 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 G K Rath, Dr Omana Nair, Dr Tarun Puri, Dr Renita Bhamrah, Sponsor: Reliance. Funds: Rs 1.5 Lakhs till now
8. A multicentric study to evaluate Palonosetron and Ondansetron in chemotherapy induced nausea and vomiting Dr PK Julka, Dr G K Rath, Dr Omana Nair, Dr Gursimran Kaur Sponsor : Dr Reddys Funds: Rs 2.5 Lakhs
9. A randomized Phase 3 Study of Pemetrexed in Combination with Cisplatin Versus Cisplatin Monotherapy in Patients with Recurrent or Metastatic Head & Neck Cancer. Carcinoma Dr PK Julka, Dr G K Rath, Dr Alok Thakar, Dr Sudhir Bahadur, Dr Omana Nair, Dr Tarun Puri, Dr Renita Bhamrah Sponsor : Eli Lilly. Funds: Rs 78,000
10. A randomized phase 3 study of Enzastaurin versus Lomustine in the treatment of recurrent, Intracranial GBM Dr PK Julka, Dr G K Rath, Dr Chitra Sarkar, Dr Omana Nair, Dr Tarun Puri, Dr Renita Bhamrah Sponsor : Eli Lilly Funds: Rs 186000
11. 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 PI: Dr B K Mohanti. CI: Dr. B.B. Tyagi, Grant from National Cancer Registry Programme, ICMR. Funds:Rs3.6 Lakhs per year
12. 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. PI: Dr. Sanghamitra Das (ISI), Dr. B.K.Mohanti. Grant from Indian Statistical Institute, Delhi. Funds:Rs2.2 Lakhs per year
13. A prospective randomized trial of amifostine given subcutaneously during radiotherapy in head and neck cancer patients. Dr. D N Sharma. Funding: AIIMS. Funds: Rs 97850

Departmental Projects

Anaesthesiology

Completed

1. Effect of Pre-Emptive Oral Gabapentin for Post-Operative Pain At Rest And On Movement After Modified Radical Mastectomies.
2. Comparative study of prophylactic administration of tramadol, pethidine, ketamine & placebo on postoperative shivering.
3. Preferred Anesthetic technique for intracavitary radiotherapy for carcinoma cervix: A randomized trial.
4. Respiratory Support in Oncology Ward Setting: A Prospective Descriptive Setting.
5. Management of Phantom Limb Pain According to WHO Analgesic Ladder in Amputees of Malignant Origin.
6. Pediatric cancer pain management following WHO analgesic ladder: A prospective study.
7. Comparison of Different Anaesthetic Techniques For Intracavitary Radiotherapy for Carcinoma Cervix.

Ongoing

1. Evaluating the correlation of serum levels of morphine and its metabolites on pain in cancer patients
2. A comparative efficacy of Amitriptyline, Gabapentine and Pregabalin in neuropathic cancer pain: A Prospective Randomized Double Blind Placebo Controlled.
3. Effect of Gender on Pain Perception and Analgesic Requirement In Patients Undergoing Exploratory Laparotomy And Surgery For Carcinoma Esophagus- A Randomized Control Trial.
4. Effect of pre-emptive duloxetine and methylcobalamine combination on postoperative pain relief and morphine consumption in oral surgeries: a randomized, double blind, placebo controlled study.
5. Redefining laryngeal mask airway Classic™ insertion with no-intraoral-index-finger technique.

Medical Oncology

Ongoing

1. Clinical implication of free plasma DNA in Breast Cancer patients.
2. Analysis of Multiple Myeloma cases 1998-2005.
3. Analysis of peripheral T-cell lymphoma, - the incidence, clinical characteristics, prognostic factors & treatment outcome.
4. Quantitative PCR for molecular remission status in CML patients.
5. Response to Docetaxel based vs. Anthracyclin based neoadjuvant chemotherapy in locally advanced breast cancer
6. Free light chain estimation in newly diagnosed multiple Myeloma patients
7. Molecular Genetics for prognostic evaluation of Acute Lymphoblastic Leukemia patients.
8. Expansion of adult human bone marrow and cord blood stem cells for reconstituting marrow & for programming into hepatocytes (ICMR, initiated from 1st October.2005) (Prof. Lalit Kumar-Co- Principal Investigator)
9. Oral voriconazole versus intravenous amphotericin B as antifungal prophylaxis in pediatric acute leukemia induction therapy: a randomized controlled study. (ongoing since Feb. 2008) Investigator-Dr. Sameer Bakshi.
10. Evaluation of efficacy of chemotherapy in advanced colorectal cancer. Investigator-Dr. Atul Sharma.

Completed

1. Comparison of efficacy of oral antibiotics (amoxicillin clavulanate + ofloxacin) with that of intravenous antibiotics (ceftriaxone + amikacin) in low risk febrile neutropenia in children .
2. Randomized comparison of ABVD with EVAP in newly diagnosed cases of Hodgkin's lymphoma- protocol p-0402. Dr Atul Sharma
3. Pilot study of MPT regimen in newly diagnosed cases of Multiple Myeloma. Dr P N Mohapatra

Medical Physics

Completed

1. Contrast enhancement techniques for mammograms.
2. Dose reduction approaches in Head CT examination.

Ongoing

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.
4. Patients' dose determination in fluoroscopy guided RF ablation procedures.

Radiodiagnosis

Completed

1. Role of directional vacuum assisted large core breast biopsy in patients with previously equivocal biopsies for breast masses suspicious for malignancy.

Ongoing

1. MRI and PET CT evaluation of soft tissue sarcomas.

Radiotherapy

Completed

1. Prognostic Value of Epidermal Growth Factor Receptors in Carcinoma of breast.
2. Role of Neoadjuvant chemotherapy followed by concurrent CT+RT in advanced ca hypo pharynx.
3. A comparative study to assess the effect of benzydamine vs. chlorhexidine oral rinses on radiation-induced mucositis in head and neck cancer patients.

Ongoing

1. Randomized trial comparing IMRT vs. brachytherapy boost in early stage squamous cell carcinoma of the oropharynx.
2. 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.
3. Clinical correlation of ER, PR and Her 2 neu expression and BRCA-I gene mutations in Indian Breast Cancer patients.
4. The correlation of VEGF and TGF Beta expression to clinico-pathological response, ER, PR and Her 2 Neu status in locally advanced breast cancer- A pilot study.
5. Comparison of two different schedule of HDR-ICRT in Carcinoma of Cervix of 7Gy vs. 9Gy at Point A in 3 & 2 weekly fractions respectively: A Prospective Randomized cohort study
6. Development of DICOM-RT software for interfacing the Treatment Planning System with treatment machines.
7. Concurrent chemo radiotherapy with or without subcutaneous administration of amifostine in cervical cancer- A randomized study.
8. Dosimetric studies in Interstitial and Intracavitary Brachytherapy of cancer cervix.
9. Validation of gel dosimetry as 3D verification tool for highly conformal radiotherapy techniques.
10. PET CT in predicting response to chemo radiotherapy in carcinoma cervix.

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 Projects

Completed/Ongoing

1. Role of Minimally invasive guided therapy in treatment of focal liver Neoplasms. (with Departments of Anesthesiology and Radiodiagnosis).
2. Role of Minimally invasive guided therapy in treatment of lung metastasis (Department of Anesthesiology and Department of general surgery)
3. Role of Minimally invasive guided therapy in treatment of focal bone Neoplasms-Collaboration. (Department of Anesthesiology and Department of orthopaedics)
4. Molecular characterization of Indian patients with Glanzmann thrombosthenia (Lab. Oncology and Hematology department).
5. 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. (Lab. Oncology and Medical Oncology)
6. A phase I/II open-label dose-escalation study to determine the safety, tolerance, and preliminary activity of intravenous high-dose fluphenazine HCl in patients with advanced multiple myeloma. (Lab. Oncology and Medical Oncology)
7. Characterization of Testis specific sperm associated antigen 9 (SPAG9) gene expression and humoral immune response in various human cancers. (Lab. Oncology and NII)
8. Serial skin biopsy in chronic myeloid leukemia (CML) patients on Imatinib mesylate- protocol p-0404. (Dept. of Medical Oncology & Dept. of Pathology)
9. Whole Body MRI for detection of skeletal metastases in pediatric patients on small cell neoplasms: comparison with skeletal scintigraphy and FDG PET CT (Dept. of Medical Oncology, Radiology & Nuclear Medicine).
10. Role of imaging in diagnosis of orbital tumors (Dept. of Medical Oncology, Radiology, Ophthalmology). .
11. Role of Neoadjuvant Chemotherapy in Gastric cancer (Dept. of Medical Oncology & GI Surgery)
12. “Evaluation of vascular permeability by Dynamic contrast enhanced- MRI & glucose metabolism by PET-CT scan as surrogate markers of angiogenesis in Osteosarcoma” (Dept of Medical Oncology, Radiology, Nuclear Medicine, Orthopedics and Pathology)
13. “Role of PET-CT in osteosarcoma for initial staging and chemotherapy response evaluation; comparison with conventional radiological modalities (MRI scan, CT scan, & Bone scan) and histopathological tumor necrosis” (Dept. of Medical Oncology, Radiology, Nuclear Medicine, Orthopedics and Pathology)
14. Role of PET-CT in staging and evaluation of early response to chemotherapy in patients of neuroblastoma and rhabdomyosarcoma. (Dept. of Medical Oncology, Nuclear Medicine and Pediatric Surgery).
15. “A randomized controlled trial comparing best supportive care, 5 FU + folinic acid and gemcitabine + oxaliplatin in management of unresectable allbladder cancer” (Dept. of Medical Oncology, Surgical Oncology, Radiation Oncology & Gastroenterology).
16. Role of Neoadjuvant Chemoradiotherapy in Gall Bladder cancer.(Dept. of Medical Oncology, GI Surgery, Radiation Oncology)
17. “An Open label, Non Randomized Phase II Trial of Oxaliplatin, Docetaxel, and Capecitabine in advanced esophageal and gastric adenocarcinoma” Protocol 0601 (Depts. of Medical Oncology, Surgical Oncology & Radiation Oncology).

18. Evaluation of percentage purity of anti cancer and anti microbial compounds using HPLC.(Dept. of Medical Oncology & Ocular Pharmacology)
19. 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. Duration 2006- continuing (Depts. of Medical Oncology & Pathology)
20. T cell repertoire in plasma cell myeloma. Funding agency- DBT.13.0 lacs, 2007-continuing (Dept. of Medical Oncology & Laboratory Oncology)
21. Endothelial progenitor cells as a biomarker of disease in multiple myeloma. Funding agency- DBT.17.0 lacs, 2007-continuing (Dept. of Medical Oncology & Lab Oncology)
22. Assessment of multi drug resistance pattern in AML and response to therapy. Funding 1.9 Lac- AIIMS- extra mural grant. Duration 2006- continuing (Dept. of Medical Oncology & Lab Oncology)
23. Dose reduction in CT while, maintaining diagnostic confidence. (Medical Physics Unit & Deptt. of Radiology AIIMS).
24. Quantitative imaging study of breast cancer and its correlation with oxidative stress (Medical Physics Unit, Radiodiagnosis and Pharmacology)
25. Verification of CT displayed dosimetric parameter (CTDI) for various scanning protocol. (Medical Physics and Radiodiagnosis, Dr.BRA IRCH)
26. Quality control of PET/CT (Medical Physics, IRCH and Nuclear Medicine, AIIMS)
27. Study of physical parameters and quality assurance in Gamma Knife based radiosurgery with non-coplanar beam in the phantom. (Medical Physics, Radiology, Neurosurgery)
28. Comparative evaluation of CT and PET in assessment of efficacy of Radio frequency ablation of unresectable non-small cell lung cancer. (Departments of Radiology, Radiotherapy, Medical Oncology and Nuclear Medicine)
29. 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). (Dept. of Radiology, Medical Oncology and gynecology).
30. Validation of gel dosimetry as 3D verification tool in highly conformal radiotherapy techniques. (Dept. of Radiology, Neurobiochemistry and Radiotherapy).
31. Radiation Induced chromosomal aberration analysis and their use as biodosimetry (Nuclear Medicine and Radiation Oncology).
32. A multinational, multicenter open label active controlled randomized parallel group dose finding study to evaluate the efficacy and safety of two doses of AP 12009 in adult patients with recurrent high grade glioma, administered intratumorally as continuous high flow microfusion over a 7 day period every other week. (Neurosurgery and Radiation Oncology).
33. Concomitant Chemo radiation in advanced/ unresectable Head & Neck Cancer. (Medical Oncology, Radiation Oncology and ENT).
34. Randomized study of Concomitant Chemoradiation versus Radiotherapy alone for advanced and or unresectable Squamous Cell Carcinoma of Oropharynx and Nasopharynx. (Medical Oncology, Radiation Oncology and ENT).
35. 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 & Neck Squamous Cell Carcinoma. (Radiation Oncology and ENT)

36. 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.
37. Pre Operative Short course RT (25 Gy/ 5 Fr) followed by Surgery for rectal cancer. (Surgical Oncology & Radiation Oncology).
38. Molecular analysis of FHIT (Fragile Histidine Triad) gene in Indian Female Breast Cancer patients (Department of Surgical oncology and Department of Biosciences ,Jamia Milia Islamia, New Delhi)
39. Adjuvant Tamoxifen long against short (ATLAS) - Multi center international trial, Oxford, UK. (Surgical Oncology, Medical oncology & Radiation Oncology).
40. Study to evaluate the feasibility of neoadjuvant chemotherapy followed by postoperative chemoradiation in the management of locally advanced gastric and gastro esophageal junction tumors and to asses the expression of multi drug resistance gene. (Radiation Oncology, Surgical Oncology, Medical oncology & Pathology)
41. Randomized study of Preoperative short course radiotherapy (25 Gy) vs. preoperative Concurrent radiotherapy (45 Gy) and chemotherapy followed by Surgery in rectal cancer. (Radiation Oncology, Medical oncology, Surgical Oncology, Pathology, Gastroenterology, GI Surgery).
42. Prospective evaluation of quality of life in advanced stage cancer patients receiving short course palliative radiotherapy by using EORTC-QLQ-C15-PAL questionnaire module (Radiation oncology and anesthesia).
43. National Retinoblastoma Registry-Delhi site, a collaborative study under ICMR, New Delhi, India. (Radiation oncology and ICMR, New Delhi)
44. Evaluation of Curcumin in the management of advanced cancer cervix. (Departments of Radiotherapy, Gynecology, Biochemistry and Pathology)

PUBLICATIONS

Journals

- 1 Agarwala S, Bakhshi S, Bajpai M, Bhatnagar V, Gupta AK, Gupta SD, Iyer VK, Gupta DK. Validation of pretext staging system and risk categorization for prognostication and outcome in hepatoblastoma- results from AIIMS-HB94 trial. *Pediatr Blood Cancer* 2007; 49:401-402.
- 2 Agarwala S, Bakhshi S, Srinivas M, Bajpai M, Bhatnagar V, Iyer VK, Mohanti BK, Bhasker S, Gupta SD, Gupta AK, Gupta DK. Prospective study comparing simple nephroureterectomy with radical nephroureterectomy in the treatment of Wilms tumor- outcomes of AIIMS-WT 99 study. *Pediatr Blood Cancer* 2007; 49:407.
- 3 Anirudhan D, Bakhshi S, Xess I, Broor S, Arya LS. Etiology and outcome of oral mucosal lesions in children on chemotherapy for acute lymphoblastic leukemia. *Indian Pediatr* 2008;45: 47-51.
- 4 Bahl A, Sharma DN, Eesa M, Rath GK. Multifocal central nervous system hemangiopericytoma *Indian J Med Paed Oncol* 2007;28;37-8.
- 5 Bahl A, Sharma DN, Harsh K, Thulkar S, Julka PK, Rath GK, et al Radiofrequency Ablation: Principles and Techniques *Ortho Today* 2007; 9: 133-135.
- 6 Bahl A, Sharma DN, Julka PK, Rath GK. Patterns of Care Studies Revisited: Relevance to Cancer Cervix Management in India. *Indian Med Gazette* 2007;9: 374-377

- 7 Bakhshi S, Bakhshi R. Genetics and management of retinoblastoma. *J Ind Assoc Pediatr Surg* 2007; 12 (3):109-115.
- 8 Bakhshi S. Burkitt's lymphoma: Relationship of infection and case clustering. *Ind J Med Pediatr Oncol* 2007; 28 (4):6-7.
- 9 Bakhshi S, Singh P, Chawla N. Malignant childhood proptosis: study of 104 cases. *J Pediatr Hematol Oncol* 2008; 30:73-76
- 10 Bakhshi S, Singh P, Chawla N. Malignant childhood proptosis: study of 104 cases. *Pediatr Blood Cancer* 2007; 49:580-581.
- 11 Bhatnagar S, Gupta D, Mishra S, Srikanti M, Singh M, Arora R. Preemptive antiemesis in patients undergoing modified radical mastectomy: oral granisetron versus oral ondansetron in a double-blind, randomized, controlled study. *J Clin Anesth.* 2007; 19(7):512-6.
- 12 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.
- 13 Das CJ, Debnath J, Thulkar SP, Kumar L, Vashisht S. Transitional cell carcinoma in herniated vesicle diverticulum. *Br J Radiol* 2007; 80:227-29.
- 14 Deo SVS, Raina V, Rath G, Sharma A, Shukla NK (Authors from AIIMS Trial Centre of Adjuvant Breast Cancer Trials Collaborative Group) Ovarian ablation or suppression in premenopausal early breast cancer: results from the international adjuvant breast cancer ovarian ablation or suppression randomized trial. *J Natl Cancer Inst* 2007; 99:516-25
- 15 Deo SVS, Raina V, Rath G, Sharma A, Shukla NK (Authors from AIIMS Trial Centre of Adjuvant Breast Cancer Trials Collaborative Group) Polychemotherapy for early breast cancer: results from the international adjuvant breast cancer chemotherapy randomized trial. *J Natl Cancer Inst* 2007; 99:506-15
- 16 Deo SVS, Shukla NK. Management of Mandibular defects in Oral Cancer. *Journal of Oral and Maxillofacial Surgery*, 2007, Suppl (22-24).
- 17 Deo SVS, Varma M.C., Shukla NK Management of patients with breast cancer: Are we ready in India for sentinel lymph node biopsy? *National Medical Journal of India* 2008 Vol. 21(1): 27-30.
- 18 Ganessan K, Goel R, Kumar K, Bakhshi S. Biphenotypic extramedullary blast crisis as a presenting manifestation of Philadelphia chromosome-positive CML in a child. *Pediatr Hematol Oncol* 2007; 24:195-8.
- 19 Ghosh J, Kumar R, Anand M, Kalita D, Ray R, Chopra A. Distinctive appearance of florid peripheral blood spill in CD30+ anaplastic large cell lymphoma *Blood Med* 2008
- 20 Goel R, Kumar R, Bakhshi S. Transformation of childhood MDS-refractory anemia to acute lymphoblastic leukemia. *J Pediatr Hematol Oncol* 2007; 29:725-7.
- 21 Goyal GN, Mishra S, Bhatnagar S, Gupta D. Aggressive Approach to Pain and Symptom Management is a key For Effective Palliation in Terminally-ill Pediatric Patients. *Internet Journal of Anesthesiology.* 2007; 14 : 1.
- 22 Goyal S, Puri T, Gunabushanam G, Sarkar C, Julka PK, Rath GK, et al Gliofibroma: a report of three cases and review of literature. *Acta Oncol.* 2007; 46: 1202-4.
- 23 Gunabushanam G, Sharma S, Thulkar S, Srivastava DN, Rath GK, Julka PK, et al. Radiofrequency ablation of liver metastases from breast cancer: results in 14 patients. *J Vasc Interv Radiol.* 2007; 18: 67-72.
- 24 Gupta A, Sharma M, Khan SA, Rastogi S, Bakhshi S. Study of her-2-neu and p-53 in osteosarcoma by immunohistochemical staining. *Pediatr Blood Cancer* 2007; 49:518.

- 25 Gupta D, Bhatnagar S, Mishra S. Defaulting oncology patient in a multispecialty state-run hospital in India. *Am J Hosp Palliat Care*. 2007; 24 (1):59-62.
- 26 Gupta D, Kumar L. Newly diagnosed multiple myeloma: allograft or autograft? *Natl Med J India*. 2007; 20(6):300-1.
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- 28 Gupta D, Mishra S, Bhatnagar S. Somatization disorder, a cause of difficult pain: a case report. *Am J Hosp Palliat Care*. 2007; 24(3):219-23.
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- 31 Gupta N, Mittal S, Lal N, Misra R, Kumar L, Bhalla S. A rare case of primary mesenteric gastrointestinal stromal tumor with metastasis to the cervix uteri. *World J Surg Oncol*. 2007; 29; 5: 137.
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- 34 Gupta R, Naseem S, Kashyap R, Paul L. Role of fine needle aspirate immunophenotyping by flow cytometry in rapid diagnosis of lymphoproliferative disorders. *Diagn Cytopathol* 2007; 35: 381-5.
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- 57 Prabhakar R, Haresh KP, Ganesh T, Joshi RC, Julka PK, Rath GK. Comparison of computed tomography and magnetic resonance based target volume in brain tumors. *J Cancer Res Ther*. 2007; 3: 121-3.
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PATIENT CARE

FUNCTIONAL BED STATUS

Sr. No.	FLOOR	Post EFC of Expanded Dr.BRA IRCH (current position of functional bed status)		
		Regular Beds	Number	Total
1.	Ground	Palliative Care		6
2.	Ist	Surgical Oncology/Radiotherapy		2026
3.	2 nd	Medical Oncology/Radiotherapy		1006
4.	3 rd	Private Ward	M.O RT SO	050505
5.	5 th	ICUS.O.		0621
6.	7 th	Medical Oncology		27
		TOTAL		137
7.		SHORT STAY/DAY CARE BEDS		
8.		Recovery S.O. (Gd. Floor)		04
9.		Aphaeresis (1 st Floor)Recovery		0402
10.		Day Care MO (2 nd Floor)		30
11.		Recovery S.O. (6 th Floor)		05
		TOTAL		45
		GRAND TOTAL		182

1. Total O.P.D. Attendance		80244
	New Patients registered	8505
	New registration in various clinics	13785
	Revisits	66459
2. Total Admissions		21535
	Regular	4177
	Short (Day Care)	17358
3. Surgical Oncology (Major/Minor) Cases	3927	
	Major	640
	Minor	3287
4. ECG	(Total)	2221

OPD/ Clinics at IRCH

No.	Name of the OPD/ Clinic	New Registration		Old registration		Total
		Male	Female	Male	Female	
1.	Bone & Soft (Tissue)	151	87	516	305	1059
2.	Breast Cancer Clinic	40	471	152	4039	4702

3.	Chemotherapy Evaluation	1257	1044	11043	10224	23568
4.	Gastro-Intestinal Clinic	281	262	799	627	1969
5.	Gynecology 'A'	-	252	-	994	1246
6.	Gynecology 'B'	-	619	-	1796	2415
7.	Head & Neck Oncology-A	181	66	1003	292	1542
8.	Head & Neck Oncology-B	1228	247	3485	631	5591
9.	Lymphoma Leukemia	601	284	8632	3331	12848
10.	Ophthalmic Tumour Clinic	32	28	78	64	202
11.	Pain Clinic	622	678	1991	1719	5010
12.	Pediatric Surgery	77	51	1205	702	2035
13.	Radiotherapy Evaluation	2620	2034	4127	4098	12879
14.	Surgical Oncology OPD	176	177	1561	2056	3970
15.	Urology Malignant Clinic	187	32	916	73	1208
	TOTAL	7453	6332	35508	30951	80244
Total New Registration= 13785				Total Revisits= 66459		

Distribution of new patients according to place of residence (Total=8505)

1.	Assam	40
2.	Arunachal Pradesh	01
3.	Andhra Pradesh	04
4.	Bihar	986
5.	Chandigarh	4
6.	Chattisgarh	4
7.	Delhi	2917
8.	Dadar Nagar Haveli	5
9.	Daman and Diu	8
10.	Gujrat	4
11.	Goa	2
12.	Haryana	984
13.	Himachal Pradesh	38
14.	Jammu & Kashmir	62
15.	Jharkhand	112
16.	Kerala	09
17.	Karnataka	3
18.	Meghalaya	2

19.	Manipur	15
20.	Madhya Pradesh	75
21.	Maharashtra	3
22.	Nagaland	7
23.	Orissa	68
24.	Punjab	73
25.	Rajasthan	175
26.	Sikkim	28
27.	Tripura	11
28.	Tamil Nadu	2
29.	Uttar Pradesh	2370
30.	Uttranchal	383
31.	West Bengal	63

Geographical Distribution (Other countries)

1.	Afghanistan	7
2.	Bhutan	1
3.	Iran	1
3.	Kenya	2
4.	Mauritius	1
5.	Nepal	34
6.	Pakistan	1

ANAESTHESIOLOGY

- ICU facilities for postoperative patients.
- Pain & Palliative Care Clinic is run twice a week in addition to the anaesthesiology related work.
- Home support to patients with advanced malignancies by NGOs and keeping monthly meeting with them to know follow up reports
- Providing critical care to patients of Radio therapy, Medical Oncology, and Surgical Oncology.
- Facility for Pediatric Radiotherapy.
- Anaesthesia for minor pediatric oncology procedures like Bone marrow biopsy, Central line insertion, Bone marrow Harvesting and others
- Facility for Pediatric radiological procedures under anaesthesia, Radio frequency ablation for liver, lung, and breast carcinoma.

LABORATORY ONCOLOGY (Total=59904)

Hemogram (Hb, TLC, Platelets)	47332
Peripheral Blood Smear	5331
Bone marrow aspirate and touch preparation	2703
Cytochemistry	521

Serum protein electrophoresis	1496
Immunofixation	23
Urine electrophoresis	62
ESR	2200
Cyto Centrifuge	63
Cytospin	52
APAAP	92
FNAC Lymph Node	27
Lyfostin	02

MEDICAL ONCOLOGY

- A new look Day Care of 30 beds is active now.
- Fully functional transplant floor with 9 rooms.
- Fully functional 4 beds apheresis facility on 1st floor.
- Drug supplies to ward and OPD patients vastly improved.
- The department performed approximately 60 transplants in this year
- Full fledged clinical trials faculty has been initiated.

Clinical Services

New Registrations (CTE)	2301
New Registrations (LL)	885
Total New Registrations (CTE+LL)	3186
Revisits (CTE)	21267
Revisits (LL)	11963
Chemotherapy in Daycare (Visits)	14043
OPD Chemotherapy	9234
Admissions in Ward and Daycare (Daycare including BT, I/V fluids, Interventions)	4177+17358 = 21535
Transplants (Autologous/Allogenic)	
OPD Procedures	3274

Diagnostic and Therapeutic procedures (Total=3274)

Bone Marrow Biopsy	1028
Bone Marrow Aspiration	666
Cerebral Spinal Fluid for Cytology	26
Ascitic Tapping	251
Pleural Tapping	100
Intra Thecal Methoxerate	614
Skin Biopsy	8

Catherization	2
Peripherally Inserted Central line Catheter	-
I/T MTX + CSF Cytology	337
PICC Removal	6
PICC Insertion	4
Foley's Catherization	11
Bone Marrow Aspiration + CSF Cytology	15
Suturing	11
Pleural Tapping + Ascitic Taping	2
Bone Marrow Biopsy + CSF Cytology	33
Central Line Removal	17
Central Line Insertion	9
Central Line Suturing	-
Chest Drain Removal	1
Foley's Catherization Removal	1
TIT	3
Mandibular Block	40
Ascitic Tapping + Bone Marrow	2
TIT + CSF Cytology	4
Punch Biopsy	-
I & D	1
Epidural Catheter Insertion	1
Pleural Tapping + B.M. Biopsy	1
Bone Marrow Aspiration + I/T MTx	8
Bone Marrow Aspiration + B.M. Biopsy	30
Bone Marrow Biopsy + I/T MTX	1
CSF Cytology + I/T MTX + Cell Count	32
Hick Man's Catheter Removal	2
Bone Marrow Biopsy + CSF Cytology + TIT	3
Bone Marrow Biopsy + CSF Cytology + Aspiration	1
Bone Marrow Aspiration + Hickman's Removal	1
Bone Marrow Biopsy + CSF Cytology + Aspiration + IT	1
Foley's Catherization/ LP	1

Laboratory Services (Total=1021)

Cytogenetic Reports	403
Cryo-preservation/Store at 80°C	45
Storage of PBSC at 4°C	47
Infusion of PBSC	65
Viability of PBSC	77
MNC	109
CD-34	121
Alloogenic/BMT/PBS CT	5
PCR	121
PBSC	28

MEDICAL PHYSICS**Departmental statistics (Total=4432)**

No. of blood bags irradiated	1949
Quality Assurance tests done on x-ray machines	1643
QA test done on film processor at room no. 10 (x-ray)	408
QA test done on film processor at room no. 46 (US, Mammo)	73
Radiation output measurements in x-ray units	201
No. of experiments on CT scanner & US	9
Patient dose measurement by Radiochromic films	2
No. of experiments in US Doppler	5
Radiation protection survey of x-ray installation	nil
A test done room no. 77 (main hospital)(x-ray)	131
Advice in inadvertent exposure in pregnancy	1
3D Reconstruction of CT Images in Patients	10

RADIODIAGNOSIS**The analysis of patients care activities are as under (Total=20760)**

S. No	Name of Procedure	Number
1	X-rays (Routine)	11267
2	Ultrasound	3382
3	CT scan	4780
4	Mammography	530
5	Intervention/IVP	807

RADIOTHERAPY

Departmental statistics (Total=168872)

1. Total cases on Radiotherapy	44306
2. Total fields on Radiotherapy	111776
3. Cases on Brachytherapy	927
4. Treatment Planning and Simulations	4543
5. 2D and 3D distribution	388
6. Compensators	487
7. Shielding blocks, immobilization devices, Moulds	1416
8. Radiation Review clinic	5029

SURGICAL ONCOLOGY

Facilities available in department

1) Minor Operation Theater.

Diagnostic and minor therapeutic procedures including Lymph node biopsy, punch/ trucut biopsy, excision of Skin/Oral tumors, soft tissue tumors, feeding jejunostomy, colostomy, insertion of Hickman's catheter / chemo ports for long term Chemotherapy are available in the Minor O.T.

2) Endoscopy Services (Diagnostic & 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.

3) Major Cancer Operation Theater

Facilities available for all major cancer Surgeries including radical resection and reconstruction of tumors involving head & Neck, GI tract, Breast, Bone and Soft tissue, Gynaecological malignancies and Thoracic tumors. Advanced reconstructive surgical procedures including microvascular free tissue transfer are also available.

Advanced state of art technologies like LASERS, CUSA, Harmonic Scalpel and Intra Operative Radiotherapy are also available.

Total no. of minor operations & endoscopic procedures performed : 3287

Major Cancer Operations - Total No. Performed : 640

Community Service

Prof. G.K. Rath

- Talk on Cancer awareness at Indo-French Technical Association at New Delhi on 19 Oct 2007.

Prof. P.K. Julka

- AIR Phone-in Program on Cancer in Women, 11th December 2007.

Laboratory Services (Total=1021)

Cytogenetic Reports	403
Cryo-preservation/Store at 80°C	45
Storage of PBSC at 4°C	47
Infusion of PBSC	65
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CD-34	121
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- AIR Phone-in-Program on Cancer in Children, 7th November 2007.
- Expert on Cancer Causes and Management Program on Delhi Doordarshan (Krishi Darshan), 17th October 2007.
- Delhi Doordarshan News, Breast Cancer Total Health, 14th October 2007.
- AIR Phone-in-Program on Breast Cancer, 12th October 2007.
- Breast Cancer Diagnosis and Management - Total Health Program, on Delhi Doordarshan National, 12th October 2007.
- AIR Phone-in-Program on Cancer Prevention and Management, 20th August 2007.
- TV and Press Conference on Tobacco and Cancer, World No Tobacco Day, 30th May 2007.
- AIR Phone-in Program on Lung Cancer, 2nd April 2007.
- Article on “Women Lung Cancer Cases on Rise” in “The Asian Age”, 30th November 2007.
- Article on “Cancer in One Breast? Get MRI on the Other” in “Times of India”, 2007.
- Article on “Breast Cancer Increasing Among Men” in “Times of India”, 11th June 2007.
- Article on “Stress, Cancer Deadly Combo” in “Times of India”, 15th April 2007.
- Panelist in MTNL Perfect Health Mela at New Delhi, 1st November 2007.

Prof. N.K. Shukla

- Involved in care and advice to the ostomates (patients of colostomy, ileostomy and Urostomy)

Dr. B K Mohanti

- Delivered a Live TV programme on ‘Head and neck cancer in India’, by Door Darshan, Delhi, on 16 September 2007

Dr. D N Sharma

- Participated in a Live Show on Sahara TV (DD News) on Telemedicine in Cancer, Aug 2007

AWARDS AND HONOURS

Dr.G.K. Rath delivered the Foundation Day Oration of Sanjay Gandhi Postgraduate institute of Medical Sciences, Lucknow, 14 December 2007; Dr.KC Borooah Foundation day Oration of Dr. B Borooah Cancer Institute (Regional Cancer Centre), Guwahati, 11 October 2007; Chairman of Steering Committee of National Cancer Registry Programme, ICMR; ICMR task force on cancer management guidelines; The project review group of the project of ministry of Information and Technology, Govt. 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 Governing Bodies of two Regional Cancer Centres (Bikaner, Allahabad), Governing Body of Delhi State Cancer Institute, New Delhi; Subgroup of Ministry of Information and Technology, Govt. of India to review the progress of the Jai Vigyan project, Ministry of Science and Technology, Govt. of India on “development & deployment of 6 MV Medical Linear Accelerator; Standing Committee on Radiotherapy Development Programme, Ministry of Health and FW, Govt. of India; Inspection team of National cancer Control Programme (NCCP), Min of Health and FW, Govt of India for the purpose of financial assistance under RCC Scheme for Govt Medical College and Hospital, Jammu, 6 -7 November 2007; Inspection team National cancer Control Programme (NCCP), Min of Health and FW, Govt of India for the purpose of financial assistance under RCC Scheme for Cancer Hospital, Agartala, 5-6 January 2008; Inspection team National cancer Control Programme (NCCP), Min of Health and

FW, Govt of India for the purpose of financial assistance under Oncology wing development programme, Naga Hospital Authority, Kohima, 12-13 October 2007; National Advisory Committee For 14th World Conference on Tobacco or Health; Member Rotary Cancer foundation, Delhi; Member of the team of Department of Science and Technology, Govt of India to review the progress of the Project on Linear accelerator, CT Simulator and Telemedicine at the Sanjay Gandhi Postgraduate Institute of Medical Sciences, Lucknow, 21 April 2007; Member of the Indian delegation of Indian Council of Medical Research for the Indo-German conference on collaboration in cancer research, Heidelberg, 9th -15 July 2007; 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, Govt. of India; Project Review Committee, Oncology - Indian Council of Medical Research, New Delhi; Safety Review Committee for Application of Radiation (SARCAR), Atomic Energy Regulatory Board(AERB), Govt. of India; 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; Scientific Advisory Group for the division of Non communicable diseases, ICMR, New Delhi; External expert for the selection committee of KGMU, Lucknow for the post of Reader and Lecturer of medical physics on 10 June 2007; External examiner for PhD at PGIMER, Chandigarh, 2nd April 2007, MD(Radiotherapy), KGMU, Lucknow, 26th April 2007, MD(Radiotherapy), SKIMS, Srinagar, 7-8 May 2007, MD(Radiotherapy), SMS Medical college, Jaipur, 2-3 July 2007; Appraiser for DNB, Radiotherapy at Dharmashilla Cancer Hospital, 26 July 2007; Member of committee on formation of recruitment rules at Delhi State Cancer Institute (DSCI), Delhi, 22 September 2007; External expert of the selection committee to select faculty members and medical physicist, PGIMER, Chandigarh ,13 November 2007; External Expert of the Committee to suggest development of the Department of Radiation Oncology, Chittaranjan National Cancer Institute(CNCI), Kolkata, 10 January 2008

He is Advisory Editor of Journal Academy of Hospital Administration; Member of Editorial Board of Indian Journal of Chest Disease and Allied Science, Indian Journal of Cancer, International Journal of Biosciences and Technology; Member of Consulting Editors Journal of Cancer Research and Therapeutics

Prof. P.K. Julka is IP University Inspection of RGCI for RT Technologist Course (B.Sc.), Delhi, 2007; Examiner for DNB (Diplomate of National Board) at RGCI, 2007;M.D. Radiotherapy, Rohtak Medical College, 2007, M.D. Radiotherapy, SGPGI Lucknow, 2007; Member, ICMR Task Force for Cancer Research Projects in the Country; Member, Specialty Board, National Board of Examination to form curriculum for DNB Radiotherapy in the Country; P K Haldar Oration at AROI Conference on Translational Research, 2007; Member, Editorial Board Journal of Cancer Research and Therapeutics.

Prof. NK Shukla reviewed research papers published in Indian Journal of Medical and Pediatric Oncology; received “Vocational Service Excellence Citation Award” for 2008 by Rotary Club of New Delhi on 14th Feb. 2008; received “Rashtriya Gaurav award” by India International Friendship Society, 27th November 2007; Appointed as appraiser by the National Board of Examinations to assess the performance of DNB candidates and Infrastructure facilities at Dharmshila Hospital & Research Center. He inspected the hospital and under took the assessment of DNB candidates on

21st Feb. 2008; acted as papers setter, thesis appraiser and external examiner for MCh course of Gujarat Cancer Research Institute, Ahmedabad on 5th August 2007 and KGMC University, Lucknow on 15th October 2007; External expert in the Selection committee for the faculty post in Surgery of PGI, Chandigarh on 12.10.07

Prof. B. K Mohanti was nominated as National Faculty for the Institute of Palliative Medicine, Calicut, by Indian Association of Palliative Care; Reviewer for Anti-cancer Drugs, Annals of Oncology, National Medical Journal of India; Reviewer of thesis for MD examination in Radiotherapy for SKIMS. Srinagar; HP University, Shimla

Dr. SVS Deo appointed as Examiner for DNB Surgical Oncology for RGCI, New Delhi and & GCRI, Gujarat; Expert to review projects for funding by International Union against Cancer (UICC), Geneva; Expert to review scientific abstracts for UICC world cancer congress to be held in 2008.

Dr. Sushma Bhatnagar won Best Paper award on “An Audit of routine clinical practice of blind insertion of peripherally inserted central catheters in surgical oncology patients in 46th Annual conference of Indian Society of Anaesthesiologist (Delhi Chapter) on 7th-8th April, 2007, Delhi; Honorary faculty for the IAPC certificate course; Co-ordinator of IAPC certificate course at IARCH, AIIMS

Dr. Pratik Kumar was nominated Co-Director and faculty and faculty at Regional College on Medical Physics-2007 organized by International Centre for Theoretical Physics (ICTP), Italy and Bhabha Atomic Research Centre (BARC) Mumbai. He was conferred Rashtriya Gaurav Award - 2007 by India International Friendship Society. He was nominated as member, Editorial Board of International Journal of Biosciences and Technology; Elected member of executive committee of AMPI; Member, Editorial Board, Journal of Medical Physics; Member of Electro-medical Equipment Sectional Committee, BIS, New Delhi; Secretary, Northern Chapter of Association of Medical Physicists of India (AMPI) and referee for Journal of Medical Physics; Organized a conference on “Updates in Medical Physics” at AIIMS on 8th September 2008.

Dr. V. Subramani underwent Observer training on Proton Therapy for 1 week at M.D.Anderson Cancer Centre, University of Texas, USA from 25th -30th July, 2007; Scientific Secretary and editor of the souvenir in 1st SAARC & XI National conference of Association of Radiation Therapy Technologists of India (ARTTICON) which was held at AIIMS ,New Delhi, India, on October 5-7, 2007; Expert for Technical evaluation of conventional simulator, 3D Treatment planning system and C-arm machines procurement by Dr.B.Borooah Cancer institute, Guwahati, December, 2007; Expert in the selection of medical physicist for LNJP Govt Hospital, New Delhi, March, 2008

SIGNIFICANT EVENTS

Anesthesiology

- Unit of anesthesiology organized 7th Foundation Course on Palliative Care on 16th -17th Feb 2007 for Medical Practitioners and Nursing Staff treating Cancer patients in & around Delhi.
- Organizing 16th International Conference of Indian Association of Palliative care.
- IRCH has started IAPC certificate course in Palliative Care.

Radiotherapy

- Started the innovative technique of interstitial brachytherapy in liver tumors.
- Started RFA in Kidney tumors.

Surgical Oncology

- 5 th floor new Surgical Oncology ward was made functional on 25 th may 2007.
- New ICU complex in 5th floor was made functional on May 9 th 2007
- 6 th Floor New OT Complex was made functional on May 9th 2007.
- Dr. N.K. Shukla acted as a external examiner for the M.S. Surgery of PGI Chandigarh.

VISITING SCIENTIST

1. Prof. Ion Maddocks The first prof. of Palliative Medicine visited IRCH and interacted with chief IRCH and other faculty.
2. Dr Alvaro Martinez, Radiation Oncologist from William Beaumont Hospital, USA
3. Dr Minesh Mehta, Radiation Oncologist from University of Wisconsin, Madison, USA
4. Dr Shankara Narayanan Radiation Oncologist from IARC France
5. Dr Sunil Upadhyay, Radiation oncologist from Hull and East Riding Hospital, UK

ADMINISTRATION

Chief	:	Professor G.K. Rath
Admn. Officer	:	Sh. R. Simon
Total No. of Staff of Dr. BRAIRCH including Faculty:		
Faculty		20
Grp. A & B		38
Tech. Staff		68
Nursing Staff		179
Resident Staff (SR, JR)		39
Stores Staff		05
Ministerial Staff		23
Grp. D Staff		87
Outsourced Sanitation Staff		155
Outsourced Security Staff		51½ duties per day
Outsourced Data Entry Operators		08

DELHI CANCER REGISTRY

Scientist VI Dr. B.B. Tyagi

FINANCE

Accounts Officer : Sh. C.L. Raina
Accounts Officer : Sh. D. R. Bellani

STORES

Asst. Store Officer : Sh. Narender Kumar

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

EDUCATION

Postgraduate Teaching

1. Six MD-Anaesthesiology students from Anaesthesiology department, AIIMS received neuroanaesthesiology training in the department, as an integral part of their curriculum.
2. Ten Senior Residents (06 from Department of Anaesthesiology, AIIMS & 04 from Bhim Rao Ambedkar Institute Rotary Cancer Hospital) received training in Neuroanaesthesiology for variable periods as a part of interdepartmental rotation on mutual exchange basis.
3. Thrice a week (Mondays, Tuesdays, Saturdays) Seminars, Journal club and case presentations (For one hour at a time) were organized as a part of departmental teaching programme till Dec. 2007. Since Jan. 2008, once a week (Saturdays) Seminars, Journal club and case presentations were organized for 2½ hours at a time.

Short Term Training

1. Dr. Zahirul Islam from Apollo hospital, Dhaka, Bangladesh underwent training in Neuroanaesthesiology & Neurointensive care at our department (From 01/04/2007 to 04/05/2007).
2. Dr. M. M. Masum-ul-Haque from Apollo hospital, Dhaka, Bangladesh came to the department for three months training in Neuroanaesthesiology & Neuro-intensive care (From 15/05/2007 to 14/08/2007).
3. Dr. R. Angral, Dr. M. Katoch, Dr. Poonam, Dr. Andlab and Dr. S. Bhati from GMC, Jammu visited our neurointensive care facility for one week each between 21/01/2008 to 02/02/2008.
4. Dr. A. K. Jain visited the department for pain management training from 14/03/2008 to 28/03/2008.

National & International Conferences

The department faculty and residents attended 9 conferences (5 National and 4 international) and two Symposia. Nine lectures (7 in national conferences and 2 in international conferences) were delivered by faculty members and 7 (5 international + 2 national) research papers were presented by faculty members and senior residents in conferences.

RESEARCH

Departmental Projects

Completed

1. Stellate ganglion block as a treatment option for refractory cerebral vasospasm following aneurysmal subarachnoid haemorrhage.
2. A comparison of three anaesthetic techniques used for transsphenoidal pituitary surgery.
3. A randomized, double blinded comparison of ondansetron, granisetron and placebo for prevention of postoperative nausea and vomiting after supratentorial craniotomy.

Ongoing

1. Evaluation of invasive versus non-invasive haemodynamic monitoring in supratentorial tumour surgery: A cost effective-analysis.
2. A comparison of two anaesthetic techniques for paediatric spinal surgery: Sevoflurane versus Isoflurane.
3. A review of intraoperative complications during neuronavigation: Our institutional experience.
4. Retrospective analysis of neurological outcome following intracranial aneurysm surgery.
5. Perioperative management and complications in children undergoing meningocele repair.
6. A comparative study of propofol and thiopentone for cerebral protection during temporary clipping in intracranial aneurysm surgery.
7. A comparative evaluation of Laryngeal Mask Airway (LMA) and Endotracheal Tube (ETT) use during neuroradiological procedures.
8. Comparative study between early and delayed extubation after transoral otoidectomy and posterior fixation.

PUBLICATIONS

Journals

1. Bithal PK, Pandia MP, Chouhan RS, Sharma D, Bhagat H, Dash HH, Arora R: Hemodynamic and bispectral index changes following skull pin attachment with and without local infiltration of the scalp. *J. Anaesth.* 2007; 21 (3): 442-444.
2. Pandia MP, Bithal PK, Bhagat H, Sharma M. Airway obstruction after extubation following use of transesophageal echocardiography for posterior fossa surgery in the sitting position. *J. Clin. Neurosci.* 2007; 14(11): 1139-1141.
3. Rath GP, Singh D, Bithal PK, Prabhakar H. Symptomatic atlantoaxial dislocation in Marfan's syndrome: anaesthetic considerations. *Eur. J. Anaesthesiol* 2007; 24(12): 1058-1060.
4. Rath GP, Dash HH, Prabhakar H, Pandia MP. Cardiorespiratory arrest during anhydrous glycerol injection for trigeminal rhizolysis. *Anaesthesia* 2007; 62(9): 971-972.
5. Rath GP, Bithal PK, Chaturvedi A, Dash HH. Complications related to positioning in posterior fossa craniectomy. *J Clin. Neurosci.* 2007; 14(6): 520-525.

6. Rath GP, Prabhakar H. Spectral entropy monitoring in a patient undergoing awake craniotomy. *J. Neurosurg. Anesthesiol.* 2007; 19(2): 144.
7. Prabhakar H, Bithal PK, Pandia MP, Gupta MM, Rath GP. Bradycardia due to hydrogen peroxide irrigation during craniotomy for craniopharyngioma. *J. Clin. Neurosci.* 2007; 14(5): 488-490.
8. Prabhakar H, Jain V, Rath GP, Bithal PK, Dash HH. Stellate ganglion block as alternative to intrathecal papaverine in relieving vasospasm due to subarachnoid hemorrhage. *Anesth. Analg.* 2007; 104(5): 1311-1312.
9. Prabhakar H, Rath GP, Bithal PK, Suri A, Dash HH. Variations in cerebral haemodynamics during irrigation phase in neuroendoscopic procedures. *Anaesth. Intensive Care* 2007; 35(2): 209-212.
10. Prabhakar H, Rath GP, Arora R. Sudden cardiac standstill during skin flap elevation in a patient undergoing craniotomy. *J. Neurosurg. Anesthesiol.* 2007; 19(3): 203-204.
11. Prabhakar H, Bithal PK, Suri A, Rath GP, Dash HH. Intracranial pressure changes during valsalva manoeuvre in patients undergoing a neuroendoscopic procedure. *Minimally Invasive Neurosurg.* 2007; 50(2): 98-101.
12. Prabhakar H, Rath GP. Bispectral index monitoring may have alternate uses! *Anaesth. Intensive Care* 2007; 35(4): 621.
13. Prabhakar H, Ali Z, Rath GP. Posterior fossa haematoma following sudden decompression of acute hydrocephalus resulting from neuroendoscopy. *Anaesth. Intensive Care* 2007; 35(4): 608-609.
14. Prabhakar H, Rath GP, Arora R, Jha M. Increased risk of venous oxygen embolism with use of hydrogen peroxide in sitting position. *J. Clin. Anesth.* 2007; 19(5): 406-407.
15. Prabhakar H, Arora R, Rath GP, Bithal PK. The analgesic effects of preoperative Gabapentin in patients undergoing surgery for brachial plexus injury – A preliminary study. *J. Neurosurg. Anesthesiol.* 2007; 19 (4): 235-238.
16. Prabhakar H, Ali Z, Rath GP, Singh D. Zero bispectral index during coil embolization of intracranial aneurysm. *Anesth. Analg.* 2007; 105(3): 887- 888.
17. Prabhakar H, Dash HH. Minutes of the 2nd International Symposium and 8th Annual Conference of Indian Society of Neuroanaesthesiology and Critical Care (ISNACC 2007), February 9 – 11th. *Anesthesiology* 2007; 107: 685–686.
18. Prabhakar H, Rath GP. Intraoperative bronchospasm under spinal analgesia – a case report. *Middle East J Anesthesiol* 2007; 19: 225–229.
19. Gupta MM, Bithal PK, Dash HH, Chaturvedi A, Prabhakar H. Clinical outcome of intracranial aneurysms: A retrospective comparison between endovascular coiling and neurosurgical clipping. *Ind. J. Anaesth.* 2008; 52: 63–69.
20. Bhagat H, Dash H H, Bithal P K, Chouhan R S, Pandia M P. Planning of early emergence in neurosurgical patients: A comparison of low dose anesthetics. *Anesthesiology*, 2007; 107: A1079.
21. Jain V, Dash HH, Chouhan RS, Suri A, Rath GP: Effect of stellate ganglion block on refractory cerebral vasospasm. *Anesthesiology*, 2007; 107: A1853.
22. Jain V, Bithal PK, Rath GP. Pressure sore on malar prominences by horse-shoe headrest in prone position. *Anaesth. Intensive Care* 2007; 35(2): 304-305.
23. Jain V, Sharma A, Mitra J, Prabhakar H. Broken stylet: a rare cause of tracheal tube obstruction. *Middle East J Anesthesiology* 2008; 19: 909–911.

24. Jain V, Sharma D, Prabhakar H, Dash HH. Metformin Associated Lactic Acidosis following Contrast Media-Induced Nephrotoxicity. *Eur. J. Anaesthesiol.* 2008; 25(2): 166–167.
25. Ali Z, Rath GP, Prabhakar H. Transient hypothalamic dysfunction causing episodic cardiac dysrhythmias. *Eur. J. Anaesthesiol.* 2007; 24(8): 726-727.
26. Arora R, Chablani D, Prabhakar H, Rath GP. Pulmonary edema following venous air embolism during transsphenoidal pituitary surgery. *Acta Neurochirurgica (Wein)* 2007; 149(11): 1177-1178.
27. Mitra JK, Rath GP, Prabhakar H. Atrio-ventricular junctional rhythm in a child with acutely raised intracranial pressure. *Ind. J. Anaesth.* 2008; 52(1): 99-100.
28. Mitra JK, Jain V, Sharma D, Prabhakar H, Dash HH. A survey on use of nitrous oxide in current anaesthetic practice in India. *Ind. J. Anaesth.* 2007; 51: 405–408.
29. Mitra JK, Pandia MP, Dash HH, Tomar AK. Moderate hyperkalaemia without ECG changes in the intraoperative period. *Acta. Anaesthesiol. Scand.* 2008; 52(3): 444-445.
30. Singh M, Chauhan H, Rath GP, Prabhakar H, Bithal PK, Dash HH. Effect of narcotic pre-treatment on pain after rocuronium injection: a randomized, double-blind controlled comparison with lidocaine. *J. Anesth.* 2007; 21(4): 510-512.
31. Prakash SP, Prabhakar H, Rath GP. Postoperative stridor after resection of cerebellopontine angle epidermoid. *J. Neurosurg. Anesthesiol.* 2007; 19(3): 204-205.
32. P Suman Prakash, Prabhakar H. Transient hiccups and stridor after surgery for brain-stem tumour. *J. Neurosurg. Anesthesiol.* 2007; 19: 288–289.
33. Prakash PS, Pandia MP. A complication associated with the use of a drug injection catheter through a fiberscope. *Anesthesiology* 2008; 108(1): 173.
34. Das SC, Pandia MP, Sharma MS. Intra-operative hyperkalaemia following extensive muscle dissection. *Anaesthesia* 2008; 63(3): 322-323.
35. Ramaiah VK, Chouhan RS, Dash HH, Bithal PK, Radhakrishnan M, Gupta MM. Effect of intraoperative rupture of intracranial aneurysm on neurological outcome. *Anesthesiology*, 2007; 107: A1062.
36. Subramaniam K, Pandia MP, Dash M, Dash HH, Bithal PK, Bhatia A, Subramaniam B. Scheduled prophylactic ondansetron administration did not improve its antiemetic efficacy after intracranial tumour resection surgery in children. *Eur. J. Anaesthesiol.* 2007; 4(7): 615-619.
37. Singh M, Chablani D, Prabhakar H, Bithal PK. Malfunctioning intravenous cannula due to a manufacturing defect. *Ind. J. Anaesth.* 2007; 51: 555–556.
38. Gandhi R, Prabhakar H. Emergency caesarean section in a patient with intracerebral tuberculoma. *Ind. J. Anaesth.* 2007; 51: 244–246.
39. Toshniwal G, Bhagat H, Rath GP. Bradycardia following negative pressure suction of subgaleal drain during craniotomy closure. *Acta Neurochirurg. (Wein)* 2007; 149(10): 1077-1079.
40. Bose S, Ali Z, Rath GP, Prabhakar H. Spontaneous spinal epidural haematoma: a rare cause of quadriplegia in the post-partum period. *Br. J. Anaesth.* 2007; 99(6): 855-857.
41. Afroza S, Ali Z, Prabhakar H. Severe systemic hypotension during repair of large leaking meningocele. *J. Anesth.* 2008; 22: 59–60.
42. Chander B, Bhagat H, Prabhakar H. Adriamycin induced pulseless electrical activity and cardiovascular collapse during general anaesthesia for Ventriculo-peritoneal shunt insertion. *Middle East J Anesthesiology* 2008; 19: 841–846.

PATIENT CARE

Perioperative anaesthetic Care

- i) Neurosurgical operations (Total–2666) = Elective (1848) + Emergency (818)
- ii) Neuroradiological procedures (Total–444) = Diagnostic (299) + Therapeutic(145)

Neuro-Intensive Care Unit

Intensive care management of 2497 patients (2357 neurosurgical and 140 neurologic patients) was performed.

Pain clinic

A total of 745 patients (170 New and 575 Old) were seen in the O.P.D. 132 of them were treated with nerve blocks in the operation theater.

AWARDS AND HONOURS

1. Dr. H. Prabhakar was elected member of executive committee of Indian Society of Neuroanaesthesiology and Critical Care (ISNACC) at the 9th Annual Conference of the Indian Society of Neuroanaesthesiology and Critical Care (ISNACC) held at Hyderabad (A.P.) in Feb. 2008.
2. Dr. V. Jain won the best paper award for his poster presentation on the research article entitled “Effect of stellate ganglion block on refractory cerebral vasospasm” at the Annual Meeting of the American Society of Anesthesiologists held at San Francisco, California from 13 – 17 Sept. 2007.
3. Dr. V. Jain won the second prize for best paper award for his poster presentation on the research article entitled “A randomized, double blinded comparison of ondansetron, granisetron and placebo for prevention of postoperative nausea and vomiting after supra-tentorial craniotomy”, at the 9th Annual Conference of the Indian Society of Neuroanaes-thesiology and Critical Care (ISNACC) held at Hyderabad (A.P.) in Feb. 2008.
4. Department of Neuroanaesthesiology was awarded organisation of “Asian Conference of Neuroanaesthesiology and Critical Care” in the year 2010.

VISITING SCIENTISTS

Dr. Sanjit Narang, a consultant anaesthesiologist from USA visited the department and delivered a lecture.

Neurology

Professor and Head

Madhuri Behari

Professors

Kameshwar Prasad*

M.V. Padma

Associate Professor

M. Tripathi

Sumit Singh

Vinay Goyal

Achal Srivastava

Assistant Professors

Garima Shukla

Rohit Bhatia

Mamta Bhushan Singh

*Visiting professor abroad

EDUCATION

Actively involved in all teaching programs of the department of Neurology and the institute, training undergraduate and post-graduate and post doctoral (DM) students. This includes guidance for preparation and presentation of seminars, journal clubs and clinical combined rounds of the department.

Organized Clinical Appraisal Seminars on

1. Clinical Meeting of Hazard Ratio at AIIMS on 4th August 2007
2. Kaplan-Meier Curve : Primer for clinicians at AIIMS on 25th August 2007
3. Kaplan-Meier Curve : Primer for clinicians at AIIMS on 30th August 2007
4. Kaplan-Meier Curve : Practical exercises at AIIMS on 22nd September 2007

CME

Lectures delivered

1. "Botulinum toxin from bench to clinic" Endowment lecture delivered at Neurovision, organized by Andhra Medical College, Vishakhapatnam, Aug 2007.
2. "Management of Parkinson's disease" lecture delivered at CME, Andhra Medical College, Vishakhapatnam, Aug 2007.
3. "Motor fluctuations in Parkinson's Disease" at First Asian Experts Meeting on Management of Parkinson's disease., at Singapore, July 2007.
4. "Quality of Life in Parkinson's disease" lecture delivered at the 1st Asian Oceania. Parkinson's Disease. And Movement Disorders Congress, Singapore Oct,2007.
5. "Are there non-motor symptoms in PD" lecture delivered at the 1st Asian Oceania. Parkinson's Disease. And Movement Disorders Congress, Singapore Oct,2007.
6. "Tremor" Breakfast session conducted at the WFN, International Congress on Parkinson's Disease and Movement Disorders, Amsterdam, Dec.2007.
7. Conducted hands – on workshop on use of botulinum toxin in focal dystonia at Visiting Professorship Program of movement disorders society, IHBAS, Nov.2007.
8. "Tremor : approach" Lecture delivered at the 1st Educational course of AO Section of Movement Disorders Society, Varanasi, March 2008

- 9 “Management of Advanced PD” delivered at the 1st Educational course of AO Section of Movement Disorders Society, Varanasi, March 2008
- 10 “Approach to chronic meningitis lecture delivered at Tropical Neurology subsection of Indian Academy of Neurology, Bikaner, March 2007.
11. “EBM in relation to patient care.” Symposium on medical informatics, India Habitat Centre, New Delhi 5 September 2007.
12. “Importance of evidence based medicine in clinical practice.” VIMHANS, New Delhi, 14 September 2007.
13. “How to Teach Evidence Based Clinical Practice Workshop”, McMaster University, Hamilton, Canada: 24th to 29th June 2007.
14. “Meet the Professor Programme” at AFMC, Pune on 21st July 2007.
15. Invited to participate in the Annual Meeting of the South Asian Cochrane Network (SACN) Site Coordinators held at Ramaratnam Epilepsy Foundation held at Chennai on 22 August 2007.
16. Stroke Subgroup Meeting at the Annual Conference of Indian Academy of Neurology, Mumbai on 5th October 2007.
17. “Neuroprotection: Present and Future” 3rd National Congress of Indian Stroke Association held at Amritsar from February 8-10, 2008.
18. “Specific treatment strategies for acute stroke’ and also conducted the “teaching program” for the medical students of Kanpur Medical College “Stroke and Seizures”. International Update in Epilepsy held in Feb, 2008, at Delhi.
19. “Synthesizing the program” in the ICMR Stroke Surveillance Workshop held in November, 2007, in Delhi at ICMR headquarters.
20. “Hyperacute thrombolysis for acute ischemic stroke in the developing countries” at the first American Science Academy conference held in collaboration with Indo US Science and Technology Forum, Govt. Of India at Irvine, California, in 2007.
21. “Diagnosis of Brain Death” at the National symposium on “Brain Death” held at AIIMS, in Mar, 2008.
22. “Secondary Prevention of Ischemic Stroke” at the APICON, held in Goa, in 2007.
23. “Stem Cell Therapy in Stroke: Hope or Hype” at the National Conference of Hematology and Satellite CME on Stem Cell Therapy, held at AIIMS, in 2007.
24. Acute Interventions in Cardio Embolic Stroke held under the auspices of Escorts Medical Center in the International Conference on Acute Interventions for Stroke, Jan, 2008.
25. “Neuroprotection: Present and Future” 3rd National Congress of Indian Stroke Association held at Amritsar from February 8-10, 2008.
26. “Specific treatment strategies for acute stroke’ in Annual conference of Neurosciences Meet in Kanpur in September, 2007.
27. “Stroke and Seizures” in International Update in Epilepsy held in Feb, 2008, at Delhi.
28. “Synthesizing the program” in the ICMR Stroke Surveillance Workshop held in November, 2007, in Delhi at ICMR headquarters.
29. “Management of Hemorrhagic Stroke” at the First Indo–Pak Colloquium on Neurosciences, held at PGIMER, Chandigarh in 2007.
30. “Secondary Prevention of Ischemic Stroke” at the APICON, held in Goa in 2007.

31. "Acute management strategies for stroke" in XVIII annual conference of API held at Kota in 2007.
32. "Optimization of antiplatelet therapy in stroke" held on the World stroke day, organized by IMR chapter of Delhi, in June, 2008.
33. Vascular Dementia 4th Asia Pacific Conference Against Stroke (APCAS 2007), New Delhi, India. 29th Mar- 1st Apr 2007
34. Intractable epilepsy Video presentation. ECON, 2007, Mumbai, 3-4 Oct 2007
35. 4th Asia Pacific Conference Against Stroke (APCAS 2007), New Delhi, India. 29th Mar- 1st Apr 2007
36. "Practical Issues In Stroke Management Tips for Physicians" & "Minimal Interventional Endovascular Procedure In Stroke Management", Ghaziabad, 8th Apr 2007
37. "Chronic Meningitis", CME-XIX, Neurosciences update, Sant Parmanand Hospital, 3rd Jun 2007
38. "Workshop on Strategies in Medical Education", AIIMS, New Delhi, India. 1-3 Aug. 2007
39. "Advances in management of Parkinson's disease", 3rd National Medicine Update 2007, Research & Scientific Society, Gandhi Medical College, Bhopal. 22nd Sep 2007
40. "Care of unconscious patients" Neurosciences update, AIIMS, New Delhi, 15-16 Oct 2007
41. "Intervention in stroke" in Annual National Conference of IMAAMS-AMSCON-2007, New Delhi. 9th Dec 2007
42. "Common Sleep Disorders", Department of Neurology, Kota Medical College, Kota. 9th Feb 2008
43. "Acute bacterial & Fungal meningitis" "MID TERM CONFERENCE OF TROPICAL NEUROLOGY", under aiges of Tropical neurology, IAN sub section, Bikaner, 15-16th Mar 2008

RESEARCH

Funded Projects

Completed

1. 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. Prof. M. Behari; Funding Agency: Clinirx; Duration: 1 year; Total Funds: Rs 8.0 lakhs
2. Intravenous autologous bone marrow stromal cells (MSC) or mononuclear cells (MMC) for patients with acute ischaemic stroke (Pilot phase). Prof. K. Prasad; Funded by: Department of Biotechnology, Govt. of India.

Ongoing

1. Transplantation of human retinal pigment epithelial (hRPE) cells in the 6-OHDA lesioned rat model of Parkinson's disease. Prof. M. Behari; Funding Agency: DBT; Duration: 3 years (2006-2008); Total funds: Rs 42.97 lakhs.
2. Motor responses to noxious and non noxious stimuli in spinalized humans: role of electro magnetic stimulation. Prof. M. Behari; Funding Agency: DST; Duration: 3 years (2005-2007); Total Funds: Rs 7.95 lakhs

3. Identification of novel gene(s) in familial Parkinson's disease. Prof. M. Behari; Funding Agency: DBT; Duration: 3 years (2007 -2009); Total Funds: Rs 1.98 lakhs
4. Protocol OV-1003 Safety and Efficacy of Melperone in the Treatment of Patients with Psychosis Associated with Parkinson's disease. Prof. M. Behari; Funding Agency: Ovation Pharma; Duration: 3 years (2007-2009); Total Funds: Rs 22.0 lakhs
5. 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. Prof. M. Behari; Funding Agency: Eisai; Duration: 3 years (2007-2009); Total Funds: Rs 23.0 lakhs
6. Autologous intra-arterial infusion of bone marrow mononuclear cells for static encephalopathy with special reference to cerebral palsy. Prof. M.V. Padma; Funding Agency: DST; Total Funds: Rs. 23.0 lakhs.
7. Normobaric Oxygen Therapy for Acute Ischemic Stroke: A pilot study in Indian patients. Prof. M.V. Padma; Funding Agency: ICMR; Total Funds: Rs 20.0 lakhs.
8. 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. Dr. M. Tripathi; Funding Agency: DBT; Total Funds: Rs 30.0 lakhs.
9. Cognitive activation studies of language and memory as a preoperative evaluation in patients with intractable epilepsy – a novel noninvasive method of investigation. Dr. M. Tripathi; Funding Agency: DST; Total Funds: 25 lakhs.
10. Mitochondrial variation and common founder for the Friedreich ataxia in the Indian population. Dr. Achal Srivastava; Funding Agency: ICMR; Duration of the Project: 3 years (Nov 2007-Oct 2010); Total Funds: Rs 4.5 lakhs
11. Intravenous autologous bone marrow derived stem cell therapy for patients with acute ischemic stroke: A multi-institutional project. Dr. Achal Srivastava; Funding Agency: DBT; Total Funds: Rs 19.0 lakhs
12. Mobilization of stem cells using GCSF for acute ischemic stroke: a randomized clinical trial. Dr. Achal Srivastava; Funding Agency: DBT; Total Funds: Rs 25.0 lakhs
13. Autosomal Dominant Hereditary ataxias and development of a locus specific disease database(LSDB). Dr. Achal srivastava; Funding Agency: CSIR; Duration of the Project: 5 years; Total Funds: Rs 1.5 crore.

Departmental Projects

1. Public perception of stroke, knowledge of risk factors and treatment
2. Risk Factors analysis of Stroke: case control study
3. Awareness of stroke and risk factors in stroke patients
4. Non-epileptic seizures in villagers
5. Evoked Responses in Hereditary Ataxias
6. Nerve Conductions in ADCAs
7. Autonomic Functions involvement in Genetically Confirmed Spinocerebellar ataxias
8. Predictors of time to seizure occurrence in patients admitted for VEEG
9. Functional MRI of speech disturbance in Parkinsonism
10. Sleep disturbance in TBM
11. Treatment of acute ischeamic stroke with transcranial Doppler

12. Parkinson's disease in women
13. Psychological profile in intractable epilepsy patients undergoing surgery

Collaborative Projects

1. Thrombolysis with intravenous rt-PA for acute ischaemic stroke: the third International Stroke Trial. (IST-3). *Funded by: Medical Research Council of United Kingdom*
2. 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 of United Kingdom*
3. Brainsgate- Sphenopalatine ganglion stimulation for Vascular Dementia- (Brainsgate) Intravenous autologous bone marrow stromal cells (MSC) or mononuclear cells (MMC) for patients with acute ischaemic stroke (Pilot phase) DBT.
4. Mobilization of stem cells using GCSF for acute ischemic stroke: a randomized clinical trial" DBT.
5. STICH II- *Funded by : Medical Research Council of United Kingdom*
6. Normobaric oxygen therapy in acute ischemic stroke. DST funded.

PUBLICATIONS

Journals

1. Gupta P, Behari M. Akinetic rigid syndrome: An overview. *Ann Indian Acad Neurol* 2007; 10:21-30.
2. Padma MV, Singh MB, Bhatia R, Srivastava A, Tripathi M, Shukla G, Goyal V, Singh S, Prasad K, Behari M. Hyperacute thrombolysis with IV rtPA of acute ischemic stroke: Efficacy and safety profile of 54 patients at a tertiary referral center in a developing country. *Neurol India*. 2007 Mar;55(1):46-9.
3. Rasool Suhail, Jailkhani BL, Irshad M, Behari M, Suhail Shahnaz and Shabirul H. Purification of Beta Bungarotoxin (β -Bgtx) Binding protein from Human Cadaver Skeletal Muscle. *J.Med.Sci.* 7 (2): 195-202; 2007.
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5. Shukla G, Singh S, Goyal V, Gaikwad S, Srivastava A, Bal CS, Gupta A, Behari M Prolonged preictal psychosis in refractory seizures: A report of three cases. *Epilepsy Behav.* 2008 Feb 29;
6. 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 Feb 20;
7. Prasad K, Bhatia R, Srivastava MV, Pardasani V, Garg A, Rishi A. Fatal subacute necrotising brainstem encephalitis in a young man due to a rare parasitic (Balamuthia) infection. *Pract Neurol.* 2008 Apr; 8(2):112-7.
8. Prasad K, Singh MB. Corticosteroids for managing tuberculous meningitis. *Cochrane Database Syst Rev.* 2008 Jan 23;(1):CD002244. Review.
9. Prasad K. Delays in publishing the results of clinical trials harm patients, and public health. *Pract Neurol.* 2008 Feb;8(1):6-7.

10. Bhatia R, Desai S, Garg A, Padma MV, Prasad K, Tripathi M. Isolated facial myokymia as a presenting feature of pontine neurocysticercosis. *Mov Disord.* 2008 Jan;23(1):135-7.
11. 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 May; 23(5):635-40.
12. Prasad K, Karlupia N. Prevention of bacterial meningitis: an overview of Cochrane systematic reviews. *Respir Med.* 2007 Oct; 101(10):2037-43. Review.
13. SCOPE (Stroke Complications and Outcomes Prediction Engine) Collaborations; IST, Lewis SC, Sandercock PA, Dennis MS. Predicting outcome in hyper-acute stroke: validation of a prognostic model in the Third International Stroke Trial (IST3). *J Neurol Neurosurg Psychiatry.* 2008 Apr;79(4):397-400.
14. Srivastava A, Mansel RE, Arvind N, Prasad K, Dhar A, Chabra A. Evidence-based management of Mastalgia: a meta-analysis of randomised trials. *Breast.* 2007 Oct; 16(5):503-12.
15. Prasad K, Krishnan PR, Al-Roomi K, Sequeira R. Anticonvulsant therapy for status epilepticus. *Br J Clin Pharmacol.* 2007 Jun; 63(6):640-7.
16. Padma MV, Singh MB, Bhatia R, Srivastava A, Tripathi M, Shukla G, Goyal V, Singh S, Prasad K, Behari M. Hyperacute thrombolysis with IV rtPA of acute ischemic stroke: Efficacy and safety profile of 54 patients at a tertiary referral center in a developing country. *Neurology India.* 55(1): 46-49, 2007.
17. Pandian JD, Padma MV, Vijay P, Sylaja PN, Murthy JMK. Stroke and thrombolysis in developing countries. *International Journal of Stroke.* Vol2: 17-26; 2007.
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19. Ahmed FU, Tripathi M, Padma MV, Gaikwad S, Gupta A, Bal CS, Sarkar C, Gupta S, Wadhwan AN, Sharma BS, Chandra PS. Health-related quality of life using QOLIE-31 : Before and after epilepsy surgery a prospective study at a tertiary care center. *Neurol India.* 55(4): 343-348; 2007.
20. Bhatia R, Vibha D, Srivastava MV, Prasad K, Tripathi M, Bhushan Singh M. Use of propofol anesthesia and adjunctive treatment with levetiracetam and gabapentin in managing status epilepticus in a patient of acute intermittent porphyria. *Epilepsia.* 2008 May;49(5):934-6.
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22. The Intractable Epilepsy Problem in Developing Countries: Is There a Way Out?. Sujoy K. Sanyal, P. Chandra, Manjari Tripathi, . *Neurosurgery*, 2007, 793.
23. Gupta P, Singh S, Goyal V, Shukla G, Behari M. Low-dose topiramate versus lamotrigine in migraine prophylaxis (the lotolamp study). *Headache* 2007; 47(3): 402-12.
24. Goyal V, Vaishya S, Shukla G, Singh S, Behari M. Unusual complication of deep brain stimulation in Parkinson's disease. *Mov Disc* 2007; (Accepted)
25. Trikha I, Singh S, Goyal V, Shukla G, Bhasin R, Behari M. Comparative efficacy of low dose, daily versus alternate day plasma exchange in severe myasthenia gravis: A randomised trial. *J Neurol.* 2007 Aug 11; [Epub ahead of print]
26. Shukla G, Bhatia M, Singh S, Goyal V, Srivastava T, Behari M. Atypical Kleine-Levin syndrome: Can insomnia and anorexia be features too? *Sleep Med.* 2007 Jul 17; [Epub ahead of print]

Abstracts

1. Srivastava AK, Mukerji M, Padma MV, Prasad K, Behari M. Novel intermediate alleles for SCA – 12 in Indian patients. 1st Asian Oceanian Congress of Parkinson's disease and Movement Disorders, Singapore, Oct 2007; p43.
2. Srivastava A.K., Mukerji M, Padma MV, Prasad K, Behari M. Sca7 Among Indian families: first report. 1st Asian Oceanian Congress of Parkinson's disease and Movement Disorders, Singapore, Oct 2007;p43
3. Yadav R., Goyal V, Singh S, Shukla G, Behari M. Knowledge about Parkinson's disease among patients and caregivers: An Indian perspective. 1st Asian Oceanian Congress of Parkinson's disease and Movement Disorders, Singapore, Oct 2007;p51-52.
4. Gambhir H, Sen S, Tandon R, Vivekanandhan S, Raina V, Behari M. Human RPE isolation and culture for treatment of Parkinsonism. 1st Asian Oceanian Congress of Parkinson's disease and Movement Disorders, Singapore, Oct 2007.
5. Siddiqui SN, Soundarajan Christudass, Manral Mala, Vivekanandhan V, Behari M. Co enzyme Q10 in Parkinson's disease (PD). 1st Asian Oceanian Congress of Parkinson's disease and Movement Disorders, Singapore, Oct 2007;p55.
6. Hamid S, Vivekanandhan S, Singh S, Behari M, Clinical features of myasthenia gravis patients with auto-antibodies to muscle specific tyrosine kinase (MuSK) Annals of Indian Academy of Neurology; p18 (Suppl):2007
7. Hamid S, Vivekanandhan S, Singh S, Behari M. Seropositive MG in north Indian population. Annals of 11th International Conference on Myasthenia gravis and related disorders, May 2007
8. Goyal C, Behari M. Evaluation of depression in patients with dystonia. 1st Asian Oceanian Congress of Parkinson's disease and Movement Disorders, Singapore, Oct 2007; p40-41.
9. Goyal C, Behari M. Demographic and clinical profile of writer's cramp. 1st Asian Oceanian Congress of Parkinson's disease and Movement Disorders, Singapore, Oct 2007; p41.
10. Shukla G, Singh S, Behari M. Oro-mandibular dystonia in SCA 12. 1st Asian Oceanian Congress of Parkinson's disease and Movement Disorders, Singapore, Oct 2007; p43.
11. Yadav R, Goyal V, Garg A, Shukla G, Singh S, Behari M. Post Japanese encephalitis vaccination secondary Parkinsonism – a case report. Annals of Indian Academy of Neurology;2007
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13. Srijithesh P R, Paradasai V, Shukla G, Goyal V, Singh S, Behari M. Psychometric properties of qualitative clock drawing test compared to MMSE. Annals of Indian Academy of Neurology; 2007
14. Goyal V, Shukla G, Singh S, Behari M. Neurocysticercosis and chorea. Annals of Indian Academy of Neurology; 2007.

Chapters in Books

1. Goyal V, Behari M. Approach to tremor. Eds Prabhakar S, Taly AB. In Reviews in Neurology. Chandika Press Pvt. Ltd., Chandigarh, India 2007 ; 316-329.
2. Behari M. Recent Advances in the management of Parkinson's disease. In Satyanarayan V (eds). Proceedings of Neurovision – 2007, CME ; 1-18 :2007.
3. M.V.Padma. Secondary Prevention of Ischemic Stroke. Medicine Update. Vol 17: (Ed): RK Singhal; 716-727; 2007.
4. M.V.Padma. Toxic Neuropathies. For Reviews in Neurology. (Ed) K.Bhattacharya; 2007: (In print).

5. M.V.Padma. Examination of Nervous System. Text book for Medical Graduates. (Ed) Dr. S.Chumber; (In print).
6. M.V.Padma. Stem cell therapy in stroke. For Annals of National Academy of Medical Sciences (In print).
7. Padma MV. Acute ischemic stroke. Manual of Medical Emergencies. 3 rd edition. (Ed): Grover et. al. 2007: 632-638.
8. Tripathi M. Episodic loss of consciousness—Manual of Medical Emergencies. 3rd edition – Editor Dr. Ashok Grover, Dr. Vinay Aggarwal, Dr. Prakakash Gera, Dr. Rajiv Gupta 2007; 618-628.
9. Tripathi M. Visual loss in the Emergency Room—Manual of Medical Emergencies -3rd edition – Editor Dr. Ashok Grover, Dr. Vinay Aggarwal, Dr. Prakakash Gera, Dr. Rajiv Gupta 2007; 663-677.
10. Tripathi M, Presurgical Evaluation for Epilepsy Surgery —Name of Book- Behavioral Aspects of Epilepsy principal and practice- Editor Steven C. Schachter, Gregory L. Holmes, Dorothee G.A.Kasteleijn- Nolst Trenite. 2008, 297-306.
11. Tripathi M. Diagnosis of Dementia, Published in—First Asian and Second National Medical Students’ Conference, Pune, Moving Academy of Medicine and Biomedicine. 2008; 42-44.
12. Tripathi M. Refractory Epilepsy How Much Investigate?—published in The Association of physicians of India Medicine update Editor - S.K. Bichile 2008:(18);578-85.
13. Tripathi M .Sleep Disorders and epilepsy. Proceedings of Third National Conference of INDIAN SOCIETY FOR SLEEP RESEARCH (ISSR 2007) 14th-15th December.
14. Tripathi M. Neuropsychiatric Disability in Epilepsy—Is Women With Epilepsy More Disabled? NEUROLINKS, International Journal in the Neurosciences,vol.05.01 (Spring & Summer)16th July 2007; 19-20.
15. Tripathi M. Stroke Strikes—quite hard, Guardian Health Chronicle - January 31, 2008 -February 13, 2008; 1.
16. Tripathi M. From Prejudice to compassion - Guardian Health Chronicle - November 8 – November 21, 2007; 2.
17. Tripathi M. Holes in memory - Guardian Health Chronicle – September 13-26, 2007.

PATIENT CARE

- Parkinson’s disease awareness program
- Facility available for botulinum toxin for dystonia and spasticity intrathecal baclofen for spasticity and deep brain stimulation for Parkinson’s disease
- Outdoor: Total Old and New Patients **58,952**

Procedures done in EMG/EEG lab.

EEG	2780
Long and short term VEEG	235
Evoked Potentials	114
NCV – EMG	2112
QST	36

Community Services/Camps

The department of Neurology organized following patient awareness programmes:

1. Parkinson's Disease : April 2007
2. Epilepsy : Nov 2007
3. Headache : August 2007
4. Brain Storm : December 2007

The faculty members routinely give talks on radio and television on neurological disorders like migraine, Parkinson's Disease, Epilepsy, Stroke, Myasthenia gravis, Muscle disorders etc.

AWARDS AND HONOURS

Prof. M. Behari President of Parkinsonism and Related disorders Awareness Network (an NGO for parkinsonism patients) ; Invited as Liason delegate between National Neurological Association and the International Movement Disorders Society, Vienna; Invited Consultant to on international research project on SPECT study in early dementia, IAEA, Vienna meeting held from 19th – 22nd Nov, 2007; Invited Member to attend meeting on collaborative project of DST – ILTP Russia Research grant held from 12–21st Sept, 2007 at Moscow; Appointed as Inspector by MCI for Inspection of various Medical colleges; Invited faculty to attend Advisory Board meeting held from 18–19th Oct, 2007 in Singapore; Appointed as member of the Trial Committee and act as the Country coordinator (Consultant)-Phase III Program in fluctuating Parkinson's Disease of Eisai Ltd, London.

Prof. K. Prasad was appointed as Director, Clinical Epidemiology Unit, AIIMS, New Delhi.

Prof. M.V. Padma was awarded the ACHANTA LAXMIPATHI ORATION for the year 2006-2007 by the NAMS; awarded the Fellowship to the NAMS (FAMS) by the National Academy of Medical Sciences for the year, 2007; Selected to be the NATIONAL CO-ORDINATOR for the SITS-MOST- NEW, INDIA Registry for “thrombolysis program in AIS” for India; Invited to represent India by the INSA, for the Indo-US Science and Technology Conference held at Irvine California; Awarded the Travel Fellowship for conducting the research on feasibility of collaborative program between Neurosciences, Harvard (MGH) Boston and AIIMS, by the IUSSTF, Govt. of India, between July 7th to the 18th of 2007; Guest of Honor and delivered the public oration for the year, 2007 in DMC, Ludhiana.

Dr. M. Tripathi was admitted to the FACULTY OF 1000 by the International league against epilepsy; Designated TASK FORCE leader in the ILAE disabilities in Epilepsy section; Received the young investigator award for the AOEC held in Xiamen China for the work on Intractable epilepsy and its surgery in children; Appointed as a member of the National Task Force on Stem Cell Therapy by the Dept of Biotechnology, Govt of India.

Dr. Achal Srivastava elected as Treasurer for Asian-Oceanian Congress of Neurology, New Delhi; elected as Co-Treasurer for Asian Oceanian Parkinson's Disease and Movement Disorder Congress, New Delhi; elected as a Co-Organisizing Secretary for Annual Conference of Indian Epilepsy Society.

Neurosurgery

Professor and Head

BS Sharma

Professor

AK Mahapatra [on deputation]

Associate Professor

SS Kale

P Sarat Chandra

Ashish Suri

Aditya Gupta (on leave)

Assistant Professor

Rajender Kumar

Manmohan Singh

Manish Singh Sharma

Trauma center

Deepak Kumar Gupta

Deepak Aggarwal

Sumit Sinha

GD Satyarthee

EDUCATION

- MCh program: Post MS: 3 years, Post MBBS: 6 years
- Visiting fellows: During the period 2007-2008 8 fellows attended the dept of Neurosurgery for observership from India and Abroad
- Experimental lab: Was fully functional for microneurosurgery and neuroendoscopic training.

Continuing Medical Education

- Xth Annual Microneurosurgery and Spine workshop. Feb 2008
Chairman: Prof BS Sharma, Organizing Secy: Dr P Sarat Chandra
- First AIIMS Radiosurgery update, April, 6-8, 2007 Chairman: Prof BS Sharma, Organizing Secy: Dr Aditya Gupta
- Hands on Spine workshop for staff and residents: Neurosurgery Lab
- Hands on Endoscopy workshop for staff and residents: Neurosurgery Lab

Invited Guest lectures

- Sarveshwari Memorial Oration: Prof Brian Brophy, Director, Royal Adelaide Hospital, Australia. Topic: Trigeminal Neuralgia
- Prof Peter Black: Professor and Director, Harvard University, Boston. Topic: Intraoperative MR imaging

Lectures delivered

- **Dr P Sarat Chandra** [1] Surgery for AVM's: Is it still logical, NEUROVASCON, Trivandrum, 2007 [2] Epilepsy surgery for post infective etiologies; Plenary session at the AOES, Xiamen China [3] Neurosciences training in India; Medical Scenario in India 2008.
- **Dr Manmohan Singh** [1] CSF rhinorrhoea: An institutional experience [Annual Skull Base Surgery Conference 23-27th October 2007 New Delhi, [2] Neurosurgical Aspects of Peripheral Nerve Injury Conference and CME of Inderprastha Association of Rehabilitation Medicine (Delhi Chapter) 7-8th April 2007.

- **Dr Deepak Gupta** [1] Role of MRI as Outcome prognosticator in diffuse axonal injury: 16th annual neurotrauma conference, Gwalior, India 17th 19th August 2007,[2] Study of clinicoradiological and immunological factors affecting outcome . ESBS congress, Prague, Czech Repub 2-5th May 2007 [3] Surgical management of petroclival tumors: defining resection/ surgical outcome in 9th annual conference skull base surgical society of India, and International CME conference, New Delhi, India, 26-28th October 2007.[4] Split cord malformations: a clinicoradiological classification. International society of pediatric neurosurgery conference at Liverpool, London 11-15th Sept 2007.
- **Dr Deepak Aggarwal** Annual CNS meeting, San Diego, USA, Sep 14-17, 2007 and attended the Ramban Trauma course, Haifa, Israel, Dec 8-23, 2007, Received 'best paper' award 'Novel biochemical markers for diagnosing postoperative meningitis' at the annual conference of Indian society of pediatric neurosurgery, held at Chandigarh, India from Nov 3-5, 2007
- **Dr Sumit Sinha** [1] International Society of Pediatric Neurosurgery Scholarship travelling Award, 'Intracranial aneurysms in children- are they different from adults'. Liverpool, UK, Sep 2007. [2] [Karl Storz Fellowship Award] 'Microsurgical Management of Giant pituitary adenomas: A series of 177 cases', presented at the 8th European Skull Base Surgery Congress; held at Prague, 2007. [3] Giant pituitary adenomas: Surgical outcome in a series of 177 cases- Proposal for a novel surgical classification. 9th Annual Conference of Skull Base Surgery Society of India, 2007.[4] Bilateral anterior cerebral artery aneurysms due to mucormycosis. Poster Presentation at the 9th Annual Conference of Skull Base Surgery Society of India, 2007.[5] Correlation of cerebral oximetry and transcranial Doppler with intracranial pressure in severe traumatic brain injury. Poster Presentation at the 58th Annual Conference of Neurological surgical Society of India, Agra, 2007.[6] Best Poster award: Bilateral anterior cerebral artery aneurysms due to mucormycosis.
- **Dr Nilesh K** Outcome analysis of traumatic pediatric basal ganglion hematomas: experience of 21 cases at 18th Annual Conference of Indian society of Pediatric Neurosurgery , Chandigarh, India, 1-4th Nov 2007
- **Dr Shashank** Infant mortality in neurosurgical practice: need for raising a specialized cadre of pediatric neurointensivists? at 18th annual conference of Indian society of pediatric neurosurgery, Chandigarh, India, 1-4th Nov 2007

NATIONAL AND INTERNATIONAL CONFERENCES

- IXth Annual conference of skull base society of India with cadaveric workshop: October 2008: Chairman: Prof BS Sharma, Organizing Secy: Dr A Suri

RESEARCH

Extramural

- A phase II randomised, double blind placebo controlled, dose finding, safety and tolerability trial of x72405 as treatment for traumatic with brain injury
- A Phase II randomized double blind placebo controlled dose finding safety and tolerability trial of XY- 2405 as a treatment for traumatic brain injuries
- A Registry for Comparing Catheter-Related Infection Rates Among Various Shunt Systems in the Treatment of Hydrocephalus. (Project with Codman corporation, USA).
- Brain trial (Bradykinin B2 receptor antagonist in Neurotrauma): A multicentric randomised trial by London school of Hygiene & Tropical medicine

- Cervical spondylotic myelopathy international trial. AO spine funded project
- CRASH2 trial: A multicentric randomised trial by London school of Hygiene & Tropical medicine.
- Development of Neurosurgery Cadaver Training Centre DST-FIST 2006.
- Efficacy and safety of AP 12009 in adult patients with recurrent 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.
- Genetic abnormalities in developmental Cranio vertebral junction anomalies: Funding Agency: Dept of Biotechnology.
- Multicentric prospective randomized trial of early decompressive craniectomy in patients with severe traumatic injury (Dectra Trial)
- Role of fMRI and simultaneous EEG for non invasive localization of the epileptogenic foci. Funding Agency: Dept of Biotechnology.
- STICH II trial. Funding Agency: MRC, UK.
- Vessel size imaging by perfusion MRI in cerebral gliomas. Funding Agency: DST.

Intramural

- Autopsy study for diffuse axonal injury DAI (Intramural)
- Correlation of coagulation abnormalities in severe traumatic brain injuries with patient outcome. A prospective analysis [Co I: Dr Sumit Sinha]
- Role of Thalamus in diffuse axonal injury: An autopsy study with histopathological correlation. (Project funded by AIIMS)

PUBLICATIONS

1. Agrawal D, Gowda, NK. Piracetam in postconcussion syndrome: preliminary results of a randomised controlled study using SPECT. *IJNT* 2007;4:109-114.
2. Agrawal D, Mahapatra AK. Complex split-cord malformation associated with situs inversus totalis. *J Pediatr Neurosci* 2007;2:11-12
3. Agrawal D, Mahapatra, AK. Biomechanics of head injury. In *Textbook of Neurosurgery*. Tandon PN (ed) (In print)
4. Agrawal D, Mahapatra, AK. Intracranial hemorrhage secondary to vasculitis. In *Brain Haemorrhage*. Mahapatra AK (ed.) Jaypee Medical publishers Pvt Ltd, Delhi 2007; 166-174
5. Agrawal D, Mahapatra, AK. Postoperative Cerebral Venous Infarction. In *Brain Haemorrhage*. Mahapatra AK (ed.) Jaypee Medical publishers Pvt Ltd, Delhi 2007; 162- 165
6. Agrawal D, Mahapatra, AK. Spontaneous intracranial extradural hematomas. In *Brain Haemorrhage*. Mahapatra AK (ed.) Jaypee Medical publishers Pvt Ltd, Delhi 2007; 166-174
7. Agrawal D, Singhal A, Hendson G, Durity FA. Gyriiform differentiation in Medulloblastoma. *Ped neurosurgery* 2007;43:142-145.
8. Agrawal D, Steinbok P, Cochrane D. Significance of Beaten Copper Appearance on Skull Radiographs in Children with Isolated Sagittal Synostosis. *Childs Nerv Sys* 2007;23:1467-70.
9. Agrawal D, Steinbok. Reply to the letter by Dr. Muzumdar on the article "Simple technique of head fixation for image-guided neurosurgery in infants". *Childs Nerv Syst* 2007;23:613.
10. Ahmad FU, Agrawal D, Mahapatra AK. Triple meningocele: Cause for a new theory? *J Pediatr Neurosci* 2007;2:39-40.

11. Ahmad FU, Sharma BS, Garg A, Chandra PS. Primary spontaneous CSF rhinorrhea through the clivus: Possible etiopathology. *J Clin Neurosci*. 2008.
12. Ahmad FU, Sharma BS. Treatment of intramedullary spinal cysticercosis: report of 2 cases and review of literature. *Surg. Neurol*. 2007; 67: 74-7.
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14. Borkar SA, Satyarthee GD, Khan RN, Sharma BS, Mahapatra AK. Spontaneous extrusion of migrated ventriculoperitoneal shunt catheter through chest wall: a case report. *Turk Neurosurg*. 2008; 1: 95-8.
15. Chandra PS, Salamon N, Huang J, Wu JY, Koh S, Vinters HV, Mathern GW. FDG-PET/MRI coregistration and diffusion-tensor imaging distinguish epileptogenic tubers and cortex in patients with tuberous sclerosis complex: a preliminary report. *Epilepsia*. 2007 Sep;47(9):1543-9.
16. Chandra PS, Salamon N, Nguyen ST, Chang JW, Huynh MN, Cepeda C, Leite JP, Nader L, Koh S, Vinters HV, Mathern GW. Infantile spasm-associated microencephaly in tuberous sclerosis complex and cortical dysplasia. *Neurology*. 2007 Feb 6;68(6):438-45.
17. Chouhan MS, Sharma MS, Sharma BS. Of a crash helmet and a cranial bolt: A design change recommendation. *Neurol India*. 2007; 55: 84-5.
18. D. Jain, M. Sharma, C. Sarkar, V. Suri, A. Garg, M. Singh, B. Sharma, A. Mahapatra. Clear cell Meningioma, an uncommon variant of meningioma: a clinicopathologic study of nine cases. *Journal of Neuro-Oncology(A)* 2007;8(3): 315-21.
19. Dwarkanath S, Suri A, Sharma BS, Mahapatra AK. Neuronavigation in a developing country: A pilot study of efficacy and limitations in intracranial surgery. *Neurol India*. 2007; 55: 111-6.
20. Garg A, Agrawal D, Suri A, Mahapatra AK. Subdural Empyema in a case of Gaucher Disease: a rare presentation. *Ped Neurosurg* 2007;43:531-2.
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22. Gupta Deepak Kumar, Ashish Suri, Deepak A. K Mahapatra¹, Chitra Sarka, B. S Sharma. Surgical management of petroclival tumors: defining outcome /resection goals. *Skull base* 2007;vol 17 DOI: 10.1055/s-2007-983943
23. Gupta Deepak Kumar, S Dwarkanath, Subhashree Mahapatra, AK Mahapatra. Management strategies in glioblastoma: from the past to the future. *Pan Arab Journal of Neurosurgery* Vol 11, No 2, October 2007: 1-7
24. Gupta DK, Chandra PS, Ojha BK, Sharma BS, Mahapatra AK, Mehta VS. Awake craniotomy versus surgery under general anesthesia for resection of intrinsic lesions of eloquent cortex – A prospective randomized study. *Clin Neurol Neurosurg*. 2007; 109: 335-43.
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26. Gupta DK, Mahapatra AK. Proposal for a new clinicoradiological classification of type I split cord malformations: a prospective study of 48 cases: 35th annual meeting of International society of pediatric neurosurgery, Liverpool, UK(9th -13th Sept 2007-abstract no 138 page 1078. *Childs nervous system*(2007) 23: 1047-1090
27. Gupta DK, Nilesh S Kurware, Faiz U Ahmad, Sharma BS. Outcome analysis of basal ganglion hematoma in post traumatic pediatric patients. XVI biennial congress of the European society of

- pediatric neurosurgery 11-15th May 2008, Montreux, Switzerland (Abstract no 66, page 651): Childs Nervous System(2008) 24: 639-669
28. Gupta DK, Shashank Ramdurg, Mahapatra AK. Vascular congenital dermal sinus tract: an institutional experience of 41 cases. XVI biennial congress of the European society of pediatric neurosurgery 11-15th May 2008, Montreux, Switzerland (Abstract no 4 page 639): Childs Nervous System(2008) 24: 639-669
 29. Hussain N, Vaishya S, Agrawal D, Mahapatra AK, Surgery in Adult Spinal Dysraphism: A Series of 51 Patients. Pan Arab J Neurosurg 2007,11:23-25.
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 31. Kasliwal M, Agrawal D, Sharma BS, Mishra NK. Sudden cardiac arrest in a successfully embolized case of giant vertebral artery aneurysm with hydrocephalus. Surgical Neurology 2007;67:652– 653.
 32. Kasliwal M, Kiran S, Agrawal D, Sharma BS. Giant colloid cyst in a child. Ped Neurosurg 2007;43:442-443.
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 41. Kasliwal MK, Suri A, Sharma B.S. Dandy walker malformation associated with syringomyelia. Clin Neurol Neurosurg. 2008; 110(3): 317-9.
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 43. M Singh, Kasliwal M K, Mahapatra A K. Giant cervical pseudomeningocele following brachial plexus trauma. J Clin Neurosci. 2008 Jan 4
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45. Mridha A, M. Sharma, C. Sarkar, A. Garg, M. Singh, V. Suri. Anaplastic ependymoma with cartilaginous and osseous metaplasia: report of a rare case and review of literature *Journal of Neuro-Oncology (A)*
46. Sai Kiran NA, Kale SS, Vaishya S, Kasliwal MK, Gupta A, Sharma MS, Sharma BS, Mahapatra A.K. Gamma Knife surgery for intracranial arteriovenous malformations in children: a retrospective study in 103 patients. *J Neurosurg.* 2007; 107: 479-84.
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50. Sharma BS, Sinha S, Mehta VS, Suri A, Gupta A, Mahapatra AK, Pediatric intracranial aneurysms – clinical characteristics and outcome of surgical treatment. *Child Nerv Syst.* 2007; 23: 327-33
51. Sharma BS, Sinha S, Suri A. Treatment of Giant Pituitary Adenomas: *Neuro surgery quarterly* 2007, 17; 120-127.
52. Sharma BS, Sinha Sumit. Pediatric intracranial aneurysms- clinical characteristics and outcome of surgical treatment. *Child nerv system* 2007; 23(3):327-33.
53. Sharma MS, Gupta A, Kale SS, Agarwal D, Mahapatra AK, Sharma BS. Gamma knife radiosurgery for glomus jugulare tumors: Therapeutic advantages of minimalism in the skull base. *Neurol India.* 2008 56:57-61.
54. Sinha S, Sharma BS. Cystic acoustic neuromas: Surgical outcome in a series of 58 patients. *J Clin Neurosci.* 2008; 5: 511-5
55. Srinivas D, Sharma BS, Mahapatra AK. Triple neural tube defect and the multisite closure theory for neural tube defects: is there an additional site? Case report. *J Neurosurg Pediatrics.* 2008; 1:160-3.
56. Suri A, Goel RK, Ahmad FU, Velliimana AK, Sharma BS, Mahapatra A.K. Endoscopic excision of intraventricular neurocysticercosis in children: a series of six cases and review. *Childs Nerv Syst.* 2008; 24: 281-5.
57. Suri A, Goel RK, Ahmad FU, Vellimana AK, Sharma BS, Mahapatra AK. Transventricular, transaqueductal scope-in-scope endoscopic excision of fourth ventricular neurocysticercosis: a series of 13 cases and a review. *J Neurosurg Pediatrics.* 2008;1:35-9.
58. Suri A, Narang KS, Sharma BS, Mahapatra AK. Visual outcome after surgery in patients with suprasellar tumours and preoperative blindness *J. Neurosurg.* 2008; 108: 19-25

PATIENT CARE

The dept has 2 units with a general neurosurgical ward under each unit [35 x 2 beds]. There are 2 ICU's [ICU-C/B] with 23 beds. There are now 4 elective 'state of art' operating theatres available on the 7th floor of the CN tower. Two exclusive operating theatres are available for trauma in the trauma centre. The 'brain suite': intraoperative MRI with neuronavigation, is the process of

installation in the first floor of the CN center after which 3 more elective operating rooms will be made available. Facilities for world class neurosurgery is offered to include all specialities: Vascular surgery, epilepsy surgery, minimally invasive cranial and spinal neurosurgery, pediatric neurosurgery, functional neurosurgery, tumor surgeries, skull base surgeries and complex spine surgeries. All operating rooms are optimally equipped with equipment to include operating microscopes, high speed pneumatic drills, CUSA, cell saver, neuronavigation, neuroendoscopes, electrophysiology and EEG monitoring.

AWARDS AND HONOURS

Prof BS Sharma: [1] Secretary Neurological Society of India from December 2005 to 2008. [2] President elect (Vice President), Skull Base Surgery Society of India, 2007-2008.

Dr P Sarat Chandra: [1] Board of Director: International Brain Mapping & Intraoperative Surgical Planning Society (IBMISPS), California [2] Core member for formulation of National guidelines for epilepsy and epilepsy surgery [Indian Epilepsy Society].[3] Executive member; Asian Epilepsy Surgery Society [4] Paper Short-listed for Michael Moore award, ILAE congress, Singapore, 2007 [5] Listed in world Faculty 1000 for epilepsy surgery.

Dr A Suri: Executive member, Skull base society of India

Neuroradiology

Professor and Head

N K Mishra

Additional Professor

Shailesh B Gaikwad

Assistant Professor

Ajay Garg

EDUCATION

Undergraduate and Postgraduate Teaching

The faculty of the department is part of undergraduate teaching and delivered 5 didactic lectures during the combined seminars in the year under review. The DM Neuroradiology course was started in July 2001. Three candidates are registered for this course presently.

Short Term Training

Three doctors from Korea and one doctor from Italy received short-term training in the department.

National & International Conferences

Lectures delivered

Dr.N.K.Mishra

1. Participated in the 1st International Symposium on Intra-operative MRI, organized by the MD Anderson Cancer Center, The University of Texas at Houston, Texas, USA during 6-8th July

2007 discussed issues related to the upcoming intra-operative MRI facility coming up at the Neurosciences Centre, AIIMS, with experts and users from other centers of the world.

2. “Endovascular vs Radiosurgery in Cerebral AVMs” – Chaired this debate session at the 1st National Radiosurgery Update, organized by the Dept. of Neurosurgery, Neurosciences Centre, AIIMS, at the India Habitat Centre, New Delhi, 7-8 April 2007.
3. “Update in radiation protection and imaging” : Chaired this session at the Updates in Medical Physics and annual meeting of UP-Delhi chapter of AMPI, AIIMS, New Delhi, 8th Sept. 2007.
4. “Advances in MR Imaging of Gliomas”: Lecture delivered at the Delhi Neuro-oncology Group meeting; BR Ambedkar Institute Rotary Cancer Hospital, AIIMS, New Delhi, 25th August 2007.
5. “Segmental agenesis of cranial arteries with rete compensation associated with aneurysm & subarachnoid haemorrhage”: Poster presented at the 9th congress of the World Federation of the Interventional & Therapeutic Neuroradiology (WFITN), 10-13 Sept. 2007, Beijing, China.
6. “Spinal MRA in localization of spinal dural arterio venous fistula”: poster presented at the 9th congress of the World Federation of the Interventional & Therapeutic Neuroradiology (WFITN), 10-13 Sept. 2007, Beijing, China.
7. “Neuroimaging in Stroke” – guest lecture delivered at the VI National Armed Forces Neurosciences Update (NNUD-2007) & annual conference of the Society for Neurosciences, Pune at AFMC & CH (SC), Pune 3-4 Nov. 2007.

Dr S.B.Gaikwad

1. “Imaging of head CT-Pathological spectrum” during CME for Medicine and Nuclear Medicine practitioners held on 26th August, 2007 at SJH, New Delhi
2. NMR department, AIIMS during their annual foundation day on “MR Imaging of Neurological disorders” September 2007
3. “Complicated case of carotid angioplasty and stenting during meet the expert session at 10th Annual Meeting of ISVIR, 1-4th November 2007, Hyderabad. Participated in the debate on “Protection devices should always be used during carotid stenting” and spoke against the motion.
4. “Endovascular management of complex aneurysm” during 10th Annual National meeting of Indian Society of Neuroradiology/ISMRM, Mumbai 10—14 November 2007
5. Endovascular management of intracranial aneurysm & Functional MR Imaging during Imaging and interventional Radiology update, Pune, 8-9th December 2007.
6. “Dural sinus interventions” during 61st National Conference of the Indian Radiological & Imaging Association, Bangalore, 17-20th January 2008
7. “Imaging and Interventions in acute Ischaemic Stroke” during Imaging Carnival 2008 organized by Annual Congress of Indian Radiological and Imaging Association, Delhi state at VMCH, Safdarjung, New Delhi, February 23-24, 2008
8. Annual meeting Neurointervention Education Foundation, KEM, Mumbai, Complications in neuro-intervention. Presented 2 cases of complications encountered during treatment by endovascular approach. Participated in interactive sessions during meeting in Goa, 21-23 Sept 2007
9. “Carotid Angioplasty and Stenting Without Protection Devices-AIIMS Experience of 100 procedures at 9th Annual Congress of the World Federation of Interventional and Therapeutic Neuroradiology (WFITN), September 13-19, 2007, Beijing, China

10. "Assessment of Cerebral Haemodynamic Changes by Perfusion MRI in patients after endovascular carotid recanalization" during 93rd Scientific Assembly and Annual meeting, November 25-30, 2007 at McCormick Place, Chicago, Illinois, USA

RESEARCH

Funded Projects

- 1 Phase imaging and Diffusion tensor imaging - Novel MR Contrasts in the evaluation of cryptogenic focal epilepsy. Dr. Ajay Garg. Funding Agency DST. March 2007, 3 years (19.02.2007 to 18.02.2010)
- 2 Quantitative Vessel size imaging (VSI) in cerebral gliomas and correlation with histopathological grading and vascular endothelial growth factor expression. Dr. Ajay Garg. Funding Agency DBT. Oct 2007, three years (20.09.2007 to 19.09.2010)

Departmental Projects

1. Role of Diffusion tensor imaging in the evaluation of intracranial Meningiomas
2. Evaluation of the angiographic features of CNS vasculitis

PUBLICATIONS

Journals

1. Shah H, Garg A, Mishra NK, Kale SS, Gaikwad SB. Delayed symptomatic cyst formation following gamma-knife radiosurgery. A case report. *Neuroradiology J* 2007; 19:727-732.
2. Puri AS, Garg A, Mishra NK, Gaikwad SB, Mehta VS. Bilateral cerebellar dysplastic gangliocytomas (Lhermitte duclos disease) with cerebellar ectopia and presyrinx cord changes. A case report. *Neuroradiology J* 2007; 19:717-721.
3. Garg A, Mishra NK, Gaikwad SB, Gupta V. Bilateral internal carotid artery segmental agenesis associated with persistent trigeminal artery, vascular ectasia, abnormal configuration of brain stem and cerebellum. A case report. *Neuroradiology J* 2007; 20:25-29.
4. Gupta V, Tanvir R, Garg A, Gaikwad SB, Mishra NK. Heparin-Induced Thrombocytopenia in a Case of Endovascular Aneurysm Coiling. *AJNR Am J Neuroradiol* 2007; 28:155-158.
5. Kasliwal MK, Agrawal D, Shanker Sharma B, Mishra NK. Sudden cardiac arrest in a successfully embolized case of giant vertebral artery aneurysm with hydrocephalus. *Surg Neurol* 2007; 67:652.
6. Ahmad F.U., Garg A., Singh M. & Mishra N.K. : Giant mesencephalothalamic Virchow-Robin spaces causing obstructive hydrocephalus. A case report. *Neuroradiology J* 2007; 20:303-306.
7. Sharma AK, Gaikwad S, Gupta V, Garg A, Mishra NK. Measurement of peak CSF flow velocity at cerebral aqueduct, before and after lumbar CSF drainage, by use of phase-contrast MRI: Utility in the management of idiopathic normal pressure hydrocephalus. *Clin Neurol Neurosurg* 2008; 110:363-8.
8. Kiran NA, Suri A, Kasliwal MK, Garg A, Ahmad FU, Mahapatra AK. Gross total excision of pediatric giant cystic craniopharyngioma with huge retroclival extension to the level of foramen magnum by anterior trans petrous approach: report of two cases and review of literature. *Childs Nerv Syst* 2008; 24:385-391.
9. Jain D, Sharma MC, Sarkar C, Suri V, Rishi A, Garg A, et al. Chordoid glioma: report of two rare examples with unusual features. *Acta Neurochirurgica* 2008;150(3):295-300.

10. 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.
11. Bhatia R, Desai S, Garg A, Padma MV, Prasad K, Tripathi M. Isolated facial myokymia as a presenting feature of pontine neurocysticercosis. *Mov Disord* 2008; 23:135-137.
12. Garg A, Sridhar MR, Gulati S. Autosomal recessive type I lissencephaly. *Indian J Pediatr* 2007;74: 199-201

Abstracts

1. Gaikwad SB, Ajit Singh, MV Padma, K Prasad, M Behari, M Tripathi, et al. Carotid angioplasty and stenting without protection devices: AIIMS experience of 100 procedures. *Interventional Neuroradiology* 2007;13 (Suppl. 2):169. Proceedings of the 9th Annual Congress of the World Federation of Interventional and Therapeutic Neuroradiology (WFITN), 13-19 Sept 2007, Beijing
2. Garg A, Mishra NK, Gaikwad SB, Gupta V. Segmental agenesis of cranial arteries with rete compensation associated with aneurysm & subarachnoid haemorrhage. *Interventional Neuroradiology* 2007;13 (Suppl. 2):264. Proceedings of the 9th Annual Congress of the World Federation of Interventional and Therapeutic Neuroradiology (WFITN), 13-19 Sept. 2007, Beijing.
3. Garg A, Mishra NK. "Spinal MRA in localization of spinal dural arterio venous fistula": *Interventional Neuroradiology; Neuroradiology*, pp337, vol.13, suppl.2, Sept.2007 - Proceedings of the 9th Annual Congress of the World Federation of Interventional and Therapeutic Neuroradiology (WFITN), September 13-19, 2007, Beijing
4. Gaikwad SB, AS Puri. Assessment of cerebral haemodynamic changes by perfusion MRI in patients of carotid angioplasty and stenting. Proceedings of 93rd Scientific Assembly and Annual meeting, Radiological Society of North America, Chicago, Illinois, USA, November 25-30, 2007.

AWARDS AND HONOURS

Dr.N.K.Mishra was International advisory committee member, invited speaker & moderator of a scientific session at the 9th congress of the World Federation of the Interventional & Therapeutic Neuroradiology (WFITN), 10-13 Sept. 2007, Beijing, China; Member of the task force on basic research in modern biology, Dept. of Biotechnology, Govt. of India; Co-editor in chief & chairman of scientific committee for the *Journal of Neuroradiology*; Member editorial board for *interventional neuroradiology*, *Indian Journal of Radiology & Imaging (IJRI)*.

Dr Shailesh B Gaikwad was invited to conduct hands-on-workshop on carotid angioplasty and stenting during the 10th Annual Congress of Indian Society of Vascular and Interventional Radiology, Hyderabad, 1-4 November 2007

PATIENT CARE

Procedures	No. of investigations
Digital Subtraction Angiography	619
Interventional procedures	138
Gamma Knife Angiogram	54
MRI / MRA / MRS	1767

CT Head	16581
Chest	204
Abdomen	139
Spine	784
Image guidance CT	90
Emergency CT	9484
Ultrasound	1293
Plain X-rays OPD/indoor	19113
Pvt. (Outside studies) case reporting	2730
Total	43512

Neuropathology

Professor

Chitra Sarkar

Associate Professors

M.C. Sharma

(On assignment from December 2006)

Assistant Professor

Vaishali Suri

EDUCATION

Short- and Long-Term Training

1. Dr. Namrata Sinha, Junior Consultant from National Neurosciences Centre, Kolkata came for Neuropathology training for three months.
2. Ms. Anjana Sharma, M.Sc. (Bioinformatics) student came for training for six months in laboratory techniques.

Continuing Medical Education

Lectures delivered

Professor C. Sarkar

- Neuronal and Mixed Neuronal Glial Tumors: Current Perspectives. International Neuropathology Symposium held at Niigata, Japan, October 2007.
- Histopathological Changes Following Radiosurgery. First National Radiosurgery Update. Organized by Gamma Knife Unit, Dept of Neurosurgery, and Radiation Oncology, AIIMS. New Delhi, April 2007.
- Lectures in the Summer CME held in GNRC Institute, Guwahati in July 2007: Approach to Diagnosis of Malignant Small Round Cell Tumors of the Brain Pathology of CNS Infections
- Lectures in Seminars for PG students held in IRCH, AIIMS: Pathology of CNS tumors, August 2007 Pathology and genetics of embryonal tumors, February 2008

- Lectures in CME in Pathology at Christian Medical College and Brown Medical College, Ludhiana, October 2007: Approach to Diagnosis of Muscular Dystrophies, Embryonal tumors: Pathology and differential diagnosis and Approach to Diagnosis of Meningeal Tumors
- Spectrum of Pediatric Brain Tumors & Status of Brain Tumor Banking in India. Neuro-Update 2007, Fortis Hospital, NOIDA, December 2007.
- Incorporation of Recent Discoveries regarding glioma molecular Biology into Clinical Practice: Feasibility & Cost Benefit Analysis. Neuro-Update 2007, Fortis Hospital, NOIDA, December 2007.
- Incorporation of molecular tools in clinical management of gliomas. Neurosciences Update at the 10th Anniversary Celebrations of National Neurosciences Centre. Kolkata, December 2007.
- Molecular Genetics in Gliomas : Use in Clinical Practice. CME at the Annual Conference of Delhi Neurological Association, Delhi. February 2008.

NATIONAL AND INTERNATIONAL CONFERENCES

Organized by Department

1. Dr. Vaishali Suri was the co-organizing secretary of the Annual Conference of the Delhi Chapter IAPM, held at AIIMS, New Delhi, April 2007.

Lectures delivered

- Sarkar C, Mondal AM, Chattopadhyay P, Mahapatra AK, Sinha S. Astrocytic Tumors : Identification of a new genetic locus and its clinicopathological correlation. Meeting of the Asian Society of Neuropathology and the Workshop of Asian Neuropathology held at Tokyo, Japan, May 2007.
- Sarkar C. Neuropathology in India. Meeting of the Asian Society of Neuropathology and the Workshop of Asian Neuropathology held at Tokyo, Japan, May 2007.
- Sarkar C. Approach to Diagnosis of Malignant Round Cell Tumors of the CNS. Annual Conference of Delhi Chapter of IAPM. New Delhi, April 2007.
- Sarkar C. Impact of Molecular Genetics on Management of Gliomas. Neuro-Oncology Meeting, IRCH, AIIMS, August 2007.
- Sarkar C. Role of Molecular Diagnostics in the Clinical Management of Gliomas. In: Neuro-Oncology Symposium. Annual Conference of Radiation Oncology Society of India. Chennai, November 2007.
- Sarkar C. Prognostic and predictive factors in Gliomas. Invited lecture in the 6th Conference on Evidence Based Management of Cancers in India. Tata Memorial Hospital, March 2008.
- Sarkar C. Morphology of High Grade Gliomas and Importance of their Molecular Markers in Diagnosis. Invited lecture in the EBM conference on Molecular Diagnostics, Tata Memorial Hospital, March 2008.
- Sarkar C. Oligodendroglial Tumors: Clinico-pathological & Molecular Genetic Study with special reference to 1p/19q status. 56th Annual Conference of Neurological Society of India. Agra, December 2007.
- Jha P. Sinha S, Chosdol K, Sarkar C. Loss of heterozygosity (LOH) for 1p and 19q in astrocytic and oligodendroglial tumors. Annual Conference of Delhi Neurological Association, Delhi. February 2008.

- Pathak P, Suri V, Sharma MC, Singh S, Sarkar C. LGMD2A (calpainopathy): Report of three cases with confirmation by western blotting and functional in vitro assay. Annual Conference of Delhi Neurological Association, Delhi, February 2008.
- Suri V, Sarkar C. Pediatric glioblastomas, a histopathological and molecular genetic study. 56th Annual Conference of Neurological Society of India. Agra, December 2007.
- Suri V, Sarkar C. Childhood GBMs. Annual Conference of IAPM. Chandigarh, December 2007.
- Haldipur, PV, Sarkar C, Iyengar S, Mani S. Role of sonic Hedgehog signaling in human cerebellum development. Annual Conference of Indian Academy of Neurosciences (IAN), Varanasi, October 2007.
- Nadeem, Sharma MC, Suri V, Sarkar C. Skin biopsy : a novel method of diagnosing dystrophinopathies. Annual Conference of Delhi Chapter of IAPM. New Delhi, April 2007.
- Gupta R, Suri V, Rishi A, Mridha A, Sharma MC, Garg A, Suri A, Gupta A, Sarkar C. Myxopapillary ependymoma: Report of two cases with rare presentation Delhi Chapter IAPM, April 2007.
- Bhaskar Shukla, V Suri, A Rishi, MC Sharma, C Sarkar, M Singh, A Garg. Rare Case of An Inflammatory Pseudotumor Presenting As A Frontobasal Mass Lesion Delhi Chapter IAPM, April 2007.
- Rishi A, Jain A, Sarkar C, Suri V, Sharma MC, Garg A, Kale SS, Gupta A. Meningeal Lymphoma Presenting As Meningioma – A Report of Two Cases and Review of Literature. Delhi Chapter IAPM 28th April 2007.
- Arvind Rishi, A Jain, V Suri, C Sarkar, MC Sharma. Histopathological Spectrum of Fungal Infections of the Central Nervous System: A Clinicopathological study of 40 cases. Delhi Chapter IAPM, April 2007.
- Agarwal S, Suri V, Rishi A, Satyarthi GD, Sharma MC, Garg A, Sarkar C. Primary intracranial squamous cell carcinoma developing in an epidermoid cyst. Delhi Chapter IAPM, April 2007.
- Das P, Sharma MC, Rishi A, Suri V, Sarkar C. Childhood Chordomas: Twenty seven years of clinicopathologic experience from All India Institute of Medical Sciences, India. Delhi Chapter IAPM, April 2007.
- Tayal S, Suri V, Ray R. Myoepithelial tumour of soft tissue with cytologically malignant features, a case report. Delhi Chapter IAPM, April 2007.
- Shukla B, Aggarwal S, Suri V, Rishi A, Garg A, Sharma MC, Sinha S, Sarkar C. Glioneuronal tumor with neuropil like island : a new entity. 56th annual conference of IAPM , PGIMER, Chandigarh, November 2007.
- Ahuja A, Rishi A, Suri V, Das P, Sarkar C. Malignant transformation of benign meningiomas after gamma knife radiosurgery: report of two cases. 56th annual conference of IAPM , PGIMER, Chandigarh, November 2007.
- Das P, Puri T, Sharma MC, Suri V, Sharma BS, Sarkar C. Medulloblastoma: a correlative study of MIB-1 proliferation index along with expression of C –mycher 2 neu and anti apoptotic proteins with histological typing and clinical outcome. 56th Annual Conference of IAPM , PGIMER, Chandigarh, November 2007,

- Jha P, Suri V, Sharma MC, Chosdol K, Chattopadhyay P, Sinha S, Gupta D, Sinha S, Sarkar C. Loss of heterozygosity (LOH) for 1p and 19q in astrocytic and oligodendroglial tumors. Xth annual conference DNA (DNACON-2008).

RESEARCH

Funded Projects

Completed

1. Myopathic disorders: a comparative clinicopathological and in vitro proton magnetic resonance spectroscopy (MRS) study on muscle biopsies. Dr. Chitra Sarkar. Funded by ICMR. Funds: Rs.6 lacs,3 years (2004-2007).

Ongoing

1. 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. Rs. 16.5 lakhs, 2007-2010.
2. Study of the role of bone marrow derived mononuclear cells in peripheral nerve repair of adult rats. Dr. Vaishali Suri. Funded by AIIMS. Rs. 18 lakhs. 2006-09.

Departmental Projects

Completed

1. Comparative evaluation of expression of dystrophin, utrophin and n-NOS in muscle and skin biopsy of patients with dystrophinopathies.

Ongoing

1. Primary and secondary glioblastomas: A study of EGFR amplification, EGFR vIII mutants & p53 expression.
2. GBMs with long term survival – Role of cell cycle regulatory genes.
3. Study of gliomagenesis: Possible involvement of CNS developmental pathway
4. p53, EGFR & HER2 receptor in osteogenic sarcomas
5. Childhood GBMs : A clinicopathological and molecular genetic study
6. Study Of Limb Girdle Muscular Dystrophy (LGMD) Patients in Indian Population Using Calpain-3, Dysferlin And Sarcoglycan Protein Analysis
7. Clinicopathological study of angiogenesis in glioblastoma multiforme.

Collaborative Projects

Completed

1. Invasive versus non-invasive meningiomas: comparative study of proliferation index, and expression of VEGF, p53 and cathepsin.- Dept. of Neurosurgery, AIIMS

Ongoing

1. Analysis of immunomodulation property of IFN-g on classical, nonclassical MHC 1 and TGF- β expression in astrocytic tumors and their relevance in immunotherapy – Neurobiochemistry, AIIMS
2. Study of HIC-1 in tumorigenesis and cell response – Dept of Biochemistry, AIIMS

3. Effects of administration of human umbilical cord blood cells (HUCBG) in combination with melatonin versus HUCBG along in rat with stroke – Dept of Neurology, AIIMS
4. Altered DNA sequences in gliomas: characterization of changes and context sequences with reference to tumor type – Dept of Biochemistry, AIIMS
5. Characterization of the properties of an amplified region of DNA in primary meningeal tumors– Dept of Biochemistry, AIIMS
6. Analysis of FAT gene in glial tumors – Dept of Biochemistry, AIIMS
7. Pilocytic astrocytomas : correlation of clinical features and outcome with proliferation index and angiogenesis – Dept of Neurosurgery, AIIMS

PUBLICATIONS

Journals

1. Sarkar C, Das P, Ghosh R. Molecular profiling of tumors by immunohistochemistry. National Medical Journal of India. 2007;20:277-281 (*invited review*)
2. Shankar SK, Mahadevan A, Sundaram C, Sarkar C, Chacko G, Lanjewar DN, Santosh V, Yasha TC, Radhakrishnan VV. Pathobiology of fungal infections of the central nervous system with special reference to the Indian scenario. Neurol India. 2007 Jul-Aug;55(3):198-215.
3. Jain A, Sharma MC, Sarkar C, Bhatia R, Singh S, Handa R. Major histocompatibility complex class I and II detection as a diagnostic tool in idiopathic inflammatory myopathies. Arch Pathol Lab Med. 2007 Jul;131(7):1070-6.
4. Sharma S, Sharma MC, Johnson MH, Lou M, Thakar A, Sarkar C. Esthesioneuroblastoma - a clinicopathologic study and role of DNA topoisomerase alpha. Pathol Oncol Res. 2007;13(2):123-9.
5. Chander B, Deb P, Sarkar C, Garg A, Mehta VS, Sharma MC. Cerebral blastomycosis: a case report. Indian J Pathol Microbiol. 2007 Oct;50(4):821-4.
6. Gupta R, Kumar A, Sharma MC, Sarkar C, Goyal V, Bihari M. Autopsy always teach and tell: neurodegeneration with brain iron accumulation: a case report. Indian J Pathol Microbiol. 2007 Oct;50(4):792-4.
7. Ahmad FU, Tripathi M, Padma MV, Gaikwad S, Gupta A, Bal CS, Sarkar C, Gupta S, Wadhawan AN, Sharma BS, Chandra PS. Health-related quality of life using QOLIE-31: Before and after epilepsy surgery a prospective study at a tertiary care center. Neurol India. 2007 Oct-Dec;55(4):343-8.
8. Misra A, Chattopadhyay P, Chosdol K, Sarkar C, Mahapatra AK, Sinha S. Clonal mutations in primary human glial tumors: evidence in support of the mutator hypothesis. BMC Cancer. 2007 Oct 9;7:190.
9. Arora R, Mathur SR, Aron M, Verma K, Iyer VK, Arora VK, Sharma MC. Oncocytic carcinoid tumor of the lung: a case report of diagnostic pitfall in filter membrane preparation of bronchial washings. Acta Cytol. 2007 Nov-Dec;51(6):907-10.
10. Jain D, Sharma MC, Sarkar C, Rishi A, Suri V, Garg A, Mahapatra AK. Spinal teratoma with pulmonary differentiation: a report of rare case and review of literature. Fetal Pediatr Pathol. 2007 Jul-Aug;26(4):185-91.
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Chapters in books

1. McLendon, R.E., Judkins, A.R., Eberhart C.G., Fuller, G.N., Sarkar, C., Ng, H.K. (2007) Central Nervous System Primitive Neuroectodermal Tumors. In: WHO Classification of Tumors. Edt. Louis D.N., Ohgaki H., Wiestler O.D., Cavenee WK. International Agency for Research on Cancer. 4th Edn, pp 141-146.
2. Lopes MBS, Wiestler OD, Rachaminov-Stemmer AO, Sharma MC. Tuberos sclerosi complex and subependymal giant cell astrocytoma. In: WHO Classification of Tumors. Edt. Louis D.N., Ohgaki H., Wiestler O.D., Cavenee WK. International Agency for Research on Cancer. 4th Edn, pp 218-221.

PATIENT CARE

1. Neuropathology Surgical Specimens	2376
2. Frozen Sections	252
3. Muscle biopsies	
Total number received -	408
Muscle enzyme histochemistry	1719
Diagnostic Immunohistochemistry	2837
4. Myelin stain	244
5. Electron microscopy	
Specimen received	1012
Specimen processed	530

AWARDS AND HONOURS

Dr. Chitra Sarkar was nominated as member of the Subject Expert Committee on Life Sciences of the 'Fund for Improvement of S&T infrastructure in Universities and other higher education institutions' (FIST) program of Department of Science & Technology, Govt. of India; Program Advisory Committee on Health Sciences, of DST, Govt. of India; Expert Committee, Women Scientist Scheme, DST, Govt. of India; Chronic Disease Biology Committee of DBT, Govt. of India; nominated as Vice President of the Asian Society of Neuropathology; Chitra Sarkar nominated as Executive Member of the Neuro-Oncology Society of India; invited as a Guest Faculty to participate in (i) Meeting of the Asian Society of Neuropathology, Tokyo, Japan, May, 2007 and International Neuropathology Symposium at Niigata, Japan, October, 2007.

Dr. Vaishali Suri won the Herbert Krause Gold Medal for the paper entitled "Pediatric glioblastomas, a histopathological and molecular genetic study" at the 56th Annual conference of Neurological Society of India, Agra, December 2007.

Dr. Ayushi Jain won First Prize for the poster entitled "MELAS (Mitochondrial myopathy, encephalopathy, lactic acidosis and stroke like episodes) with urticaria pigmentosa- report of a rare case" at the Xth annual conference DNA (DNACON-2008), Delhi.

Dr. Arvind Ahuja won the Second Prize for the poster entitled "Malignant transformation of benign meningiomas after gamma knife radiosurgery: report of two cases". 56th annual conference of IAPM, PGIMER, Chandigarh, November 2007.

SIGNIFICANT EVENTS

1. Dr. Chitra Sarkar was the coordinator of Indo-US symposium on Brain Tumor Banking with Prof. Abhijit Guha, Prof. M. Kieran, Prof. Charles Stiles, USA at Fortis Hospital, Noida, December 2007.
2. The procedure for detection of deletions of 1p&19q using Fluorescence in situ Hybridization (FISH) on formalin fixed paraffin embedded tissue for the diagnosis and prognostication of oligodendrogliomas has been standardized for the first time.
3. Western blotting for diagnosis of calpainopathy, a common form of limb girdle muscular dystrophy, has also been standardized for the first time.

4. Dr. Vaishali Suri was the member of organizing committee of the 9th Annual Conference Skull Base Surgery Society of India, International Skull Base CME and WFNS Microsurgery and Endoscopy Cadaver Workshop held on October, 2007 at AIIMS, New Delhi.

VISITING SCIENTISTS

Dr Nitya Ghatak, Director of Neuropathology, Virginia University, USA visited the Neuropathology laboratory and presented a Slide seminar on Interesting cases in January 2008.

10.6 Dr. Rajendra Prasad Centre for Ophthalmic Sciences

Chief & Professor

Supriyo Ghose

Professor

Raj Vardhan Azad
Sat Pal Garg
Atul Kumar
Gita Satpathy
(Ocular Microbiology)

Rasik Behari Vajpayee
Anita Panda
Pradeep Sharma
Jeewan Singh Titiyal
Sudarshan Khokhar

Vimla Menon
Yog Raj Sharma
Ramanjit Sihota
Radhika Tandon
Mahesh Chandra

Medical Superintendent

Shakti Kumar Gupta

Additional Professors

Dilip R. Shende
(Ocular Anaesthesiology)
Rajpal

G.V. Satyanarayana Murthy
(Community Ophthalmology)
Niranjan Nayak
(Ocular Microbiology)

Mandeep Singh Bajaj

Associate Professors

Seema Sen
(Ocular Pathology)
Namrata Sharma

Sanjay Sharma
(Ocular Radiology)
Pradeep Venkatesh
Tanuj Dada

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

M.D. - (23 passed)

Ph.D. -16

SRs: Ophth. - 29

Ocular.Anaesth -06

Paraclinical Pool Officers/

B.Sc. (H) Ophth. 4 Course-30

10 students passed

Short and long term training

31 Ophthalmologists from various parts of the country including 13 in training of trainers programme (ECCE/ IOL) were trained in different fields of specialisation.

CME

During the year the Centre organized following Conferences/ Seminars/ Workshops on:

4th Manpower & Management Training workshop	09/04/2007 to 14/04/2007
National Workshop on Phacoemulsification Surgery	25/04/2007 to 26/04/2007
3 rd ORBIS-RPC Workshop on “Strategic Planning on Eye Care”	23/07/2007 to 26/07/2007
Glaucoma Workshop on “Current Concepts”	16/08/2007 to 17/08/2007
Training of School Teachers under School Vision Screening Programme	26/11/2007
Hospital Based Programme on Cornea	03/12/2007 to 07/12/2007
First National Hands-On-Workshop on Bioanalytical techniques in PK studies – from Method Development to Data Interpretation.	08/02/2008 to 09/02/2008

The faculty of the Centre participated in, various scientific forums, delivered 101 lectures including keynote addresses, chaired 57 scientific sessions.

RESEARCH

Funded Projects

Completed

1. Clinical evaluation of multifocal intraocular lens “Technis Z900”.
2. Development and validation of sensitive HPLC method and evaluation of taxanes in various taxus species found in Himalayan region.
3. Novel molecular diagnostic for eye disease and low vision enhancement devices.
4. Standardization of antifungal susceptibility testing for filamentous fungi and characterization of drug sensitive and drug resistant fungal isolates in mycotic keratitis.
5. Situational analysis of existing human resources and infrastructure for control of childhood blindness in India.
6. Evaluation of prevalence and causes of visual impairment and blindness in adults in Gujarat.

Ongoing

1. Evaluation of polymerase chain reaction assay for Herpes Simplex Virus 1 (HSV1) detection in tear specimen of suspected viral keratitis, particularly stromal and atypical epithelial keratitis.
2. Detection of HPV genome in malignant ocular lesions.
3. Culture of limbal stem cells for ocular surface reconstruction in stem cell deficiency diseases.
4. Culture of human adult retinal pigment epithelial cells on human amniotic membrane.
5. Ocular surface reconstruction with alternative autografts of non-ocular origin.
6. Transplantation of human retinal pigment epithelial cells in the 6-OHDA lesioned rat model of Parkinson disease.
7. Comparative genome hybridization in primary angle closure glaucoma families: a pilot study in Indian patients.
8. Mutational analysis of the myocilin gene in primary angle closure glaucoma and primary open angle glaucoma patients in Indian population.
9. Mutational spectrum of the CYP1B1 gene in North Indian primary congenital glaucoma patients.
10. p53 and mdm2 expression in orbital RMS of childhood – An IH study.

11. Immunophenotype characterization of small lymphocytic lymphomas of the eye.
12. Evaluation of calcium dobesilate for various ocular conditions.
13. Evaluation of tear-fluid constituents in various ocular pathological conditions using tandem mass spectrometry.
14. Long term changes in Heidelberg retinal tomography and visual fields in primary adult glaucoma patients.
15. Study on the prevalence, therapeutic options and outcome measures of amblyopia.
16. 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 center of the macula.
17. 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.
18. LX211-01-UV: A double-masked, placebo-controlled, parallel-group, multi-center, dose-ranging study to assess the efficacy and safety of LX211 as therapy in subjects with active sight threatening, noninfectious intermediate-, anterior and intermediate-, posterior- or pan-uveitis.
19. LX211-02-UV: A double-masked, placebo-controlled, multi-center, 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.
20. LX211-03-UV: A double-masked, placebo-controlled, parallel-group, multi-center, dose-ranging study to assess the efficacy and safety of LX211 as therapy in subjects with active sight threatening, noninfectious intermediate-, anterior uveitis.

Departmental Projects

Completed

1. Ulcerative eyelid lesions—role of impression cytology and clinicopathological correlation.
2. Clinical comparison of matrix frequency doubling technology perimetry, standard automated perimetry and Scanning laser polarimetry in primary open angle glaucoma.
3. A study to evaluate various parameters for early detection of ethambutol induced optic neuropathy.
4. Evaluation of waveform characteristics and visual acuity in infantile nystagmus and the changes induced by its management.
5. Evaluation of convergence exercises in cases with convergence insufficiency.
6. Evaluation of modified levator plication as compared to levator resection for correction of congenital ptosis.
7. Rapid assessment of trachoma in a previous hyper endemic rural area of North India.
8. Imaging evaluation of intra-orbital masses causing proptosis.
9. Intravitreal drug level assay in retinoblastoma patients undergoing chemoreduction.
10. Role of directional vacuum assisted biopsy in patients with previously equivocal biopsies for breast masses suspicious for cancer.

Ongoing

1. ICG staining vs triamcinolone acetonida staining for ILM peeling with triamcinolone acetonida PVD induction in macular hole surgery.
2. An integrated predictive model for evidence based eye care.
3. Evaluation of ocular toxicity of festival colors during the celebration of Holi.
4. Immunohistochemical and molecular studies on WntB-Catenin signaling pathway in sebaceous cell carcinoma of the eye lid.
5. Isolation, expansion and characterization of corneal limbal epithelial cells.
6. Identification and characterization of differentially expressed genes in human retinoblastoma.
7. Regulation of apoptosis in human retinoblastoma.
8. Clinical and chromosomal analyses of patients with congenital eye lid anomalies in a tertiary care hospital.
9. Evaluation of expression of P- glycoprotein (P-gp) in retinoblastoma.
10. Bone marrow derived stem cell therapy and the trabecular meshwork: An experimental study.
11. Prevalence of Vit.A deficiency in children and nursing mothers co-related with corneal pathology a hospital based study.
12. Retinal nerve fibre layer thickness in pituitary tumors by optical coherence tomography.
13. Retinal nerve fibre layer thickness in amblyopia by optical coherence tomography.
14. Retinal nerve fibre layer by optical coherence tomography in optic neuritis and multiple sclerosis.
15. Functional magnetic resonance imaging (MRI) in optic neuritis and multiple neuritis.
16. Evaluation of aetiopathogenic factors in eyes with primary angle closure glaucoma.
17. Evaluation of combined trabeculectomy with trabeculotomy with mitomycin versus trabeculectomy with mitomycin alone in primary congenital glaucoma.
18. Evaluation of the effect of surgery on motor and sensory outcomes in cases of intermittent divergent squints.
19. To study the role of autologous bone marrow stem cell transplant in macular hole surgery.
20. Prospective comparative randomized evaluation of intravitreal avastin, intravitreal triamcinolone acetonide and laser treatment in non responsive persistent diffuse diabetic macular edema.
21. Multifocal electroretinogram in emetropes, myopes and hypermetropes and its correlation with optical coherence tomography.
22. Comparative evaluation of functional outcome of eye assisted internal limiting membrane peeling in macular hole surgery using multifocal ERG.
23. Comparative evaluation of combination therapies PDT + Ranibizumab vs PDT + pegaptanib in the treatment of subfoveal classic CNVM.
24. Prospective randomised comparative trial of triamcinolone acetonide assisted and indocyanine green assisted internal limiting membrane peeling in macular hole surgery.
25. Use of autologous bone marrow derived stem cells for rehabilitation of patients with dry age related macular degeneration and retinitis pigmentosa: a pilot study.
26. Evaluation of change in macular thickness in diabetes after photocoagulation using optical coherence tomography (OCT).
27. Comparative study of combination therapies using PDT with intravitreal triamcinolone Vis a Vis PDT with intravitreal bevacizumab in treatment of neovascular AMD.
28. Qualitative and quantitative assessment of early lesions in diabetic retinopathy with multifocal electroretinogram: a cross section study.

29. Role of intravitreal bevacizumab in diabetic vitrectomy.
30. Use of autologous bone marrow derived stem cells (Phase-2 trial) & umbilical cord blood stem cells (pilot study), transplantation by intravitreal injection for rehabilitation of patients with retinitis pigmentosa & allied hereditary retinal dystrophies.
31. Role of avastin in vitreous surgery for diabetic non resolving vitreous hemorrhage.
32. Role of bevacizumab in surgery for diabetic vitreous hemorrhage with or without traction retinal detachment.
33. Single nucleotide polymorphisms associated with diabetic retinopathy.
34. To evaluate the role of oral corticosteroids in orbital cellulitis.
35. Evaluation of efficacy of probing in nasolacrimal duct obstruction with adjunctive mitomycin-C in adults.
36. Development of a poly-herbal formulation for dry eye (computer vision syndrome).
37. Evaluation of cassette dosing for the intraocular penetration of drugs.
38. Modulation of transporters for the intraocular penetration of drugs.
39. Role of MRI in management of soft tissue sarcomas.
40. Role of MRI in characterization of sonographically indeterminate adnexal masses.

Collaborative Research

Completed

1. Imaging evaluation of intra-orbital masses causing proptosis (with department of Radiology)
2. Genetic polymorphisms of vascular endothelial growth factor and risk of 'threshold' retinopathy of prematurity (with department of Paediatrics).
3. To study the role of core decompression with and without fibular grafting in patients with avascular necrosis of femoral head; and its effects on the disease progression (with department of Orthopaedics).
4. Population-based study on the "Epidemiology of age-related eye disease in India (INDEYE) (with the London School of Hygiene and Tropical Medicine).
5. Comprehensive management training programme for service providers in the eye care sector (with ORBIS International).
6. NPCB survey on rapid assessment of avoidable blindness (with Blindness Control Division of the Ministry of Health & Family Welfare).

Ongoing

1. Outcome of optical penetrating keratoplasty in bilaterally blind patients. (with Deptt. Of Psychiatry)
2. Sentinel surveillance unit at Dr. Rajendra Prasad Centre, AIIMS under the National Programme for Control of Blindness (with National Programme for Control of Blindness, Govt. of India).
3. Evaluation of vitreous humor as a marker fluid in the autopsy drug level analysis (with Forensic Science Laboratory, New Delhi).

PUBLICATIONS

Journals

1. Agarwal T, Jhanji V, Dutta P, Tandon R, Sharma N, Titiyal JS, et al. Pediatric keratoplasty in India: indications and outcomes. *Cornea* 2007; 26:810-3.

2. Agarwal T, Jhanji V, Dutta P, Tandon R, Sharma N, Titiyal JS, et al. Automated vitrector-assisted optical iridectomy: customized iridectomy. *J Cataract Refract Surg*. 2007;33:959-61.
3. Anand A, Negi S, Khokhar S, Kumar H, Gupta SK, Murthy GV, et al. Role of early trabeculectomy in primary open-angle glaucoma in the developing world. *Eye* 2007;21:40-5.
4. Azad RV, Chandra P. Intravitreal bevacizumab in aggressive posterior retinopathy of prematurity. *Indian J Ophthalmol* 2007; 55:319 (author reply).
5. Azad RV, Chanana B, Sharma YR, Vohra R. Primary vitrectomy versus conventional retinal detachment surgery in phakic rhegmatogenous retinal detachment. *Acta Ophthalmol Scand* 2007; 85:540-5.
6. Azad RV, Chandra P, Gupta R. The economic implications of the use of Anti-VEGF drugs in ARMD. *Indian J Ophthalmol* 2007; 55:441-3.
7. Azad RV, Chandra P, Khan MA, Darswal A. Role of intravenous fluorescein angiography in early detection and regression of retinopathy of prematurity. *J Pediatr Ophthalmol Strabismus* 2008;45:36-9.
8. Bajaj MS, Pushker N, Chaturvedi A, Betharia SM, Kashyap S, Balasubramanya R, et al. Orbital space-occupying lesions in Indian children. *J Pediatr Ophthalmol Strabismus* 2007; 44:106-11.
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10. Bajaj MS, Pushker N, Kashyap S, Sen S, Vengayil S, Chaturvedi A. Fibrous histiocytoma of the lacrimal gland. *Ophthalm Plast Reconstr Surg* 2007; 23:145-7.
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12. Chawla B, Agarwal A, Kashyap S, Tandon R. Diagnosis & management of corneal keloid. *Clin Exp. Ophthalmol* 2007;35:855-7.
13. Dada T, Vengayil S, Gadia R, Gupta V, Sihota R. Slitlamp-optical coherence tomography-guided needling of failing filtering blebs. *Arch Ophthalmol* 2008; 126:284-6.
14. Dada T, Kumar S, Gadia R, Aggarwal A, Gupta V, Sihota R. Sutureless single-port transconjunctival pars plana limited vitrectomy combined with phacoemulsification for management of phacomorphic glaucoma. *J Cataract Refract Surg* 2007;33:951-4.
15. Dada T, Sihota R, Gadia R, Aggarwal A, Mandal S, Gupta V. Comparison of anterior segment optical coherence tomography and ultrasound biomicroscopy for assessment of the anterior segment. *J Cataract Refract Surg* 2007;33:837-40.
16. Dada T, Chaudhary S, Muralidhar R, Nair S, Sihota R, Vajpayee RB. Evaluation of retinal nerve fiber layer thickness measurement following laser in situ keratomileusis using scanning laser polarimetry. *Indian J Ophthalmol* 2007;55:191-4.
17. Dada T, Dhawan M, Garg S, Nair S, Mandal S. Safety and efficacy of intraoperative intravitreal injection of triamcinolone acetonide injection after phacoemulsification in cases of uveitic cataract. *J Cataract Refract Surg* 2007;33:1613-8.
18. Dada T, Mandal S, Aggarwal A, Gadia R. Microincision cataract surgery in a vitrectomized eye. *J Cataract Refract Surg* 2007;33:577-9.
19. Dada T, Muralidhar R, Jhanji V. Intraocular pressure rise after use of Healon 5 during extracapsular cataract surgery. *Can J Ophthalmol* 2007;42:338.
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21. Garg R, Ramachandran R, Sharma P. Anaesthetic implications of hyperekplexia-”startle disease”. *Anaesth Intensive Care* 2008; 36:254-6.
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28. Jhanji V, Sharma N, Prakash G, Titiyal JS. Simultaneous bilateral cataract surgery in developing countries. *J Cataract Refract Surg* 2007; 33:363.
29. Jhanji V, Sharma N, Satpathy G and Titiyal JS. Fourth generation fluoroquinolone resistant bacterial keratitis. *J Cataract Refract Surg* 2007: 33: 1488-9.
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31. Jhanji V, Sharma N, Mannan R, Titiyal JS, Vajpayee RB. Management of tunnel fungal infection with voriconazole. *J Cataract Refract Surg* 2007;33:915-7.
32. Kar UK, Satpathy G, Das BK, Panda SK. Characterization of *Streptococcus pneumoniae* ophthalmic, systemic and commensal isolates by pulsed-field gel electrophoresis and ribotyping. *Ind J Med Res* 2008;127:171-7
33. Kumar A, Pushker N, Bajaj MS, Sen S, Agarwal A. Unifocal, subconjunctival twin cysticercus cysts. *J Pediatr Ophthalmol Strabismus* 2007; 44:55-6.
34. Kumar A, Sinha S, Sharma YR, Azad RV, Vohra R: Comparative evaluation of vitrectomy and dye-enhanced ILM peel with grid laser in diffuse diabetic macular edema. *Graefe’s Arch Clin Exp Ophthalmol* 2007; 245:360-8.
35. Kumar A, Sinha S. Rapid regression of disc and retinal neovascularisation in a case of Eales’ disease following intravitreal Bevacizumab (Avastin). *Can J Ophthalmol* 2007; 42: 335-6.
36. Kumar A, Sinha S, Kumar V. Visual acuity and contrast sensitivity outcomes in Indian eyes undergoing photodynamic therapy with intravitreal injection of triamcinolone acetate in age-related macular degeneration. *Indian J Ophthalmol* 2007;55:207-11.
37. Kumar A, Sinha S. Intravitreal bevacizumab (Avastin) treatment of diffuse diabetic macular edema in an Indian population. *Indian J Ophthalmol* 2007;55:451-5.
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PATIENT CARE

Hospital Services

	New Cases	Old Cases	Total
General O.P.D.	110843	105009	215852
Emergency	43466	-	43466
Total Cases	154309	105009	259318

Speciality Clinics

Cornea Clinic	5384	12366	17750
Lens Clinic	603	465	1068
Uvea Clinic	740	2155	2895
Contact Lens Clinic	1040	1325	2365

Glaucoma Clinic	2537	6161	8698
Ophthalmoplasty Clinic	2860	1749	4609
Paed. Ophthalmology Clinic	787	403	1190
Trauma Clinic	987	886	1873
Retina Clinic	2788	2948	5736
Neuro-Ophthalmology Clinic	1487	1168	2655
Medical Ophthalmology Clinic	1164	1601	2765
Vitreo Retinal Clinic	1676	1223	2899
Ocular Surface Disorder Clinic	68	57	125
a) Orthoptic Clinic	6551	32257	38808
b) Squint Clinic	10344	35937	46281
Refraction	-	38782	38782
Total Cases	39016	139483	178499
Grand Total of Cases	193325	244492	437817

Indoor	No. of Cases
General Admissions	14898
Casualty Admissions	2623
Private Admissions	1118
Short Admissions	3720
Day Care Admissions	5558
Total	27917

Operations

Major	15869
Day Care	5180
Total Major	21049
Minor	5600
Grand Total	26949
Deaths	01

Yearly other figures

Average bed occupancy ratio	86%
Average length of stay	4.9 P.W
Average OPD Attendance per working day	1474
Average No. of Indoor Admission per working day	76%
Average No. of Surgeries per working day	73%

Investigative laboratories

Tests	Number
Fluorescein Angiography + ICG	5,432
Ultrasonography	16,987
EUA	262
E.C.G.	1,937
Applanation Tonometry	16,037
Indirect Ophthalmoscopy	4,429

Goldmann Perimetry	2,148
Automated Perimetry	4,238
E.R.G.	721
VER	4,238
E.O.G.	69
ENG	82
Focimetry	7,902(139)
Colour Vision	2,036
L.I.	6,176
Ultrasonic Pachymetry	787
Non Contact Tonometry	17,065
Refraction	66,263
Auto Refraction	32,688
Axial Length	17,153
Keratometry	19,052
OCT	8,726
Contact Lenses (Old + New)	2,132
Artificial Eye	502
Low Vision Aid	1,474
PRP	4,978
Nd-Yag Laser	2,100
Fundus Photography	655
Excimer Workup (Lasik)	
Lasik (operated) eyes	385
Lasik (unoperated) eyes	225
PTK (operated) eyes	85
PTK (unoperated) eyes	28
Phakic IOL (operated) eyes	-
Phakic IOL (unoperated) eyes	48
Glare	2,152
Contrast (FACTS)	2,10
Shirmer	2,508
BUT	1,908
Lasik counseling	4,899
Clinical photograph	2,252
Orthoptic work-up	135
Excimer Laser (inv. & surgeries) {R.No.101}	
Aberometr	745
Orbscan	745
P.D.T.	121
T.T.T.	14
Inj Lucentis	135
Inj Macugen	30
Retinal Camera Ret. CAM	

Cornea Service Lab (total no of inv.)	19,199
Cornea Research Lab (total no of inv.)	10,002
Glaucoma Service Lab (total no of inv.)	4,136

Ocular Radiology

Total No. of X-rays	13624
Total No. of special investigation	28
Total No. of CT Scan (done in Main X-ray Department)	294
Total No. of MRIs (Done in the Dept. of NMR)	40

Ocular Microbiology

Total specimens processed 12868

Specimens processed for bacterial culture sensitivity	9890
Specimens processed for fungal culture	1754
Specimens processed for Acanthamoeba culture	56
Specimens processed for Cytology	377
Specimens processed for viral antigen detection	93
Specimens processed for Chlamydia tissue culture	48
Specimens processed for Chlamydia antigen detection by DFA	467
Samples processed for PCR (Chlamydia)	104
Samples processed for PCR (Corneal ulcer and endophthalmitis)	nil
Specimens processed for Chlamydia serology	6
Samples processed for PCR (HSV)	63
Samples processed for conjunctivitis	10

Ocular Pathology

Total number of Investigations	47656
Blood TLC, DLC, PBS, ESR, BT, CT	23898
Urine	9625
Histopathology, Cytopathology	14133

Ocular Biochemistry (Clinical Chemistry)

Total samples	12017
Indoor	10023
Outdoor	1994

Ocular Pharmacology

Free drugs (Vials) supplied through Ocular Pharmacy	71276
MK Media	696

Eye Bank

Total eyes received:	806
(3 corneas were used for 6 patients in August, September and October 2007)	
Surgery Performed:	483
Unsuitable for clinical:	208
Transplantation	
Preserved in Glycerine:	75
Histopathology/Stem cell culture:	43

Stem cell culture: Total fifteen patients have undergone transplantation limbal stem cell transplantation from April 07 to March 08. Out of fifteen, thirteen underwent autologous limbal stem cell transplantation and two for cadaveric limbal stem cell transplantation.

Introduced facility for keratoprosthesis surgery for patients not suitable for corneal transplantation.

Amniotic membrane grafting: Total 4 batches of Human amniotic membrane were prepared during the period. Out of these four; two batches have been used till Mar 2008. 3rd batch is in use and fourth batch could not be used because the patient was not traceable.

Community Ophthalmology

Eye Care Services in Slums

Number of Slums covered for comprehensive eye care services	20
Number of attendees at PEC Centres in Slums Clusters	11757
Number of Refractions carried out in PEC Centres in slums Clusters	4060
Number of Patients referred to R. P. Centre	1762
Number of Subsidized Spectacles issued in Slums	1762
Number of Volunteers Training Programme	8
Number of Volunteers Trained	96
Number of Eye Health Education Events	23
Number of Participants	1120

Reach-in-Programme

Number of adult screening camps organized for Reach-in-Programme	30
Number of patients examined under Reach-in-Programme	7674
Number of patients referred at R.P.Centre under Reach-in-Programme	1885
Number of patients operated at R.P.Centre under Reach-in-Programme	1687
Number of follow-up camps organized under Reach-in-Programme	21
Number of follow-up patients examined in under Reach-in-Programme	994
Number of pediatric screening camps organized for Reach-in-Programme	1
Number of children examined under reach-in-Programme	141
Number of children referred at R.P.Centre under reach-in-Programme	27

School Eye Screening Programme

Number of School covered under SES Programme	30
Number of Teachers Trained	35
Number of Students Examined	6173
Number of Spectacles Prescribed	501

Rehabilitation services:

Number of blind patient counseled for rehabilitation services	90
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AWARDS AND HONOURS

Prof. 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 2007-08: The Most Popular Monthly Clinical Meeting (Dr. Minoo Shroff Trophy); The Best Monthly Clinical Meeting (Dr. Bodh Raj Sabharwal Trophy); Invited by the Ophthalmologist Club, New Delhi, to distribute their awards, as well as to receive their Ophthalmologist Ratna Award, India Habitat Centre, New Delhi, Sep 2007; Invited to

address the Expert Group at ICMR, on a Task Force for Retinoblastoma being created with ICMR, along with a National Retinoblastoma Registry, Aug 2007; Continued to be: Director of WHO Collaborating Centre for Prevention of Blindness; Honorary Advisor Ophthalmology to the Ministry of Health and Family Welfare, Govt. of India; Expert Member, Technical Advisory Group on Visually Handicapped for projects submitted to the Ministry of Social Justice & Empowerment, Govt. of India, New Delhi, 2007-08; 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 & Ophthalmic Techniques programme; Invited by the ICMR, DST, & CSIR amongst others as their Reviewer for Projects and nominated works for SSB Award submitted to them in the field of Ophthalmology, 2007-2008; Expert Member of the Technical Advisory Group on Visually Handicapped for Projects submitted to District Rehabilitation Centre Scheme, Ministry of Social Justice & Empowerment, Govt. of India, New Delhi; 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 & Ophthalmic Equipment sponsored by MEA, GOI under the aegis of the Central Scientific Instruments Organisation (CSIO), a National Laboratory of CSIR, GOI; Vice President of Vision 2020: The Right to Sight – India.

Prof. R.V. Azad: Appointed Chairman Expert Committee Established for Rajendra Nagar Super Specialty Hospital for Eye, Patna, State Health Society, Bihar, 18th March, 2008; Delivered “Prof. Dr. E.T. Selvam Oration” at Regional Institute of Ophthalmology, Chennai, December, 2007; Appointed Chairman Establishment of Advanced Eye Centre, Agartala, Tripura, December, 2007; Chairman, National Retinoblastoma New Delhi Registry: Delhi Site at Dr. R.P. Centre for Ophthalmic Sciences, AIIMS, August, 2007; Awarded “Rising Personalities of India Award” and Gold Medal for exceptional caliber and outstanding performance by the International Penguin Publishing House, New Delhi, November; 2007; Appointed as Chief Advisor to Delhi Journal of Ophthalmology of the Delhi Ophthalmological Society, New Delhi; 2007; Appointed by the Medical Council of India as Inspector for inspecting: D.Y. Patil Medical College, Mumbai, August, 2007; Kamineni Institute of Medical Sciences August, 2007; Joseph Eye Hospital, Tiruchirappally, October, 2007; K.S. Hedge Medical Academy, Mangalore, December, 2007. Continued to be: Chairman Ophthalmology Section, Bureau of Indian Standards (BIS) Ministry of Agriculture Food & Civil Supplies, Consumer Affairs and Public distribution; Secretary, SAARC Academy of Ophthalmology; Expert, Standing Selection Committee, PGI, Chandigarh.

Prof. Vimla Menon: Awarded Dr. S.N. Mitter Oration Award for 2007-2008 by Delhi Ophthalmological Society.

Prof. Yog Raj Sharma: Biographical profile in the First Edition of Who’s Who in Asia: MARQUIS WHO’S WHO 2007; Section Editor: RETINA, Delhi Journal of Ophthalmology 2007.

Prof. Atul Kumar: Appointed as Member of Task Force Group on ‘Diabetic Retinopathy’ by ICMR, New Delhi, May, 2007; Appointed as Ophthalmologist to the Hon’ble Vice-President of India Sh. Mohd. Hamid Ansari, 2007.

Dr. Pradeep Sharma: Awarded FAMS, Fellowship of National Academy of Medical Sciences, India.

Dr. Ramanjit Sihota: Reviewer for: Indian Journal Ophthalmology, 2007; Archives of Ophthalmology, 2007; British Journal of Ophthalmology, 2007; Eye, 2007.

Prof. J.S. Titiyal: Awarded Gold Medal by Indian Intraocular Implant & Refractive Surgery (IIRSI). Chennai, July 2007; awarded Ophthalmic Bhushan: Ophthalmological Club Delhi Sept. 2007; Distinguished Resource Teacher: Awarded certificate of appreciation by Delhi Ophthalmological Society, April 2007, New Delhi; Reviewer, Indian Journal of Ophthalmology; Indian National Medical Journal of India; Editorial board member Delhi Journal of Ophthalmology; Editorial board member Journal of Utranchal Ophthalmological Society.

Dr. Radhika Tandon: Awarded “Best Citizens of India” 2007; Nominated as international Health Professional of the year by International Biographical Centre, Cambridge, England; Member of Task force in the priority areas of the Blindness programme in All India Ophthalmological Society; Convenor in XXXV Annual Convocation, AIIMS, 23rd Oct. 2007; Teaching Faculty Member at Dr. Agarwal’s Eye Hospital and Eye Research Centre organized by National Post Graduate CME course on 4th -7th Oct. 2007; Member of the Committee for Research section and Project on 6th Nov. 2007. Continued as a 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.

Dr. G.V.S. Murthy: (2006-2007); Continued to be: Member, Editorial Board of the Journal of Community Eye Health; Reviewer: Indian Journal of Ophthalmology; International Ophthalmology, National Medical Journal of India, Journal of Community Eye Health, Acta Ophthalmologica, International Ophthalmology and Visual Science, BMC Ophthalmology, BMC Public Health, Eye; Reviewer’s panel of: British Journal of Ophthalmology, Lancet; Member, Academic Resources Advisory Committee of the National Programme for Control of Blindness; Member, Editorial Board of the Journal of Community Eye Health; Member, Editorial Committee of the Journal of Ophthalmology-UP; Member of INDIACLEN; Member of the Operational Research Advisory Group of Vision 2020 India; Member of the WHO Global Monitoring Committee of Implementation of Vision 2020 Initiative (2005); Invited faculty for the Community Eye Health Diploma course at the L.V. Prasad Eye Institute, Hyderabad since 2005.

Dr. Tanuj Dada: Special Poster Recognition Award at World Glaucoma Congress for work on ultrasound biomicroscopy in opaque grafts with secondary glaucoma Singapore July 2007.

Dr. Praveen Vashist: Member, Editorial Board of “NPCB India” Quarterly Newsletter of National Programme for Control of Blindness 2007. Continued to be: Reviewer, Indian Journal of Ophthalmology.

SIGNIFICANT EVENTS

The Centre has taken big strides in improving the quality of services delivered to patients.

The Centre has completed the formalities and process of reaccreditation with the WHO to continue as their Collaborating Centre for Prevention of Blindness (PBL) for another 4 years.

World Health Organization recognizes Dr. Rajendra Prasad Centre for Ophthalmic Sciences as a member of International Sun Monitoring project (INTERSUN).

National Eye Donation Fortnight: 25th August – 8th September 2007.

Awareness drive for eye donation was launched and charts and pamphlets distributed. During this period 16 eyes were received and 23 pledges were made for eye donation.

A DNA chip for diagnosis of eye infections has been developed and commercially launched by the Industrial partner of the recently concluded CSIR (NMTLI) multicentric project.

Newly established Stem cell/ Tissue and Cell culture facility and Molecular Biology laboratory are fully functional at department of Ocular Biochemistry.

The advanced bioanalytical system with LC-MS/MS is being installed at department of Ocular Pharmacology, to further upgrade facilities of paraclinical departments at RPC, as well as to subserve several departments at the AIIMS and even other institutions.

Funds allocated and made available, and a guaranteed cash flow would always remain constant and occasionally insurmountable problems in our fiscal system. Very limited amounts are actually available in the Centre's budget for LTCs and TA, though GOI rules may be construed as permitting much larger expenditures especially incurred on air travel as allowable. Financial austerity measures invoked at our RPC since December 2006, encouraging traveling on concessional fares offered by any airlines to curb such needless cash drains, have already achieved savings in terms of about 12 lakhs during this year.

VISITING SCIENTISTS

Dr. Robert Chappell, OBE, President of the World Council of Optometry

Mr. Geoffery Holland (Executive Director of ORBIS International)

Dr. Duffey (ORBIS volunteer faculty)

Dr. (Mrs.) R. Jose (Addl. Director General Ophthalmology, MOH & FW Govt. of India)

Dr. G.V. Rao (Country Director, India Country Officer, ORBIS International)

Dr. Anthony Aldave, MD, Associate Professor, Director Cornea Service Jules Stein Eye Institute UCLA, USA.

Dr. Sandeep Kaushal – Indian National Science Academy (INSA) Fellow

10.7 Jai Prakash Narayan Apex Trauma Centre

Chief

M.C. Misra

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 (Orthopaedics)
John R Bera (Orthopaedics)	Kamran Farooque (Orthopaedics)
Vijay Sharma (Orthopaedics)	Vivek Trikha (Orthopaedics)
Atin Kumar (Radiodiagnosis)	Shivanand G. (Radiodiagnosis)
Amit Gupta (Surgery)	Biplab Mishra (Surgery)
Maneesh Singhal (Surgery)	Subodh Kumar (Surgery)
Sushma (Surgery)	

EDUCATION

Short Term Training

1. Dr. Piyush Choudhry w.e.f. 27.08.07 to 26.2.08 (Six Months)
2. Dr. Rathindra Bhuyan, M.S. Guwahati Medical College 1.10.07 to 30.3.08 (Six months)

Elective Training

1. Ms. Anina Zeumer of Germany w.e.f 04.02.08 to 03.05.08 (Four Months)
2. Ms Jana Christina Moeller of Germany w.e.f. 01.11.07 to 31.01.08 (Two Months)
3. Mr. Gerald Paul Jones of UK w.e.f. 05.09.07 to 29.09.07 (25 days)
4. Mr. Aju Pazhenkottil w.e.f. 23.07.07 to 27.07.07 (One Week)
5. Ms. Amarpreet Kaur of UAE w.e.f 16.08.07 to 22.08.07 (One Week)
6. Ms. Rhythm Bhalla of UAE w.e.f 23.08.07 to 29.08.07 (One Week)
7. Ms Zamira Kohkan of Germany w.e.f. 31.03.07 to 30.04.07 (One Month)

Academic activities of undergraduate and postgraduate students and paramedical staff is being conducted by faculty in JPNATC.

1. Basic Life Support Courses for Junior Residents, Senior Residents, Nurses, Paramedics, Policeman.
2. Advanced Cardiac Life Support Training for Junior Residents, Senior Residents, Nurses.
3. Initial Resuscitation of Trauma Victims
3. Initial Resuscitation of Trauma victims.

Simulation has been used as a teaching tool and three such sessions have been conducted so far.

Continuing Medical Education

Prof. M.C. Misra

Course Director for

- 1st Training Course in laparoscopic Suturing Skills from 25th February to 27th February 2008 at Minimally Invasive Surgery Training Centre, AIIMS, New Delhi.
- 2nd Training course in Operative Laparoscopic- Basic and Advanced from 8th -12th May 2007 at Minimally Invasive Surgery Training Centre, AIIMS, New Delhi.
- 3rd Training course in Operative Laparoscopic- Basic and Advanced from 23rd July -27th July 2007 at Minimally Invasive Surgery Training Centre, AIIMS, New Delhi.
- 4th Training course in Operative Laparoscopic- Basic and Advanced from 10th September-14th September 2007 at Minimally Invasive Surgery Training Centre, AIIMS, New Delhi.
- 5th Training course in Operative Laparoscopic- Basic and Advanced from 22nd October-26th October 2007 at Minimally Invasive Surgery Training Centre, AIIMS, New Delhi.
- 6th Training course in Operative Laparoscopic- Basic and Advanced from 26th November-30th November 2007 at Minimally Invasive Surgery Training Centre, AIIMS, New Delhi.
- 7th Training course in Operative Laparoscopic- Basic and Advanced from 7th January -11th January at Minimally Invasive Surgery Training Centre, AIIMS, New Delhi.
- 8th Training course in Operative Laparoscopic- Basic and Advanced from 31st March -4th April 2007 at Minimally Invasive Surgery Training Centre, AIIMS, New Delhi.
- Organizing Chairman, Inaugural Conference of Society of Endoscopic and laparoscopic Surgeons of India (SELSI) at All India Institute of Medical Sciences, New Delhi, 27-30 March 2008.
- Special Meeting of the Board of Studies of the Department of Surgery JN Medical College on 4.04.07 at AMU, Aligarh.
- As a Member of the Search Committee for Vice-Chancellor on 5 May 2007 at Hyderabad.
- Visited as part of Central Technical Team for appraisal of Rajendra Institute of Medical Sciences, Ranchi for upgradation under PMSSY on 7th and 8th May 2007.
- Invited to visit "R Adams Cowley Shock Trauma Center" University of Maryland Medicine, Baltimore, USA on 6th June 2007
- Invited to present Surgical Grand Rounds on 13th June 2007 at Mount Sinai Hospital, USA – Topic: Generalized peritonitis – Tropical spectrum
- As a Guest Faculty in National Conference on Medical Preparedness and Mass Casualties Management on 24th to 25th July 2007 at New Delhi, Organized by the National Disaster Management Authority.
- As a Faculty Member in Global Hernia Clinical Advisory Board meeting from 26th & 27th July 2007 at Lyon, France & Trevoux, France.
- As Guest Faculty in NATCON-IASO-2007 conference at Mohan Dai Owsal Cancer Treatment Research foundation Ludhiana from 21st to 23rd September 2007.
- Deliver an Oration at the Bazpur Conference, CME 2007 of IMA Bazpur Branch, Udham Singh Nagar, Uttarakhand on 7.10.07 held at Nainital.
- Invited to chair a scientific session in Surgery Update 2007 XXIV National Continuing Medical Education Programme in Surgery at Maulana Azad Medical College, New Delhi from 24th to 29th September 2007.

- Appointed to act as an advisor in the PT Board for interviewing candidate in the Combined Medical Services Examination on 8.10.07 at UPSC Office.
- Invited as a Panelist during the Parenteral and Enteral Nutrition Conference held at AIIMS from 12th to 14th October 2007.
- Invited as a Faculty Member in 16th Asian Congress of Surgery, the Biennial Congress of the Asian Surgical Association (ASA) from 19th to 22nd October 2007 at Beijing, China to deliver guest lecture on Laparoscopic repair of incisional and ventral hernia.
- Invited as Operating Faculty in 6th Live Endo Laparoscopic Workshop at Agra on 27th to 28th October 2007
- Invited to deliver a lecture on “Laparoscopy in General Surgery Emergencies” in 33rd Annual Conference of UP Chapter of Association of Surgeons of India from 2nd to 4th November 2007 at BHU Varanasi.
- Invited to act as a Faculty Member, Workshop on Best practices in Tertiary Healthcare on 5th November 2007 at the Ministry of Health & FW, Govt. of India, Nirman Bhawan, New Delhi.
- Invited Guest Faculty Act as a National Faculty during the 8th Postgraduate Endocrine Surgery Course and 8th Indian Association of Endocrine Surgeons’s conference at SGPGI, Lucknow from 22nd to 25th November 2007.
- Invited Faculty at the National Hernia Congress & Live Workshop at New Delhi from 14th to 16th December 2007.
- Invited to participate during Symposium on Severe Dudenal Trauma and Intra-abdominal infections during ASI conference in Bhubaneshwar on 27th & 28th December 2007.
- Invited as guest faculty during the 3rd Meeting of International Endohernia society (IEHS) at Stuttgart, Germany from 17th to 19th January 2008 and presented “Comparison of open and laparoscopic repair of incisional/ventral hernia – results of a prospective randomized study”.
- Invited as a National Faculty to participate during 8th National Congress of IAGES& workshop of Minimal Access Surgery at Jaipur from 14th to 17th February 2008.
- Invited as a National Faculty to participate at the Live operative Workshop on Laparoscopic Surgery on 9th March 2008 at J N Medical College, AMU Aligarh
- Invited as a Chairperson in 7th Annual International Conference of Rajiv Gandhi Cancer Institute and Research Centre from 7th March to 9th March 2008
- Participated at the Second Meeting of Global Hernia Clinical Advisory Board on 11th & 12th March 2008 at the Camelback Inn in Scottsdale, Arizona, USA.
- Invited as a National Faculty to participate at the Live operative Workshop on Laparoscopic Surgery on 15th& 16th March 2008 during Kanpur Endosurgery – 2008, Organized at Mariampur Hopsital under Kanpur Surgical Club and UP Chapter of ASI.

Dr. Chhavi Sawhney

- Conducted workshop on basic airway management in ER, on 11 September 2007.

Dr. Sanjeev Bhoi

- Conducted workshops on basic airway management in ER, 11 September/6 October 2007
- Round Table Meeting with Agency for Toxic Substances and Disease Registry (ATSDR), CDC, Atlanta, 25 February 2008.
- Baasic and Advanced Cardiac Life Support, CME, Indian Institute of Coal Management, 9 March 2008.

National and International Conferences

- Organizing Secretary, Indo-US Academic Council for Emergency and Trauma, 1-2 September 2007, AIIMS.
- Academic Secretary, Indo-U.S Emergency Medicine Summit, Mumbai, 26-30 September 2007.
- Course Director: ECG Workshop, Mumbai, 29th September, 2007.
- Course Faculty: Lead-India Course, 25th September, 2007.
- Speaker: New Speaker Forum, Seattle, USA, 10th October, 2007.
- Course Faculty: Advanced Hazmat Life Support Course, 4th -6th December, 2007.
- Training: Israeli-Indian Course on Trauma System and Mass Casualty Management 8-21 December, 2007 Haifa, Israel.
- Training: Emergency Sonography Course, 18th to 20th January, 2008, AIIMS, New Delhi.
- Expert, Policy Issues for Road Traffic Prevention and control in India conducted by Indo-US Joint program workshop on 26th February, 2008, New Delhi
- Expert, Road Map for Trauma Management in India and in the USA conducted by Indo-US Joint Program, 27th to 28th February, 2008 Agra

Dr. Shefali K. Sharma

Lectures delivered

- Indian Rheumatology Association Annual Conference (IRACON) 2007 conducted at Khajuraho from 26-29th October 2007 on “Epidemiology of Osteoporosis”.
- Conducted workshop on “Osteoporosis and DEXA” during Indian Rheumatology Association Annual Conference (IRACON) 2007 at Khajuraho from 26-29th October 2007.
- Post Graduate Institute of Medical Education Research, Chandigarh on “Complicated malaria” on 15th April, 2007.

Dr. Vinay Gulati

Lectures delivered

- ‘Special Issues in Management of Chemical Casualties’ at ‘Symposium on Awareness, Preparedness and Mitigation of Exposure to Domestic & Industrial Chemicals, AIIMS, New Delhi, August 30th –31st, 2007.
- ‘ECG in Acute Coronary Syndrome’ at INDO-US Emergency Medicine Summit-2007, Mumbai, September 26- 30,2007.
- ‘Pulmonary Thromboembolism’ and ‘Workshop on Obstructive Sleep Apnea’ at North India Medical Clinics, organized by Association of Physicians of India (Saharanpur Branch), September 29-30, 2007, Mussoorie.
- Monitoring progress in ICU & Role of ventilatory support in fulminant hepatic failure’, Annual Conference of UP Chapter of Indian Society of Gastroenterology, Kanpur, March 15, 2008.
- ‘Role of Bronchoscopy in clinical practice’ at LRS Institute of TB & Respiratory Diseases, New Delhi on February 26, 2008.
- Chaired a session on ‘Chronic Heart Failure’ at APICON 2008, the Annual conference of the Association of Physicians of India, January 12, 2008, Kochi

Dr. Adarsh Kumar and Dr. Sanjeev Lalwani

Joint Organizing Secretary, Symposium on ‘Awareness, preparedness & mitigation in exposure to domestic & industrial chemicals, APMEDIC-2007, collaboration with Dept of Pharmacology, AIIMS.

Dr. Adarsh Kumar

Co-chairman, Scientific Committee of Forensic MEDICON-2008 at Mumbai.

Lectures delivered

Participated in training programmes of the Academy of CBI, CDTS, NICFS, Amity Institute, Delhi Judicial Academy, DMA & NIPCCD. Lectures and demonstrations were held for CBI officials, Police officers, Judicial officers, Medical officers and Forensic science experts from all over India.

Dr. Purva Mathur

Delivered a guest lecture on “Mycoplasma contamination of cell cultures” in the Vth Annual conference of the Indian Association of Medical Mycoplasmologists”, held in Agra, 2007.

Dr. S. Arulselvi

- Attended one day workshop on “Management of High Volume Laboratories – Beckman User’s perspective” held in Hotel Le Meridien, Delhi on 29.10.07.
- Attended workshop on “Basic airway management” held in JPNATC, AIIMS on 6.10.07.
- Attended “Delhi Society of Haematology annual meet” on 11.8.07, held in India Habitat Centre, New Delhi.
- Attended Indo–US academy council for emergency medicine and trauma, CME, 1.9.07 and 2.9.07.
- Attended workshop on “Educational research scholarship” conducted by CMET in AIIMS on 14.11.07.
- Attended “National Conference on Medical Education” between 15.11.07 to 17.11.07 held in AIIMS, Delhi.
- Attended Workshop on “Operational/Application Training on Sysmex 2100 i analyser” held on 17.12.07 and 18.12.07 at JPNATC, AIIMS conducted by Sysmex India Pvt Ltd.
- Attended National Haematology Update V, 2008 AIIMS 23-24 February 2008.
- Attended Haemophilia conference held on 13.3.08 in AIIMS, New Delhi.

Dr. Deepak Agrawal

- Ginde Oration & Hand-on cadaveric workshop on endoscopic skull base surgery, Bombay Hospital, 31st March-2 April 2007, Mumbai, India.
- 1st National radiosurgery update & Gamma-Knife workshop, All India Institute of Medical Sciences, 14-15 April 2007, New Delhi.
- Annual conference of the skull base society of India, All India Institute of Medical Sciences, 14-17 October 2007, New Delhi.
- Annual CNS meeting, San Diego, USA, Sep 14-17, 2007.
- Ramban Trauma course, Haifa, Israel, Dec 8-23, 2007.
- 10th Annual AIIMS microneurosurgery workshop held at All India Institute of Medical Sciences, 14-15 February, 2008, New Delhi, India.
- Ginde Oration, Bombay Hospital, 31st March 2008, Mumbai, India.

Dr. John R. Bera

- Conducted workshops on basic airway management in ER, 11 September/6 October 2007
- Legal and ethical issues in medical sciences, 30 April 2008, AIIMS

National and International Conferences

- Co-organizing Secretary Indo-US Academic Council for Emergency and Trauma, 1-2 September 2007 AIIMS.
- Course Faculty, For Sam's splints & POP technique at Indo-US Emergency medicine summit 2007 held at 26-30th September, 2007.

Dr. Kamran Farooque

- Director, Workshop on Splints in ER for nurses and paramedics, 29 September 2007, Mumbai at INDUS EM 2007.
- Director, Workshop on Fracture stabilization for doctors, 30 September 2007, Mumbai, INDUS EM 2007.
- Member of organizing committee of "Sports Medcon 2007" annual conference of IFSM.

Lectures delivered

- "Spine Trauma ATLS protocols" at INDUS EM 2007 at Mumbai Sept 29th 2007.
- "Orthopaedic Splints in ER" on 30th September 2007 at Mumbai at INDUS EM 2007

Dr. Vijay Sharma

- Director, Workshop on Splints in ER for nurses and paramedics, 29 September 2007, Mumbai at INDUS EM 2007.
- Director, Workshop on Fracture stabilization for doctors, 30 September 2007, Mumbai, INDUS EM 2007.

Lectures delivered

- "Musculoskeletal Trauma ATLS Protocols" at INDUS EM 2007, Mumbai, 29 September 2007.
- "Splintage of Orthopaedic Injuries in A&E" on 30th September 2007 at Mumbai Indus EM 2007.

Dr. Atin Kumar

'Approach to pediatric chest X ray', in "Awesome Pulmonology", Paediatric Pulmonology Zonal-CME, SMS Medical College, Jaipur, 6-7 May 2007.

Dr. Shivanand Gamanagatti

- Portal vein embolisation: Live video demonstration, XVII National Conference of IASG, AIIMS, New Delhi, 29 September-1 October, 2007.
- Transarterial chemoembolisation with DC beads, 6 conference on Evidence based Management of Cancers in India- Interventional Radiology in Oncology, Tata Memorial Hospital, Mumbai, 29February -2March, 2008.

Dr. Amit Gupta

ABCD of Trauma Care. In Trauma Alert Assembly. INDO-US Emergency Medicine Summit 2007, Mumbai. 26th – 30th Sep 2007.

Dr. Biplab Mishra

Diagnosis and Management of Acute abdomen. INDO-US Emergency Medicine Pre-Summit 2007, New Delhi. 2nd September, 2007.

Dr. Maneesh Singhal

- Tip Plasty. Rhionofess workshop, AIIMS New Delhi, 30th Dec. 2007.

- Management of Burns in ED. INDO-US Emergency Medicine Summit 2007, Mumbai, 26– 30 Sept. 2007.
- External anatomy of nose. Rhionofess workshop, AIIMS New Delhi, 30th Dec. 2007.

Dr. Subodh Kumar

- Emergency Room Management of Thoracic Trauma. In Trauma Alert Assembly. INDO-US Emergency Medicine Summit 2007, Mumbai. 26th -30th Sep. 2007.
- Colo-rectal cancer-Role of minimally access surgery. In NATCON – IASO, Ludhiana Sept 2007.

Dr. Sushma

- Management of Burns in ED. INDO-US Emergency Medicine Pre-Summit 2007, New Delhi. 2nd Sep.2007.
- Trauma in special scenario: Pediatric/Geriatric/Pregnancy and maxillo-facial trauma. In Trauma Alert Assembly. INDO-US Emergency Medicine Summit 2007, Mumbai. 26th – 30th Sep.2007.

RESEARCH

Funded Projects

- 1 Prospective study to evaluate the role of Helicobacter pylori in benign and malignant hepato-biliary disease Dr M.C. Misra. Institute Research Grant. April 2006 March 2008. Rs. 80,000.
- 2 A randomized controlled trial of laparoscopic inguinal hernia repair–transabdominal preperitoneal versus total extraperitoneal approach. Dr. M.C. Misra. From Institute Research Grant 2007-08. Rs. 1,62,500/-
- 3 Feasibility study on Injury & Road Traffic Injury surveillance. MC Misra, Amit Gupta. Funded by MoHSW- WHO-ICMR, 1,80,000/-
- 4 A Registry for Comparing Catheter-Related Infection Rates Among Various Shunt Systems in the Treatment of Hydrocephalus. Dr. Deepak Agrawal. Funded by Codman corporation, USA.
- 5 Role of Thalamus in diffuse axonal injury: An autopsy study with istopathological correlation. Dr. Deepak Agrawal. Project funded by AIIMS.
- 6 Ultrasonic debridement of post traumatic wounds. Maneesh Singhal, Sushma, Subodh kumar, Amit Gupta, Biplab Mishra. Funded by Soring Germany.

Departmental Projects

Completed

1. Comparison of conventional and Gadolinium-BOPTA enhanced MR Cholangiography in the evaluation of biliary enteric anastomosis.
2. MR evaluation of recurrent shoulder dislocation
3. Role of MR arthrography in the assessment of glenohumeral instability

Ongoing

- 1 Post-op analgesia in Arthroscopic surgery: Comparison of three different doses of Morphine: A prospective double blinded study.
- 2 Outcome of acute lung contusion in ICU: A prospective study.
- 3 Study of neurocognitive impairment and atherogenesis in Indian subjects with obstructive sleep apnea

- 4 Study the efficacy of DMARDs on Lipid Profile in Rheumatoid Arthritis patients with special reference to Lipoprotein (a) and Oxidized LDL
- 5 Treatment efficacy, clinical characteristics, laboratory features and outcome in ART Clinic at AIIMS, New Delhi.
- 6 Clinical profile of frail elderly patients in hospital setting
- 7 Prevalence of Metabolic Syndrome in Obstructive Sleep Apnea and the effect of treatment with continuous positive airway pressure (CPAP)
- 8 Molecular studies of differentially expressed hypoxia sensitive proteins in patients with Obstructive Sleep Apnea
- 9 Role of Vitamin D receptor genetic variants in susceptibility to development and severity of pulmonary tuberculosis
- 10 Role of mitochondria in an experimental atopic asthma in mice
- 11 Comparison of tuberculin skin test (TST) and interferon-gamma release assays (IGRAs) for the diagnosis of latent TB infection and TB disease
- 12 Study of efficacy and safety of concomitant use of Nevirapine and Rifampicin in patients co-infected with HIV and Tuberculosis
- 13 Study o-prevalence and types of baseline HIV drug resistance in the antiretroviral treatment-naive and previously treated HIV infected northern India population Genetic polymorphism and expression of Toll-Like Receptor (TLR) in HIV-TB co-infection
- 14 Comprehensive study of unnatural deaths in children & women.
- 15 Auditing of asphyxial deaths.
- 16 Comprehensive study of fatal poisonings in South Delhi.
- 17 A Phase II randomized double blind placebo controlled dose finding safety and tolerability trial of XY- 2405 as a treatment for traumatic brain injuries.
- 18 Correlation of coagulation abnormalities in severe traumatic brain injuries with patient outcome. A prospective analysis.
- 19 Differentiating recurrent gliomas from post radiotherapy changes: Utility of advanced MRI techniques and their correlation with 99m tc-glucoheptonic acid (GHA) brain SPECT.
- 20 Role of MDCT in staging of laryngeal carcinoma with limited MRI correlation.
- 21 Comparison of US, CT and MR Portography in children with EHPVO.
- 22 MRI and PET-CT evaluation of soft tissue sarcomas
- 23 Comparison of MDCT, Endoscopic Ultrasound, MRI & PET-CT in evaluation of pancreatic malignancy
- 24 A Study of Quality of Life of Live related Renal Donors
- 25 Protocol Biopsy in live related renal transplant recipients – Tacrolimus Versus cyclosporine
- 26 Feasibility of fast track discharge in breast cancer patients undergoing definitive surgery and impact on quality of life
- 27 Percutaneous management of malignant biliary obstruction.
- 28 Fast tract Thyroidectomy
- 29 Cosmetic outcome following breast oncoplasty
- 30 A randomized controlled trial of laparoscopic inguinal hernia repair- Trans-abdominal pre-peritoneal versus totally extra peritoneal approach.
- 31 Expression of beta hCG in benign and malignant breast diseases.
- 32 MRI in evaluation of chronic wrist pain.

Collaborative Projects

Completed

1. Total extra peritoneal hernia repair comparison o space creation by direct telescope vs. balloon dissection- A randomized controlled study.
2. Standardized mesh repair for inguinal hernia – A pilot study
3. Prospective Study to evaluate the role of Helicobacter pylori in benign and malignant hepatobiliary disease.
4. Feasibility study on Injury & Road Traffic Injury surveillance. MC Misra, Amit Gupta funded by MoHSW- WHO-ICMR.
5. Identification of candida by conventional and rapid automated methods (with Medical Microbiology, Ch. Charan Singh University, Meerut)
6. To document the effect of the time of institution of DMARDs on the radiological outcome in patients with rheumatoid arthritis (with Medicine)

Ongoing

- 1 B hcg expression in patients with benign and malignant breast diseases
- 2 A prospective randomized control trial of sutured vs. tacker fixation of mesh in patients undergoing laparoscopic Incisional Hernia repair.
- 3 A prospective randomized comparison of TAPP vs. TEP repair in patients undergoing laparoscopic inguinal hernia repair.
- 4 Prospective Evaluation of laparoscopic Skills Acquisition in a Short Term Focussed Training Programme on a Phantom Model using Porcine Gall Bladder.
- 5 Transvaginal Cholecystectomy – a pilot feasibility study.
- 6 Role of FDG-PET and MRI in assessment of Osteosarcoma : Prechemotherapy and Post chemotherapy (with Medical Oncology and Orthopedics)
- 7 Regulation of Coagulation in orthopedic surgery to prevent DVT and pulmonary embolism (with Orthopedics)
- 8 Comparison of FDG-PET and Dynamic MRI in correlation of VEGF expression on tumour cells in patients with Osteosarcoma (with Medical Oncology)
- 9 Comparison of minimally invasive techniques and conservative treatment in vertebral collapse (with Orthopedics)
- 10 A comparative Evaluation of changes in ultrasonographic dimensions of masseter muscle with EMG activity prior and subsequent to twin block therapy (with Dental Surgery)
- 11 Clinico-radiological evaluation of total knee arthroplasty; short term retrospective-prospective study (with Orthopedics)
- 12 Assessment of endothelial dysfunction and oxidative stress in chronic kidney disease of varying severity and after renal transplantation (Department of Nephrology)
- 13 Randomized controlled trial of Radiofrequency ablation (RFA) versus percutaneous acetic acid injection (PAI) therapy for treatment of small hepatocellular carcinoma. (with Gastroenterology)
- 14 Randomized controlled trial of transarterial chemoembolization (TACE) versus TACE plus oral chemotherapy in the treatment of unresectable hepatocellular carcinoma (with Gastroenterology)
- 15 Randomized controlled trial Oral chemotherapy versus supportive therapy in the treatment of unresectable hepatocellular carcinoma. (with Gastroenterology)

- 16 Randomized controlled trial of N-Acetylcysteine in prevention of renal failure in hepatocellular carcinoma patients undergoing transarterial chemotherapy (TAC) and transarterial chemo-embolisation (TACE). (with Gastroenterology)
- 17 Metabolic characterization of soft tissue tumours and pathologic and radiological correlation with in vivo Magnetic Resonance Spectroscopy. (with Surgical oncology and NMR).

PUBLICATIONS

Journals

1. Agrawal D, Gowda, NK. piracetam in postconcussion syndrome: preliminary results of a randomised controlled study using SPECT. *IJNT* 2007;4:109-114.
2. Agrawal D, Mahapatra AK. Complex split-cord malformation associated with situs inversus totalis. *J Pediatr Neurosci* 2007;2:11-12
3. Agrawal D, Singhal A, Hendson G, Durity FA. Gyriiform differentiation in Medulloblastoma. *Ped neurosurgery* 2007;43:142-145.
4. Agrawal D, Steinbok P, Cochrane D. Significance of Beaten Copper Appearance on Skull Radiographs in Children with Isolated Sagittal Synostosis. *Childs Nerv Sys* 2007;23:1467-70.
5. Agrawal D, Steinbok. Reply to the letter by Dr. Muzumdar on the article "Simple technique of head fixation for image-guided neurosurgery in infants". *Childs Nerv Syst* 2007;23:613.
6. Ahmad FU, Agrawal D, Mahapatra AK. Triple meningocele: Cause for a new theory? *J Pediatr Neurosci* 2007;2:39-40.
7. Baldeep Singh, Kamran Farooque et. al Unusual mechanism of injury with segmental fracture of clavicle: *The Internet Journal of anaesthesiology*: 2007:Vol. 6: No. 1:ISSN:1092-406X.
8. Behera B, Mathur P, Das A et al. High prevalence of carbapenem resistant *Pseudomonas aeruginosa* at a tertiary care centre of India. Are we under reporting? Accepted in *Ind J Med Res*, 2008.
9. Behera B, Mathur P, Das A. An evaluation of four different phenotypic techniques to evaluate detection of metallo β lactamase producing *P aeruginosa*. Accepted in *Ind J Med Microbiol*, 2008.
10. Behra C, Rautji R, Lalwani S, Dogra TD. Elderly homicide in South Delhi (1996-2005). *Ind. J Gerontology* 2007; 21(4): 362-7
11. Behra C, Rautji R, Lalwani S, Millo T. Accidental asphyxial deaths (1996-2005): A study from South Delhi. *J For Med Toxicol* 2007; 24 (1): 15-8
12. Behra C, Rautji R., Lalwani S, Dogra TD. Retrospective study of homicide in South Delhi (1996-2005). *Indian Internet J For Med Toxicol* 2007 ; 5(2): 39-42. [www. icfmt.](http://www.icfmt.com)
14. Chetan nagraj, kamran farooque, Vijay Sharma, HL Nag :Management of discoid lateral meniscus: a review: *Journal of Orthopaedic Association of South Indian States*: vol 4: sep 2007: pg 91-93.
15. Dogra TD, Leenars A, Rautji R, Lalwani S, Girdhar S. Menstruation & suicides: An exploratory study. *Psych Reports* 2007; 101: 430-4
16. Gamanagatti S, Kandpal H. Craniodiaphyseal Dysplasia: An unusual cause of recurrent dacryocystitis. *Indian J Ophthalmol.* 2007 May-Jun; 55(3):219-21.
17. Gamanagatti S, Kandpal H. Gastric teratoma: A case report. *Singapore Med J.* 2007 Apr;48(4):e99-101

18. Gamanagatti S, Nayaz Z. A child with cerebellar ataxia. *Br J Radiol.* 2008 Jan; 81(961):82-4.
19. Garg A, Agrawal D, Suri A, Mahapatra AK. Subdural Empyema in a case of Gaucher Disease: a rare presentation. *Ped Neurosurg* 2007;43:531-2.
20. Garg B, Sharma V, Khan SA, Malhotra R. Medical Image. An unusual cause of shoulder pain: Self assessment questions. Synovial chondromatosis. *NZ Med.J.*2007 Aug 24; 120(1260).
21. Garg B, Sharma V, Gupta V, Kotwal PP Reduction and pinning of pediatric supracondylar humerus fractures in the prone position, Letter To the editor. *J.Orthop.Trauma* 2007; Jan.21(1): 77.
22. Goel A, Aggarwal P, Bhoi S, Gupta V. High-dose, Pralidoxime for organophosphorus poisoning. *Lancet.* 2007 Apr.28;369(8571):1425;author reply 1427.
23. Gulati V. Differential properties of enantiomers of commercially available racemates.
24. Gupta Babita, Kapoor Rakesh. Trauma Centre in India: Anaesthetic Perspective. *Indian Society of Anaesthesiologist (Delhi Chapter)* 2008;1.
25. Gupta Deepak Kumar, Ashish Suri, Deepak A. K Mahapatra¹, Chitra Sarka, B. S Sharma. Surgical management of petroclival tumors : defining outcome /resection goals. *Skull base* 2007;vol 17 DOI: 10.1055/s-2007-983943
26. Gupta Deepak Kumar, S Dwarakanath, Subhashree Mahapatra, AK Mahapatra. Management strategies in glioblastoma : from the past to the future. *Pan Arab Journal of Neurosurgery* Vol 11, No 2, October2007: 1-7
27. Gupta DK, Kasliwal MK, , Mahapatra AK, Sharma MC .Congenital Glioblastoma Multiforme: A case report and review of literature. *J Ped Neurosciences* 2007
28. Gupta DK, Mahapatra AK. Proposal for a new clinicoradiological classification of type I split cord malformations: a prospective study of 48 cases: 35th annual meeting of International society of pediatric neurosurgery, Liverpool, UK (9th -13th Sept 2007-abstract no 138 page 1078. *Childs nervous system*(2007) 23: 1047-1090
29. Gupta DK, Nilesh S Kurware, Faiz U Ahmad, Sharma BS. Outcome analysis of basal ganglion hematoma in post traumatic pediatric patients. XVI biennial congress of the European society of pediatric neurosurgery 11-15th May 2008, Montreux, Switzerland (Abstract no 66, page 651): *Childs Nervous System*(2008) 24: 639-669.
30. Gupta DK, Shashank Ramdurg, Mahapatra AK. Vascular congenital dermal sinus tract: an institutional experience of 41 cases. XVI biennial congress of the European society of pediatric neurosurgery 11-15th May 2008, Montreux, Switzerland (Abstract no 4 page 639): *Childs Nervous System*(2008) 24: 639-669
31. Gupta R, Dinda AK, Singh Mk, Misra MC, Macrocystic serous cystadenocarcinoma of the pancreas: The first report of a new pattern of pancreatic carcinoma. *J Clin Pathol.* 2008 Mar: 61(3) : 396-8, PMID 18305183.
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33. Gupta S, Mathur P, Maskey D, Wig N, Singh S. Immune Restoration Syndrome with disseminated *Penicillium marneffei* and Cytomegalovirus co-infections in an AIDS patient. *AIDS Res Ther.* 2007 Oct 8;4:21.
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38. Jain TP, Srivastava DN, Mittal R, Gamanagatti S. Fibrolipomatous hamartoma of median nerve. *Australasian Radiology* 2007;51 (s1), B98–B100
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40. Jain V, Gamanagatti SR. Bye Bye Birdie. *Inner Vision. Radiographics* 2007 Apr ; 27 (2): 342
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51. Kumar J, Bandhu S, Kumar A, Alam S. Extra osseous fat fluid level: a specific sign for osteomyelitis. *Skeletal Radiol.* 2007; 36 Suppl1:s101-104.
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57. Kumar J, Kumar A, Seith A, Hari S. Hereditary Hemorrhagic Telangiectasia. *Intern Med J.* 2008 Mar; 38(3):217-8.
58. Kumar J, Kumar A, Sethy P, Gupta S. The dot-in-circle sign of mycetoma on MRI. *Diagnostic and Interventional Radiology* 2007; 13(4): 193-195.
59. Kumar J, Kumar A, Sharma R, Vashisht S. MR Imaging of Sellar and Suprasellar Pathology: A Pictorial Review. *Current problems in Diagnostic Radiol* 2007; 36(6): 227-236.
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Abstracts

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Chapters in books

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AWARDS, HONOURS AND SIGNIFICANT EVENTS

Dr. Babita Gupta successfully completed “Emergency Sonography School” held in January 2008.

Dr. Sanjeev K Bhoi is Assistant Editor: Journal of Emergencies, Trauma and Shock

Dr. Shefali K. Sharma received the ARA-APLAR (Australian Rheumatology Association -Asia Pacific League of Rheumatologist) Scholarship 2007 to attend and present at Australian Rheumatology Association Annual Scientific Meeting held at Sydney , Australia from 26-30th May, 2007.

Dr. Adarsh Kumar elected Joint Secretary, Indian Academy of Forensic Medicine for Governing Council 2008-10,for a consecutive second term.

Dr. Deepak Agrawal received ‘best paper’ award for co-authoring paper titled ‘Novel biochemical markers for diagnosing postoperative meningitis’ at the annual conference of Indian society of pediatric neurosurgery, held at Chandigarh, India from Nov 3-5, 2007; received 2nd best research paper award for the paper titled ‘Image guided in pituitary adenomas-luxury or necessity?’ at the annual conference of the skull base society of India, held at New Delhi from Oct 14-17, 2007.

Dr. Deepak Gupta invited speaker 16th Annual Neuro Trauma Conference, Gwalior, India 17-19 August 2007, lecture on Role of MRI as Outcome prognosticator in diffuse axonal injury; Received (i) Karl Storz fellowship for attending 8th ESBS Congress, Prague, Czechoslovakia (2-5 May 2008), (ii) Pediatric neurosurgery fellowship 14-22 Sept 2008 at Policlinico Gamelli, Rome, Italy; (iii) Best poster award for poster entitled Surgical management of petroclival tumors: defining resection/ surgical outcome in 9th annual conference skull base surgical society of India, and International CME conference, New Delhi, India, 26-28th October 2007.

Dr. Sumit Sinha received International Society of Pediatric Neurosurgery Scholarship Award for the paper entitled ‘Intracranial aneurysms in children- are they different from adults. An experience in 66 cases; presented at the 35th Annual meeting of International Society of Pediatric Neurosurgery, Liverpool, UK, Sep 2007; Karl Storz Fellowship Award for the paper entitled ‘Microsurgical Management of Giant pituitary adenomas: A series of 177 cases’, presented at the 8th European Skull Base Surgery Congress; held at Prague, Czech Republic, May 2007; Best Poster award: Bilateral anterior cerebral artery aneurysms due to mucormycosis. Best Poster award at the 9th Annual Conference of Skull Base Surgery Society of India. New Delhi, India. October 2007

Dr. John R. Bera awarded a scholarship by MASHAV, Ministry of External Affairs Israel to attend first Indo-Israel International Course on “Trauma and Mass Casualty Management” at Haifa, Israel, December, 2007; awarded Life membership of Indian Society for Trauma and Acute care; awarded life membership of Association for Trauma care of India.

Dr. Kamran Farooque elected joint secretary of IFSM; awarded membership (MRCS) of The Royal College of Physicians and Surgeons of Glasgow, UK.

Dr. Vijay Sharma elected Executive Member Indian Federation of Sports Medicine (IFSM) for 2008.

Dr. Vivek Trikha was Trauma and Reconstructive Fellowship Feb 26th -March 27th 2008, Katharinen; Trauma and Mass Casualty Management Course” Dec.8th-20,2007, Rambam University, Haifa, Israel; Delhi Orthopaedic Association Travelling Fellowship” year 2007-08.

Dr. Shivanand Gamanagatti awarded ‘Editor’s recognition Award for reviewing’ (European Journal of Radiology).

Dr. Amit Gupta elected active member to the International Society of Surgery (ISS), Society International de Chirurgie (SIC); elected active member to the International Association of Trauma Surgery and Surgical Intensive Care (IATSIC); elected Founder Secretary to the Indian Society for Trauma and Acute Care (ISTAC); Workshop Director, Trauma Alert Assembly, Indo-US Emergency Medicine Summit 2007; Joint Secretary, Second AIIMS Surgical week and Endosurg-2008, International CME cum Live Workshop, 26–30 March 2008; awarded Life membership of Association for Trauma Care in India; awarded a scholarship by MASHAV, Ministry of External Affairs Israel to attend First Indo-Israel international course on “Trauma System and Mass Casualty Management” at Haifa, Israel December 2007; awarded a Travel scholarship by Department of Bio-technology, Govt. of India to attend above course.

Dr. Biplob Mishra appointed as an external examiner for MBBS final exam by Ahmedabad University; awarded Life membership of Association for Trauma Care in India.

Dr. Maneesh Singhal appraiser for Diplomat of National Board, National Board of Examinations; involved in formation of training module for general practitioners made by National board of examinations; awarded Life membership of Association for Trauma Care in India; instructor: BLS/ ACLS course awarded by American Heart Association.

Dr. Subodh Kumar Founder Member and Treasurer, Indian Society for Trauma and Acute Care; Joint Secretary, Indian Hernia Society; Founder Member and Treasurer, Society of Endoscopic and Laparoscopic Surgeons of India; Joint Secretary, Second AIIMS Surgical week and Endosurg-2008, International CME cum Live Workshop, 26–30 March 2008; awarded Life membership of Association for Trauma Care in India; Instructor, BLS/ ACLS Course awarded by American Heart Association; awarded scholarship by MASHAV, Ministry of External Affairs Israel to attend First Indo-Israel international course on “Trauma System and Mass Casualty Management” at Haifa, Israel Dec.2007; awarded Travel scholarship by Department of Biotechnology, Govt. of India to attend above course.

Dr. Sushma Founder Member, Indian Society for Trauma and Acute Care; Joint Secretary, Second AIIMS Surgical week and Endosurg-2008, International CME cum Live Workshop, 26-30 March 2008; Awarded Life membership of Association for Trauma Care in India, Indian society for Reconstructive Microsurgery, International Society for Burn Injuries and National Academy of Burns India; Instructor, BLS/ACLS course awarded by American Heart Association; awarded scholarship by MASHAV, Ministry of External Affairs Israel to attend First Indo-Israel international course on Trauma System and Mass Casualty Management at Haifa, Israel Dec.2007; awarded a Travel scholarship by Department of Biotechnology, Govt. of India to attend above course.

PATIENT CARE

Total No. of Patients	Number
Attended J.P.N.A. Trauma Center	6683
Admitted in J.P.N.A. Trauma Center(New cases)	3362
Operated in J.P.N.A. Trauma Center(Old cases)	3321

Emergency Attendance	Admissions			Operation			
	Neurosurgery	Orthopedics	Surgery	Total	Orthopedics	Surgery	Neuro Surgery
866	1546	577	2989	1301	557	389	2247

Total No. of casualty Registration: 15161; MLC: 6163, Non-MLC: 8998

Imaging Center

Routine X rays	27278
Portable X rays	3435
Ultrasound including Doppler	1047
CT	8672
MRI	1044

New Equipment

- 1 radiography system with computed radiography unit
- 1 ultrasound Doppler unit

Blood Bank

Total Samples received	:	2607 Units
Total Blood cross matched	:	5551 Units
Total Blood issued	:	2423 Units
Total FFP issued	:	1611 Units
Total Platelet Issued	:	622 Units
Total Cryo Issued	:	55 Units
SDP	:	2 Units

Laboratory Medicine

Hematology

Hemoglobin	:	8805
Total Leucocyte count	:	8805
Differential count	:	8805
HCT	:	8805
RBC	:	8805
MCH	:	8805
MCHC	:	8805

MCV	:	8805
RDW	:	8805
Platelet count	:	8805
Retic count	:	306
Total	=	88,356

Coagulation

PT	:	3316
APTT	:	3316
TT	:	2859
Fibrinogen	:	2000
D-dimer	:	2859
Total	=	14,350

Biochemistry

Total	=	74,931
Sugar	:	2339
Urea	:	8490
Creat	:	4109
Calc	:	3561
Phos	:	3010
Uric Acid	:	725
Sodium	:	8748
Potassium	:	8755
TBIL	:	5132
DBIL	:	2862
TP	:	3605
ALB	:	8550
AST	:	3752
ALT	:	3554
ALP	:	3442
CHOL	:	1308
AMY	:	836
M-TP	:	246
CKMB	:	7
CRP	:	20

Lipid Profile

HDL	:	520
LDL	:	520
TG	:	520
VLDL	:	320

Routine and Microscopic Examination of Urine

Total	=	11,485
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Microbiology

A. Total bacterial cultures:	3396
B. Antibiotic sensitivity: total:	2354
By VITEK	: 1177
By Disc diffusion	: 1177
C. Viral Markers: Total:	554
HIV serology:	208
Hepatitis B serology	: 187
Hepatitis C serology	: 159
D. Hospital Infection surveillance cultures =1006	
Grand Total	= 1,96,432.00

Physiotherapy

Number of Physiotherapy sessions for indoor patients: 2989

Number of physiotherapy sessions for outdoor patients: 4296

VISITING SCIENTISTS

1. Dr. Maureen (Shock Trauma Centre, Baltimore, Maryland)
2. Dr. Sunil Ahuja (Shock Trauma Centre, Baltimore, Maryland)
3. Dr. Mosche Michaelson (Ramban Trauma Centre Haifa, Israel)
4. Ms. Gila Hymes (Ramban Trauma Centre Haifa, Israel)
5. Dr. C.Kaufmann,International Chair ATLS
6. A team of Doctors from U.K. (FRCS Examiners)
7. A team of Doctors from Nepal Medical Council
8. A team of doctors for various Medical Colleges of India for specification Committee meeting under PMSSY Scheme.

11.1 B.B. Dikshit Library

Professor
Rani Kumar

Chief Librarian
Dr R. P. Kumar

Timings and Membership

The library is open round the clock on all days of the week including Sundays and holidays, w.e.f. 1st August 2003. It has 2282 regular members on its roll. On an average 700 readers consult the library every day.

Services

The library continued to extend the following services to the users. These services are not only modernized and updated but also further strengthened.

1. Book alert service

This is a monthly service, listing new books, monographs and pamphlets added to the library in a particular month.

2. Periodical alert service

This is fortnightly service, listing new periodicals received in the library during the previous fortnight.

3. Bibliographies on demand

The staff of the library compiled bibliographies on various topics as and when demanded by the readers.

4. 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.

5. Reprographic services

The library has five machines to meet the demands of the readers viz one PRO35, two 5834LV and two Modi Xerox 1025. During the year 1,37,912 pages were photocopied, on payment basis, as a service to the readers.

6. CD-ROM printout services

During the year 15,912 computer printout pages containing abstracts or full text of articles were made available to the readers on payment basis.

7. Book Bank

The Book Bank continues to serve the undergraduates and interns. The total membership of the Book Bank is 70. The Book Bank has more than 2,600 books, which are issued on a long-term basis to the students.

8. 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.

9. 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. This section also has four audio cassette playback decks and 109 audio cassettes.

10. CD-based service

The library has different data bases 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 778.

11. CD-NET

A CD-NET workstation is operational in the library since January 1993. Fifteen users at a time can search different databases loaded in a CD-NET tower. The library has been a pioneer in this respect being among the few libraries in the country to install such a facility. A printing facility is also available. The library has expanded this facility by adding one more CD tower with 28 drives.

12. Library automation

The library has a digital ALPHA personal workstation DPW 433 AU with sixteen terminals, one laser printer, one line printer and three local dot matrix printers. The various housekeeping operations, viz. acquisition, cataloguing, series control and circulation have been automated. The library is using a commercially available software package named LIBSYS.

13. Computerized thesis search

About 5,290 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.

14. Online journals

In the current year, the library received 446 journals in electronic and print versions and 46 journals only in electronic form.

15. OPAC (Online public access catalogue)

All the records from 1985 onwards are searchable through a computer. The theses received so far in the library can also be retrieved through OPAC. Other databases searchable 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.

16. Multimedia

The library has two multimedia sets. Few multimedia titles are also available.

17. 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.

18. Internet

This facility is available in the library from 10 a.m. to 10 p.m. from Monday to Friday and from 10 a.m. to 8:30 p.m. on Saturdays. Eighteen nodes are available to the users.

19. New additions

The library added 702 new books to its collection. It now has a total of 70,814 books. Also 1325 bound volumes of journals and 156 pamphlets/reports were added to the collection. The total number of bound volumes of journals and reports/pamphlet increased to 66,600 and 16,805, respectively. The library subscribed to 634 journals in various field of health sciences; 358 of these were received in electronic form 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 available for use of readers.

New ventures

1. A documentation centre containing publications of the faculty was set up.
2. A section containing books in Hindi, mostly in the health sciences, was setup. During the year 72 titles were added to this section.

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Dr R. P. Kumar, Chief Librarian was awarded the first Medical Library Association of India (MLAI) Life Time Achievement Award for his contributions to the profession and innovations during the National Convention of Medical Library Association of India (MLAI-2007) at Gaya, Bihar on 3 December 2007; continued as Vice President, MLAI, 2007–08; continued to be Chief Editor, MLAI News, a quarterly publication of the MLAI; was nominated expert member by Director, National Institute of Health and Family Welfare, New Delhi to look after revision of pay scales of various library posts; was elected unanimously General Secretary, Asian Society for Health Sciences Librarians and Information Specialists (ASHLIS) for 2008–10; continued as nominated member of Delhi Library Board (Governing Body of Delhi Public Library) for 2007–08; was Director of Seminar on 'Management of E-Resources' held at Government Medical College, Chandigarh, 16 April 2007; delivered lecture 'Electronic resources: Some key issues' at 8th Training course on IT applications, National Institute of Health and Family Welfare, New Delhi, 15 October 2007; Director, Annual Convention, MLAI, A. N. Magadh Medical College, Gaya, Bihar, 3–6 December 2007; presented a poster at Fourth International Conference on 'Bridging the Digital Divide' at Kathmandu, Nepal, 13–15 December 2007.

11.2 Cafeteria

Chairman

Deputy Director
(Administration)

Faculty-in-charge

O.P. Kharbanda

Accounts Officer

N. K. Bajaj (uptil 1.2.2008)

S. K. Gupta (from 1.2.2008)

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 AIIMS and all employees are treated at par with other AIIMS employees. The cafeteria is being run on a no-profit, no-loss basis, without any financial assistance from the Institute.

MANAGEMENT COMMITTEE

A management committee is constituted by Director, AIIMS for 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. Smt Rashmi Jain, 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 | Spl.Invitee |
| 10. Smt Swapna Chaturvadi, 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 |

SERVICES

The cafeteria runs 7 units for 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 theater cafeteria situated at 9th floor of the main hospital
3. CNC cafeteria situated on the 2nd floor of the Centre
4. Dr R.P.C. O.T. cafeteria situated on the 5th floor of the Centre
5. Apex J.P.N. Trauma Centre
6. Faculty Room cafeteria situated near main cafeteria
7. Dr B.R.A. IRCH Cafeteria situated at 3rd floor of the center.

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.

STAFF STRENGTH

Eighty-nine employees (regular/ad hoc/temporary) are on the rolls in the cafeteria. 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 53 lakhs.

DEVELOPMENTAL ACTIVITIES

Several changes were introduced in the cafeteria during the year.

Facility of LPG tandoor at main cafeteria

An LPG tandoor was procured to prepare tandoori dishes hygienically. Many changes were made to improve the ambience at the cafeteria.

Services started at Dr BRA IRCH Centre and Trauma Centre

An extension counter of the cafeteria was started at Dr BRA IRCH Centre and the Trauma Centre for the faculty, doctors and other staff members.

Medical checkup of cafeteria employees

All cafeteria workers were examined medically for their fitness as food handlers.

Future plans

A proposal for complete renovation of the cafeteria has been prepared so as to be equipped with the latest technology. This will allow food preparation and handling to be done in a more healthy and hygienic manner. A detailed working proposal has been prepared after several meetings and a professional architect has been hired. The proposal envisages complete renovation along with addition of one floor to the existing cafeteria. The building plan of the proposal is currently awaiting approval of the New Delhi Municipal Committee.

11.3 Central Workshop

Faculty Co-ordinator

Manoj K. Singh

Officer-in-charge (w.e.f. 30 March 2007)

Kalu Ram

Technical Officers

Harinder Pal

Nitin Srivastava

Swaraj Kumar

The Central Workshop is 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. Glass blowing
6. Carpentry and upholstery
7. Painting

FABRICATION AND GUIDANCE

The Central Workshop has contributed to the research activities of the Institute by modification of instruments and fabrication of useful equipment. 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 118 jobs of fabrication were carried out. The Central Workshop also provided support for the repair and maintenance of various new instruments developed by the workshop. Some of the important specialized fabrication jobs done successfully for various departments include:

Testicular prosthesis	(Department of Paediatric Surgery)
Fumigation chamber	(Main operation theatre 6 and 7)
Auto CPAP connector	(Department of Medicine)
'T' connector	(Dr BRAIRCH Main operation theatre)
Rat chamber	(Department of Pharmacology)
Spreader	(Department of Biotechnology)
Plastic Falcon tubes	(Stem Cell facility)
Glass column	(Department of Biophysics)
Adjustable CSF bag	(Department of Neurosurgery)
Arm rest	(Department of Obstetrics and Gynaecology, IVF operation theatre)
Jaw clamp	(Department of Dental Surgery)

The workshop also contributed by fabricating very specialized glass moulds for the Department of Obstetrics and Gynaecology. These moulds are used extensively by the department and are not

available in the market. In addition, glass rods of different shapes (L, V and U), glass capillaries, Pasteur pipettes and measuring cylinders were fabricated for all the departments as well as for the main hospital.

REPAIR AND MAINTENANCE

The Central Workshop has carried out repair and maintenance of all types of biomedical equipment including electrosurgical units, ECG machines, infusion pumps, multiparameter monitors, defibrillators, patient warmers, operation theatre tables, 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, etc.

The Central Workshop has also economically and successfully repaired many electronic types of equipments that manufacturing companies had proposed for condemnation. These include patient monitors, defibrillators, infusion pumps and patient warmers, etc.

The Central Workshop has also undertaken repair and painting jobs of all hospital furniture such as patient beds, patients lockers, intravenous stands, instruments trolleys, loading trolleys, fowler beds, etc. During 2007–08, the Central Workshop attended to a total of 8,325 repair jobs.

A total of 8,443 repair and fabrication jobs were done during the year.

11.4 K.L. Wig Centre for Medical Education and Technology

Dean (Examination)

T. D. Dogra

Professor-in-charge

Rita Sood

Coordinator

O. P. Kharbanda

Educationist

B. V. Adkoli

Education Media Generalist

Yogesh Kumar

Chief Technical Officer (Scientist IV)

Vacant

Adjunct faculty

Faculty from different departments

EDUCATION

Undergraduate, postgraduate, paramedical

Dr Rita Sood coordinated an 'Orientation Program for Interns' on 5–6 January 2008 for the new batch of interns at AIIMS. Many CMET adjunct faculty were resource persons for the program. CMET provided inputs to the MB,BS curriculum committee deliberations of phase 1 and phase 2. A feedback questionnaire was designed for phase 1. Inputs were provided to Examination Cell for appraisal and revision of undergraduate and postgraduate examinations.

Twenty sessions were conducted for MSc Nursing students of College of Nursing, AIIMS on topics related to media and communication. Five sessions were conducted for residents of Masters in Hospital Administration on computer applications.

Continuing medical education

Conferences/workshops organized by the Department

CMET in collaboration with Foundation for Advancement of International Medical Education and Research (FAIMER), Philadelphia, USA organized a National Conference on Medical Education (NCME 2007) on 'Building Capacity in Medical Education: A National Perspective' from 15 to 17 November 2007. It was attended by more than 100 participants comprising of senior faculty, Deans, Principals of Medical Colleges, Vice-Chancellors of Health Sciences Universities and international experts. As part of NCME 2007, 4 pre-conference workshops were also organized. The core group of organizers consisted of Dr Rita Sood (Organizing Chairperson), Dr A. Shariff (Organizing Secretary), Mr. Yogesh Kumar and Dr Radhika Tandon (Co-organizing Secretaries), Dr B. V. Adkoli, Mr Ragu Kumar, Dr Nalin Mehta, Dr Nibhriti Das, Dr Rajiva Gupta and Dr Kalpana Luthra.

Two in-house workshops on Assessment Strategies in Medical Education were held on 1–3 August 2007 (Organizing Secretary: Dr Arti Kapil) and 21–23 February 2008 (Organizing Secretary: Dr Nalin Mehta).

Lectures delivered

Dr Rita Sood

Course faculty for:

1. First PSG–FAIMER regional institute faculty development program in medical education, Coimbatore, Tamil Nadu, 15–20 April 2007.
2. Third GSMC–FAIMER regional institute course in medical education, K.E.M. Hospital and G.S.M.C. Mumbai, 15–19 June 2007.

The sessions conducted at these courses were (i) Project management, (ii) Student assessment, (iii) Mentoring–learning web and virtual curriculum, (iv) Qualitative research, and (v) Educational scholarship

- Panel discussion on ‘Curricular challenges to bridge health care needs’ and lecture on ‘Professionalism and ethics in medical education’ Sri Ramachandra University Harvard Medical International Conference on ‘Bridging Healthcare Education Gap’, Ramachandra University, Chennai, 27–28 July 2007.
- ‘One minute preceptorship as a teaching method’, Seminar for Directors and Faculty of FAIMER regional institutes (DAFFRI) at FAIMER, Philadelphia, USA, 18–22 August 2007.
- ‘Building a network of medical educators’, NCME 2007, AIIMS, November 2007.
- Workshop on ‘Assessment in Medical Education’, API Gujarat chapter Annual Conference, Karamsad, Gujarat, 23–24 December 2007.
- ‘Written communication’, Interns orientation program, AIIMS, New Delhi.
- ‘MCQ as an assessment tool’, College of Nursing workshop on ‘Teaching and Learning for nurses’, AIIMS, New Delhi, 14 January 2008.
- ‘Role of medical education units’, Regional workshop on ‘Role, relevance and effective utilization of medical education units for faculty development in medical education’, Nagpur, 3 February 2008.
- ‘Assessment—an overview’ and ‘Recent trends in assessment’, In-house workshop on Assessment in Medical Education, November 2007 and February 2008.

Dr O.P. Kharbanda

- ‘CMET facility—Role and usage’, AIIMS PG orientation programs, July 2007 and January 2008.
- ‘Role of continuing professional development in the accreditation program’, Dental Council of India.

Dr B.V. Adkoli

- ‘Newer trends and concepts in Assessment’, ‘Linking educational objectives, learning and assessment’ and ‘Recent trends in clinical assessment’, In-house workshop on Assessment in Medical Education, November 2007 and February 2008.
- Two lectures on ‘Group dynamics’ for Residents, Department of Hospital Administration, AIIMS.
- Panelist for the session ‘Communication and team work’, AIIMS PG orientation programs, July 2007 and January 2008.

- ‘Communication skills’, Training program on Management of HIV/AIDS for Nurses, Department of Medicine and Delhi State AIDS Control Society.
- Session on ‘Group dynamics’, National Workshop on Advanced Educational Technology, Nursing for Quality Patient Care, Trained Nurses Association for India.
- ‘Ethics and professionalism in patient care’, AIIMS Intern’s orientation program.
- ‘Group dynamics’ and ‘Microteaching’, College of Nursing workshop on ‘Effective teaching and learning strategies’.
- Resource person, Workshop on faculty development, FAIMER Regional Institutes, CMC, Ludhiana.
- Resource person, Workshop on ‘Strengthening teaching and learning skills’ for nursing faculty, Himalayan Institute College of Nursing, Dehradun.

Mr Yogesh Kumar

- Twenty-hours module for the fourth batch of MSc Nursing on various aspects of educational technology and role of media in communication.
- ‘Digital photography’, Surgical Workshop and CME on ‘Rhinoplasty and FESS’ Otorhinolaryngology & Head and Neck Surgery and Otorhinolaryngological Society, AIIMS.
- Three sessions on ‘Effective presentation’, ‘Designing OHP’ and ‘Micro-teaching’, Workshop organized by Trained Nurses’ Association of India (TNAI).
- Demo lecture on ‘Video editing: Tips and tricks’, Conference Skull Base 2008, Department of Neurosurgery, AIIMS.
- Hands on training on ‘Digital Photography and ‘Video Editing’ during Indian Association of Surgical Gastroenterology Conference, AIIMS, New Delhi, September 2007.
- Resource person, Workshop organized by College of Nursing, Himalyan Institute Health Trust, Dehradun; Conducted sessions on assessment, media selection, effective presentation and microteaching for nursing faculty.
- Demo lecture on ‘Reviewing techniques in word’ and ‘Inserting cross-references in word’ during pre-conference workshop on ‘Essentials of Research Methods and Good Scientific Writing in Reproductive Health’, 51st All India Congress of Obstetrics & Gynecologists, New Delhi.

Dr Manju Mehta

- ‘Communication skills and psychosocial issues in healthcare’, AIIMS Interns orientation program.

Dr Nalin Mehta

- Participated in workshop on Faculty development organized by the FAIMER Regional Institutes at CMC, Ludhiana.
- ‘Ethical Issues’, AIIMS PG orientation program.
- ‘Ethics and professionalism in patient care’, AIIMS Interns orientation program.
- ‘Ethics’, Workshop organized by Trained Nurses Association of India (TNAI)

Dr Kalpana Luthra

- Resource person, National workshop for Nurses ‘Effective teaching and learning strategies’, AIIMS, January 2008.
- Participated in workshop on Faculty development organized by the FAIMER Regional Institutes at CMC, Ludhiana.

- Conducted session on ‘Role of MCQs’, In-house workshop on Assessment in Medical Education, November 2007 and February 2008.

Dr Nibhriti Das

- Conducted a session on ‘Student feedback’, In-house workshop on Assessment in Medical Education, November 2007 and February 2008.

Dr Arti Kapil

- Conducted session on ‘Improving essays’, In-house workshop on Assessment in Medical Education, November 2007 and February 2008.

Mr Ragu Kumar

- Session on ‘Role on computers and information technology in Nursing education’ for the National training program for nursing teachers organized by Trained Nurses Association of India.
- Session on ‘Computer assisted learning’ for the National workshop on Effective teaching and learning strategies for Nursing teacher from Delhi region at AIIMS.
- The adjunct faculty of CMET, Dr Nibhriti Das, Dr A. Shariff, Dr Nalin Mehta, Dr Kalpana Luthra and Dr Ashok Jaryal were also resource persons for National Workshop on Assessment Methods for Learning and Evaluation in Basic Sciences organized by the Department of Physiology, AIIMS in September 2007.

RESEARCH

Completed

- Critical appraisal of assessment in key clinical disciplines in undergraduate course at AIIMS (Dr Rita Sood), as a part of FAIMER Fellowship program, Philadelphia, USA.
- Appraisal of the undergraduate biochemistry practical curriculum (Dr Kalpana Luthra) as a part of fellowship program of Regional FAIMER Institute, CMC, Ludhiana.
- A survey of medical education units and faculty development programs in medical colleges of India. (Dr BV Adkoli and Dr Rita Sood)

Ongoing

- Introduction of bioethics in AIIMS undergraduate curriculum (Dr Nalin Mehta) as a part of FAIMER fellowship program at Regional FAIMER institute, PSG Institute of Medical Sciences and Research, Coimbatore.
- Implementation and evaluation of structured clinical case presentation for assessment of fourth and fifth semester undergraduates posted in the Department of Pediatrics, AIIMS (Dr Vandana Jain) as a part of FAIMER fellowship program at Regional FAIMER Institute, Seth G.S. Medical College, Mumbai.

PUBLICATIONS

1. Adkoli BV, Sood R, Kharbanda OP. Faculty development program at the Centre for Medical Education and Technology AIIMS In: *Proceedings of NCME 2007. National Conference on Medical Education. Building Capacity in Medical Education*. New Delhi:AIIMS; 2007.
2. Sood R. Role of medical education units in medical education. In: *Proceedings of Regional workshops on ‘Role, relevance and effective utilization of medical education units in faculty development’*. Nagpur: Datta Meghe Institute of Medical Sciences University; 2008.

SERVICES

Media production during 2007–08

Type of media	No. of requisitions
Clinical photography	496
X-ray, specimen, gel, etc.	511
Photographic prints (black and white, and colour)	365
Scanning of images (slides, documents)	407
Video recording, editing (non-linear) including tape to CD conversion	295
Designing/printing of large format posters	479
Book binding, paper cutting and offset printing	185,20,000 approx.

Photography support was provided to 39 institutional academic events and 36 official functions.

Upgradation of facilities

The following technology-based facilities were installed/augmented for the benefit of interactive training workshops conducted for faculty, residents and nurses and for quality improvement of services provided by the CMET:

1. Computer-based teaching facility with network and internet facility with 12 PCs and provision for wireless connectivity and online access to LRMs.
2. Networking of media production facility.
3. State of art multimedia projector, visual projector, electronic copy board, high end non-linear editing system, drawing tablet, DVCAM camera and A3 size high end transparency scanner have been installed. Multiple round tables and flip boards have been procured to facilitate small group participatory activities.
4. Media requisition software upgradation was done and installed at CMET reception for an efficient tracking and reporting system for users requests for posters, photography and other services.

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; Reviewer for *Int J Med Edu*, *Natl Med J India* and *JIACM*.

Dr. Radhika Tandon continued as member of the core group for introduction of OSCE style examination by the National Board of Examination (since 2001–ongoing); remained on the panel of examiners in Ophthalmology of Royal College of Surgeons, Edinburgh (since 2000–ongoing); organized a number of public health education programs, awareness drives for eye donation through distribution of charts and pamphlets; delivered talks on eye donation on DD Prasar Bharati and other channels.

Dr Rita Sood and Dr BV Adkoli were members of the expert committee constituted by DGHS, Ministry of Health and Family Welfare on the revision of curriculum for the MBBS course; invited by Medical Council of India for brain storming session on Medical Faculty Training and development at the national level.

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

Sanjay Gupta

V.K Jindal

S.P.Singh

Vinay Pande

Programmer

Hari Shankar

EDUCATION

Postgraduate

Computer programming classes covering both theory and practical aspects were conducted for postgraduate students of the Department of Biotechnology, students of the College of Nursing, and bioinformatics classes for students of the Department of Biotechnology. Also provided training for Armed Force officers deputed to study Medical Informatics for a 2-year period using new course modules.

Undergraduate

A three-month course on basics of computers, internet, Windows applications, computer-aided learning, database and biostatistics was conducted for students of BSc (Hons) Nursing at AIIMS. A computer course was conducted for students of BSc Nursing (Post-certificate).

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. The facility organized videoconferencing facilities for lectures of faculty members of AIIMS to other medical colleges/hospitals in India. Conducted a workshop on use of internet and email facilities at JPNATC, 25 August 2007, for the Faculty and Junior/Senior Residents of JPNATC

SERVICES

Hospital computerization

Computer Facility has migrated to latest SQL Server 2005 and Windows Server 2005. The following software design, development and implementation activities were done by the computer facility during this year.

1. Successfully implemented computerized registration of OPD patients, daycare registration and appointment of cancer patients at Dr BRA IRCH in July 2007. The backlog entries of all old patients' demographic information since inception have been entered into the system. The

operational modules are (i) registration (OPD/inpatient/daycare), (ii) cash section, (iii) laboratory, (iv) surgery, (v) anaesthesia, (vi) pain clinic, (vii) MRO, and (viii) daycare appointment.

2. Successfully implemented computerized registration of new OPD patients for all clinical departments at main hospital in October 2007. Registration of 19 departments was completed by March 2008.
3. Successfully implemented computerized admission registration in the main hospital in January 2008.
4. Successfully integrated neurosurgery patients receipt counter, neurosurgery billing section and neurosurgery OT store in July 2007.
5. Successfully demonstrated electronic registration of new patients both for OPD and clinics at cardiac and neurosciences centre. Software is ready for implementation.
6. Since February 2008, OPD registration of dental patients has started at Centre for Dental Education and Research (CDER). Viewing of digital image through network is in the process of implementation.
7. Discharge summary for patients of some clinical departments such as Gastroenterology, Orthopaedics, CTVS, Neurology, etc and Disability certificate for both Orthopaedics and Physical Medicine and Rehabilitation are running successfully.

Software development

1. Software maintenance on duty book for control room (MS-Office)
2. Database and software maintenance for pathology reports
3. Database and software maintenance for PMR
4. Registration software for patients at Trauma Centre
5. Software for physiotherapy patients.
6. Physical activity software for the Department of Medicine
7. Software for haematology patients data including various haematology tests
8. Software for histopathology and cytopathology tests for Dr RP Centre for Ophthalmic Sciences
9. Baseline proforma software for young diabetic patients, Department of Endocrinology
10. Analyzing, designing and development of main billing system
11. Providing training to hospital system users
12. Development of Neurosurgery main stores and OT stores system
13. Computerization of academic section, research section and library
14. Technical coordination for creation of network-based teaching facility and for various IT related infrastructure development at CMET
15. Report generation package for academic section
16. Modification and maintenance of CMET requisition system.
17. 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.

B.B. Dikshit Library

Technical co-ordination for online journal access and provision of journal access using internet and PC at duty rooms and common rooms for scholars and senior/junior resident doctors.

Networking, Internet and Intranet

1. Analysis, design and development of state-of-art structured network for the JPNATC, New Delhi with more than 60 nodes throughout the hospital, academic and administrative areas.
2. Development of fiber optic backbone to connect Centre for Dental Education and Research.
3. Installation of 45 mbps leased line (1:4) for internet for use in academic and office work.
5. Technical coordination for study of wireless connectivity of Hostels.
6. Development of draft network security policy.
7. Co-ordination of the Training program for the concerned staff and officers on the Indian Government tenders information system for online tender information of AIIMS.
8. Co-ordination for installation of point-to-point connectivity of wireless interconnectivity between computer facility and JPNATC and Department of Forensic medicine.
9. Involved in technical specifications committee for library computers, networking and internet for students at B.B. Dikshit Library, integrated web appliance for antivirus, antispam, webmails, etc.
10. Installation of UTM-based perimeter security.
11. Creation of webmail facility.
13. Website *www.aiims.edu*, *www.aiims.ac.in* are maintained in-house. There were about 24 lakh visitors to the website during 2007–08. Software modules for the website are developed in house.
14. Internet facility for faculty and students were maintained 24x7x365 days at around 1400 nodes.
15. Remote access internet facility for faculty on the campus wide telephone network 24x7x365 days was continued
16. Creation and maintenance of users accounts for 564 aiims.ac.in domain email users.
17. Maintenance of Web Server, Proxy Server, Messaging server 24x7x365 round the year.
20. Design, development and modifications in the Dharamshala reservation system.
21. Design and development of web-based cardiac radiology laboratory system.
22. Design and development of the web-based CTVS appointment system.
23. Designing web pages for CTVS department and uploading unknown patient information.

Details of pages updated and created on AIIMS website

Details	No. of pages
Total under departments and centres	216
Conferences, workshops, lectures and orations	230
Recruitment for faculty and other posts	83
Admission notices, results and others under 'Current events'	413
Members of Institute body and other standing committees	4

Central facilities	22
RTI information, notices, health information, hostel, etc	109
Tenders and notices	355
Total	1432

Other web-based activities

Data uploaded on Exam server	117 MB (approx)
Number of email users at aiims.ac.in	649
Number of tenders uploaded on <i>http://tenders.gov.in</i> website	1,491
Number of internet users at the user room	16,734
Number of virus mails detected	17,268
Number of valid mails	10,74,000
Number of spam mails detected and filtered	4,02,39,240
Total data transferred (as of June 2008)	69,36,264 MB
Number of internet nodes	1400 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

Administrative sections

1. Technical co-ordination for the New telephone directory Committee at AIIMS.
2. Software of Cheque Printing for Budget Section

Examination section

Coordinated and conducted computerized online counseling for MD/MS/MDS and selection of Junior Residents (non-academic). All exam results and notices were hosted on the website.

Telemedicine

1. Technical co-ordination for establishment of pilot/inaugural link between AIIMS and REC, New Delhi inaugurated by President of India; for webcasting user facility for web-based learning and CME.
2. The existing telemedicine facility was upgraded by ISRO VSAT and now supports high quality transmission for Ballabgarh unit.
3. The following programs were organized: 19 CMEs, 43 case discussions, and 25 national and international conferences.

SIGNIFICANT EVENTS

Dr R. S. Tyagi was elected Member, Audit Committee, International Medical Informatics Association, 2007–10; Member, Board of Studies, Himgiri Nbh Vishwavidyalaya, Dehradun, Uttarakhand; conducted Symposium on Medical Informatics, Delhi Chapter of IAMI, New Delhi, 5 September 2007; adjudged among 100 CIOs of India by IDG, an international agency.

Mr S. Kailash attended and chaired a scientific session, Silver Jubilee National Conference of Indian Society for Medical Statistics, Manipal, Mangalore, Karnataka, 30 November–2 December 2007; presented paper titled ‘Patterns of practice of telemedicine at a quaternary super-specialty referral hospital in a developing country, Medinfo 2007 triennial congress, 20–24 August 2007, Brisbane Convention Centre, Australia; was Selection Committee expert for selection of System administrators and Group A Scientific officer at ERNET, Ministry of Information Technology, Government of India

Mr S.N. Ragu Kumar attended 4 national conferences/meetings; conducted session on ‘Information management in biomedical informatics’, ICMR workshop; delivered lecture ‘Use of IT in patient care’, PG orientation course, AIIMS, 4 August 2007; delivered a lecture ‘ICT in nursing education: e-learning’, Symposium on Effective teaching and learning strategies in nursing education, AIIMS; delivered a lecture on ‘Computer aided learning: e-learning’, National training program for nursing professionals, TNAI, New Delhi; conducted a session on ‘Internet and rhinology’, National conference on Rhinology, 30 December 2007, Department of ENT, AIIMS; member of study team for comparative study on ‘in person versus tele-medicine based learning for nursing education’, Department of Paediatrics, AIIMS; delivered lectures ‘Information technology in disaster management’ and ‘Tele-Medicine’, Indian Red Cross Society; Executive and organizing committee member, National conference ‘Building capacity in medical education—a national perspective’, 15–17 November 2007; Expert, selection of ‘IT- coordinator’, Indian Red Cross Society; Member, Committee to review project on hospital management information system for the rural health center, Ballabgarh; guide for dissertation ‘Information technology in disaster management’, Guru Gobind Singh Indraprastha University.

Mr S.K. Meher organized workshop on ‘Application of IT in Healthcare’, at annual symposium ‘Information technology management’, Utkal University, Bhubaneswar, 6–8 December 2007; delivered talk on ‘Community health informatics’, MTech monthly seminar, Utkal University; Member, Medical and Bioinformatics reviewer committee, AACC 2007; selected International Organising Chair, Conference AACC 2007, Kathmandu, Nepal, 13–15 December 2007; conducted tutorial ‘Adoption of eHealth: Necessary for quality patient care’, AACC 2007, Kathmandu, Nepal, 13–15 December 2007; delivered talk on ‘PERL programming’, ICMR workshop ‘Introduction to Bioinformatics’, 4–8 June 2007; delivered talk on ‘CME in Neonatology through Tele Medicine’, eHealth India 2007 Conference, New Delhi, 31 July 31–2 August 2007; attended 2 national and 1 international conference.

Mr Sanjay Gupta attended 2 national conferences; represented AIIMS at Telemedicine User’s Meet, Workshop organized by ISRO, Ahmadabad, 3–4 May 2007.

Mr Vinay Pande was elected Treasurer, Indian Association of Medical Informatics (2008–09), continuing as Treasurer, Delhi Chapter of IAMI; Member, Organizing team of (i) Seminar on Medico-Legal Informatics, Organized jointly by IAMI (Delhi Chapter) and India Legal Information Institute, Greater Noida, UP, 29 April 2007; (ii) Symposium, Medical Informatics, IAMI (Delhi Chapter), New Delhi, 5 September 2007; panelist in symposium ‘Medical Informatics in India: Looking Ahead’, New Delhi, 5 September 2007; panelist at National Convention of MLAI, Gaya Medical College Gaya, Bihar and presented paper ‘The knowledge manager—Changing role of health science librarians in information age’, 3–6 December 2007.

VISITING SCIENTISTS

1. Professor Diana Schmidt, School of Medical Informatives, Beidelberg University and Heilbronn University, Germany.

11.6 Electron Microscope Facility

Officer-in-charge

Shashi Wadhwa

Associate Professor

Taposh K. Das

Associate Professor

T.C. Nag

Technical Officer

Mr Rajesh Pathania

Technical Assistant

Mr Sandeep Arya

EDUCATION

1. A training programme on Scanning electron microscopy (SEM) and Transmission electron microscopy (TEM) was conducted for 14 MTech (Nanotechnology) and MSc (Nanoscience) students of Amity Institute of Nanotechnology, Noida, 2–10 April 2007.
2. Twenty-four MSc and PhD students from JNU visited the EM laboratory on 9 April 2007.
3. Five WHO fellows visited EM laboratory on 29–30 April 2007 and were instructed on principles of EM and processing of biological samples for EM observation.
4. Twenty-four students from the British School, Chanakyapuri, New Delhi visited the EM facility on 28 November 2007.
5. Eighteen MSc students from Jamia Milia Islamia visited EM laboratory on 30 January 2008.

Continuing Medical Education

1. The 23rd National Training Programme in Electron Microscopy for Scientific Investigators was held, 12–24 November 2007. The training programme was conducted in two parts:
 - a) **Basic course (12–17 November 2007):** 17 scientific investigators, selected from 51 applicants from various parts of the country participated. The course comprised of 2 weeks of hand-on training on techniques of biological sample preparation and operation of SEM and TEM for viewing self-prepared samples.
 - b) **Advanced course (19–24 November 2007):** 13 scientific investigators, selected from 46 applicants, from various parts of the country participated. The course consisted of hands-on training-cum-demonstration of special techniques in EM, viz. microwave technique for sample preparation, immunoelectron microscopy, cryoelectron microscopy, image analysis, stereology and digital imaging.
2. Summer Training Course for Technical Personnel in Electron Microscopy was held for 6 weeks, 2 July–11 August 2007. Dr Madhu Yashpal, Scientist, EM Facility from Institute of Medical Sciences, Banaras Hindu University, Varanasi, was trained in sample processing, microtomy, CPD, sputter coating, TEM and SEM viewing, photography and routine maintenance.

RESEARCH

Funded projects

Ongoing

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 lakhs.
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.

Completed

1. Localization of markers of oxidative phosphorylation in the aging human retina. T.C. Nag. Funded by AIIMS (2005–07). Funds: Rs 1 lakh.

Departmental projects

Ongoing

1. Effect of infused amyloid beta (Ab1-42) on hippocampus and cerebellum of rat: Ultrastructural and proteomic study. Taposh K. Das.
2. Müller cell changes in the aging human retina. T. C. Nag.

Collaborative projects

Completed

1. Effects of certain plant extracts on experimentally induced myocardial infarction in rat (with Pharmacology).

Ongoing

1. Influence of prenatal auditory stimulation on the development of synaptic proteins, BDNF and spatial memory in chick hippocampus (with Anatomy). T. C. Nag.
2. Prenatal development and maturation of human inferior colliculus (with Anatomy). T. C. Nag.

PUBLICATIONS

1. Baweja RB, Zaman MS, Mattoo AR, Sharma K, Tripathi V, Aggarwal A, Dubey GP, Kurupati RK, Ganguli M, Chaudhury NK, Sen S, Das TK, Gade WN, Singh Y. Properties of *Bacillus anthracis* spores prepared under various environmental conditions. *Arch Microbiol* 2008;189:71–9.
2. Biswas NR, Khokhar S, Rajesh P, Gogoi M, Sen S, Das TK, *et al.* Amniotic membrane in trabeculectomy: An experimental study. *J Clin Diagnostic Res* 2007;1:56–61.
3. Chaudhury S, Nag TC, Wadhwa S. Altered levels of BDNF protein following prenatal auditory stimulation. *Neurosci Res* 2007;58 (Suppl 1):S224.
4. Chaudhury S, Nag TC, Wadhwa S. Calbindin D-28K and parvalbumin expression in embryonic chick hippocampus is enhanced by prenatal auditory stimulation. *Brain Res* 2008; 1191:96–106.
5. Das U, Hariprasad G, Ethayathulla AS, Manral P, Das TK, Pasha S, *et al.* Inhibition of protein aggregation: Supramolecular assemblies of arginine hold the key. *PLoS ONE* 2007;2:e1176.

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PATIENT CARE

Special laboratory facilities

During the year, special laboratory facilities provided for research and patient care are as follows:

Facility	Users (<i>n</i>)	Specimens analysed
Transmission electron microscope	387	1901
Scanning electron microscope	234	1617
Immuno-electron microscope	38	59
Elemental analysis (EDAX)	26	119

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Dr Taposh K. Das was invited to review for Microscopy Research and Technique, Ohio, USA.

Dr T.C. Nag presented a talk at the Silver Jubilee meeting of Indian Academy of Neurosciences, 22–25 November 2007, BHU, Varanasi; attended Workshop on Cryo electron microscopy and 3D tomography in biology, 3–4 December 2008, NICED, Kolkata; invited to review for *Indian J Ophthalmol*.

Professor Shashi Wadhwa delivered a plenary lecture, chaired a session and judged the best electron micrograph contest and attended the meetings as member of the National Advisory Committee of the XXIX Annual Conference of Electron microscope Society of India, University of Delhi, 26–28 November 2007.

Professor Shashi Wadhwa, Dr Taposh K. Das and Dr T.C. Nag attended the meeting of the Steering Committee for the Sophisticated Analytical Instrument Facilities (SAIF) held at DST, New Delhi on 21 January 2008 where Professor Wadhwa presented the performance of Electron Microscope Facility during 2006–07 and the proposal for 2007–08.

11.7 Central Animal Facility

Professor-in-Charge

D.N. Rao

Senior Veterinary Officer

P.K. Yadav

Veterinary Officer

Vijender Singh

The activities of the facility during 2007–08 are listed below.

SMALL ANIMALS (RODENTS)

The following small animals (average/month) have been maintained throughout the year:

Rats (Wistar)	1,372
Mice (Swiss)	1,236
Rabbits (New Zealand)	87
Guinea Pigs (Dunkin Hartley)	37

A total of 3,205 small animals (rats, mice, rabbit and guinea pigs) were supplied to various departments and considerable numbers of animals were also sold to other institutions in Delhi and outside, i.e. rats 296, mice 446, rabbits 19 and guinea pigs 2.

LARGE ANIMALS (SHEEP)

The sheep colony housed 21 sheep for research work of the microbiology department.

NON-HUMAN PRIMATES (MONKEYS)

Census report

Total number of monkeys on 1 April 2007	85
Number of deaths	14
Born in the colony	4
Total number of monkeys on 31 March 2008	58

Breeding programme

Breeding of monkeys was done in cage and open run. A total of 18 female monkeys were mated by cage breeding and 11 female monkeys were put in run formatting. While 4 monkeys have been born in the colony another 13 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 for 3–5 years and old monkeys were put in open run and monkeys cages. Most of these monkeys were permanently rehabilitated to animal welfare organizations as per instructions from the CPCSEA. Seventeen monkeys have been rehabilitated to People for Animal (PFA), Sanjay Gandhi Animal Care Centre, New Delhi, during 2007–08.

Clinical procedures conducted

Blood samples collected	100
Physical examination, testing for tuberculosis and weight	69
Haematology	100
Blood chemistry	76
X-ray	22
Rectal palpation	22
Parasitology (stool examination)	Nil
Other procedures	253

(Management of trauma, obstetrics procedures, ASD treatment, etc.)

EXPERIMENTAL SURGERY

Fifty-three surgical procedures and radiological investigations were performed by various departments (including Surgery, Biomedical Engineering Unit, Neurosurgery, Paediatric Surgery, and Endocrinology and Metabolism) on small and large animals in the Central Animals Facility.

INSTITUTIONAL ANIMAL ETHICS COMMITTEE (IAEC)

During the year (2007–08), the IAEC cleared 45 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 124, Mice 700, Rabbits 58, Guinea pig 2 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 attended the 1 week residential training programme for CPCSEA nominees, 24–28 September 2007, NIWA, Sikri, Ballabgarh (Haryana); attended Indian Association of Veterinary Anatomists XXII Annual Convocation and National Symposium on ‘Recent advances in anatomy of domestic animals with special reference to developmental anatomy’, 21–23 November 2007, Tirupati, Andhra Pradesh.

Dr Vijender Singh attended the World Small Animal Veterinary Association Education Programme for Pets, 1–2 December 2007, New Delhi.

Dr P.K. Yadav and Dr Vijender Singh attended the Second National Conference on ‘Current perspectives and future challenges in laboratory animal management, 29–30 December 2007 LASA, Bangalore; attended the conference of the Society for Free Radical Research—India Satellite meeting, 11–12 February 2008, Department of Biochemistry, AIMS, New Delhi.

11.8 Hostel Section

Superintendent of Hostels

H.H. Dash

Deputy Superintendent of Hostels

S. Datta Gupta
Buddhadev Choudhary

J.S. Titiyal
Rachel Andrews

Seema Mishra
Bhupinder Paul

Senior Warden

Krishna Dhaka

Warden

Shashi Prakash Pandey

Deputy Wardens

Mohan Sharma
Sat Prakash Kalia

Remani Thoams

Seema Pruthi

Assistant Wardens

Suchita Kumari

Sukhpal Mallick

Junior Wardens

Babu Lal Meena
Dinesh Desai
Sunil Devi

Rani Varghese
Nirmala

Triptha Sharma
Rajesh Rawat

Ministerial Staff

Neelam Rani

Vimal Thakral
UDC

Assistant (NS)

Sudhir Thakur
LDC

D. Poongothai
LDC

Veena Bhatia
LDC

Subordinate Staff

Twelve women and men office attendants each are posted in the hostel section.

There are several halls of residents with a capacity of over 1700 (approximate) single/double rooms and 176 married residences and 322 residences for nursing students. These are spread over different hostels and residences in the Main campus, Masjid Moth, Ayurvigyan Nagar, Faculty Transit Accommodation Hostel and Jai Prakash Narain Apex Trauma Centre Hostel (Raj Nagar).

RESIDENCES

S. No.	Hostel	Location	Single room	Double/Three/Four/Five seater	Guest rooms (with 2 beds)	Total strength
Gents hostel						
1.	I (Charak)	Main Campus	62	3	–	68
2.	II (Jivak)	Main Campus	55	2	1	60

3.	III (Sushruta)	Main Campus	69	6	1	82
4.	IV (Madhava)	Main Campus	53	7	–	67
5.	V(Nagarjuna)	Main Campus	53	5	–	63
6.	VI (Vagbhatta)	Main Campus	69	8	–	85
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	74+4+0+0	2	322
Total						1,264

Ladies hostel

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 (Laxmi)	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.	A.V. Nagar	A.V.Nagar	80			80
4.	F.T.A.	A.V.Nagar	29			29
5.	J.P.N.A. T.C	Raj Nagar	7			7
Total						176
Grand Total						1,720

SIGNIFICANT EVENTS

- Reverse osmosis plants have been installed in Masjid Moth Residents doctors and Nurses hostel.
- Car parking space has been extended in Masjid Moth Resident doctors hostel for the benefit of the resident doctors.
- The life has been renovated at Masjid Moth Resident doctors hostel
- All bathrooms and lavatories at Masjid Moth Resident doctors hostel have been renovated.
- The mess kitchen at Masjid Moth Resident doctors hostel has been renovated.
- Internal wiring for air conditioners (with MCB, DB, cable, etc.) has been done for Hostels 1 to 10, and RPC I and II.
- Reverse osmosis machine has installed on the ground floor in Hostels 1 to 10 and RPC I and II.
- The set top box of dish connection for common television rooms of various hostels have been installed.
- The cateteria of Hostel no. 5 has been renovated.
- The mess kitchen on the ground floor of Hostel no. 8 has been renovated while that on the first floor is being renovated.
- Twelve lavatories in Hostel no. 7 have been renovated.

12. The new shop complex has been constructed and allotted to contractors. Previously they were running their shops in a temporary structure.
13. The mess kitchen of Hostel no. 9 has been renovated.
14. (i) Two new security guard cabins have been constructed in Hostel No. 10 and 11 near the S.T.D booth.
(ii) Two security guard cabins have been replaced near the main gate of Hostel No. 10 and RPC-II.
16. The beauty parlour in the Ladies Hostel has been renovated.
17. The work for provision of 24 hours computer facility in Ladies Hostel has started in RPC-II (TV room).

FUTURE PLANS

1. Construction of a new hostel with modern amenities to accommodate 1000 students and resident doctors.
2. Internet connection for all the rooms in the Hostels.
3. Renovation of cooperative mess of Hostel no. 2, 4 (ground and first floor).
4. Installation of air conditioners in Hostel section.
5. Computerization of hostel allotment.
6. Provision of study room on terrace of Hostel No. 9.

12.1 Finance Division

Sr. Financial Advisor

Smt. Rashmi Jain upto 4.3.2008

Sh. D.N. Pathak w.e.f. 17.3.2008

Financial Advisor/F&CAO

Mrs. Basanti Dalal

F&CAO

Sh. S.P. Mahla

Sh. C.L. Raina

Accounts Officers

Sh. Kishan Gopal upto 31.7.07

Sh. Sunil Kumar Kedia upto 15.7.2007

Sh. N.K. Bajaj upto 27.1.2008

Sh. O.P. Saini upto 27.4.2007

Sh. R.K. Juneja

Sh. D.P. Gangal w.e.f. 26.4.2007

Sh. Suresh Kumar w.e.f. 26.4.2007

Smt. Kanta Sachdeva w.e.f. 28.8.07 to 31.1.08

Sh. R.C. Katoch w.e.f. 26.4.2007

Smt. Santosh Kapoor w.e.f. 21.9.2007

Sh. N.D. Sharma w.e.f. 1.3.2008

Sh. Bhom Singh w.e.f. 15.9.2007

Sh. S.S. Yadav w.e.f. 13.12.2007

Sh. S.K. Gupta w.e.f. 8.10.2007

Sh. D.R. Bellani w.e.f. 28.8.2007

The Institute gets grants under the Heads “Plan” and “Non-Plan” from the Govt. of India, Ministry of Health & Family Welfare. Plan grants are also received for National Drug Dependence Treatment, VVIP care and College of Nursing etc. separately. 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 Govt. of India and other agencies are further allocated to Superspecialities Centres/departments/Research Section as per their projections/requirements.

Finance Division of the Institute monitors/controls 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 G.P.F. in respect of the employees of the Institute. While making payments, all the checks prescribed by the Government of India are being exercised by the respective DDOs. Financial advise is also being rendered by the Finance Officers wherever required.

All the above works are executed by the Financial Advisor, Finance & Chief Accounts Officers (F&CAOs)/Accounts Officer under the overall control of Senior Financial Advisor.

**FIGURES OF ACTUAL EXPENDITURE FOR THE YEAR 2006-2007 AND 2007-2008
(UNAUDITED) AND FINAL**

**BUDGET ESTIMATES FOR 2007-2008 & BUDGET ESTIMATES FOR 2008-2009 IN
RESPECT OF**

ALL INDIA INSTITUTE OF MEDICAL SCIENCES, NEW DELHI.

(RS. IN CRORES)

HEAD/SUB HEAD	ACTUAL EXPENDITURES		SANCTIONED		BUDGET ESTIMATES	
	2006-2007		2007-2008		2008-2009	
	PLAN	NON-PLAN	PLAN	NON-PLAN	PLAN	NON-PLAN
1	4	5	4	5	6	7
A. (Main Instt.)						
Pay & Allow. Incl.	-	115.82	-	123.69	-	98.65
LS & PC, stipend etc.						
Mach. & Equip. & Computers	22.49	3.11	47.67	4.80	50.19	2.60
Mat. & Supply	-	83.99	-	91.39	-	82.00
Maintenance of Bldg.	-	4.79	-	5.10	-	4.75
Pension & other pensionary benefits	-	18.63	-	21.02	-	21.00
Recoverable Advances	-	0.19	-	0.33	-	0.50
House Building Adv.	-	0.08	-	0.20	-	0.50
Instt. Research Grant	-	0.50	-	0.50	-	0.50
Books & Publication (M. & S.)	1.63	-	3.04	-	2.75	-
Conference/Symposia	-	0.50	-	0.50	-	0.50
Capital Building	13.79	-	32.67	-	33.77	-
P.E.T. Facility	1.55	-	-	-	-	-
Computerisation	-	-	-	-	5.29	-
TOTAL A	39.46	227.61	83.38	247.53	92.00	211.00
TOTAL A & B	39.46	227.61	83.38	247.53	92.00	211.00
1	4	5	4	5	6	7
B. SUPERSPECIALITIES						
C.N.Centre	33.37	47.33	21.65	52.88	15.00	45.00
Dr. R.P. Centre	6.75	25.40	8.93	28.57	9.00	18.00
Dr.B.R.A. I.R.C.H.	9.73	11.90	12.50	18.49	5.00	16.00
i/c Linear Accelerator	0.63					
J.P.N. Apex Trauma Centre	50.80	-	34.16	-	35.00	
Centre for Dental Education and Res.	13.69	-	3.22	-	6.00	
TOTAL (A & B)	154.43	312.24	163.84	347.47	162.00	290.00

C. DE-Addiction Centre	4.05	-	4.86	-	6.00	-
D. N.A.C.O. (Dr. Ashok Kumar)	-	-	-	-	-	-
GRAND TOTAL (A to D)	158.48	312.24	168.70	347.47	168.00	290.00

ALL INDIA INSTITUTE OF MEDICAL SCIENCES

STATEMENT SHOWING REVENUE RECEIPT FROM APRIL 2007 TO MARCH 2008

(Rs. in
Lakhs)

HEAD	AIIMS(M)	C.N.C.	R.P.C.	I.R.C.H.	Trauma	C.D.E.R.	TOTAL
Hospital Receipts	1257.25	45.77	943.65	231.48	32.29	0.27	2510.71
Interest	672.98	62.87	31.42	25.67	8.22	5.94	807.10
Licence Fee	203.54	7.30	-	-	-	-	210.84
Fee	47.37	-	-	-	-	-	47.37
E.H.S.	102.41	15.13	-	-	-	-	117.54
Private Ward	-	240.59	-	-	-	-	240.59
X-Ray	-	7.97	-	-	-	-	7.97
Ultra Sound	-	1.13	-	-	-	-	1.13
C.T. Scan	-	12.81	-	-	-	-	12.81
Levy Charges	-	3.94	-	-	-	-	3.94
Thallium Test	-	29.03	-	-	-	-	29.03
Blood Test/Lab. Test	-	50.66	-	-	-	-	50.66
Cardiac Test Collection	-	36.36	-	-	-	-	36.36
Recoverable Advances	79.38	19.07	4.03	0.67	-	-	103.15
Revolving Fund	558.37	-	-	37.92	-	-	596.29
Others, if any	-	-	12.54	3.75	-	0.09	16.38
TOTAL	2921.30	532.63	991.64	299.49	40.51	6.30	4791.87

REVENUE RECEIPT
BREAK UP OF BUDGET RECEIPTS FOR 2007-2008 AND ESTIMATE FOR 2008-2009
FOR AIIMS,
INCLUDING SUPERSPECIALITY, DR. R.P. CENTRE AND I.R.C.H.

(RS.IN CRORES)

S.NO.	HEAD/SUB HEAD	ACTUAL RECEIPT DURING 2007-2008	ESTIMATED RECEIPT 2008-2009
1	COLLEGE/HOSTEL	0.47	0.50
2	RENT & WATER CHARGES	2.11	2.25
3	HOSPITAL RECEIPT(USER CHARGES)	29.10	30.50
4	RECOVERABLE ADVANCES	1.03	1.25
5	INTEREST	8.07	8.25
6	EHS	1.18	1.25
7	REVOLVING FUND	5.96	6.00
TOTAL		47.92	50.00

GRANTS RECEIVED DURING (2007-2008)

(Rs. in crores)

S.NO.	HEAD	PLAN	NON-PLAN
1	AIIMS	160.00	309.68
2	DE-Addiction Centre	5.00	-
TOTAL		165.00	309.68

ALL INDIA INSTITUTE OF MEDICAL SCIENCES

RECEIPTS & PAYMENT ACCOUNT FOR THE YEAR 2007-2008

	RECEIPTS	2007-08	2006-07		PAYMENTS	2007-08	2006-07
1	OPENING BALANCES		1		Grants transferred to the Centres/Schemes Cell		
A	Cash at bank			A	Dr. R.P. Centre		
i)a	AIIMS (MAIN) 483714326		382986814	i)	PLAN 90000000		
b	Unspent Balance of specific grants remained with AIIMS(M) 181989884	665704210	-	ii)	Non-Plan 190000000		245000000
ii)	Scheme Cell 43642652	61200654		B	C.N. Centre		
iii)	R.P. Centre 42205910	24422198		i)	Plan 226800000		
iv)	C.N. Centre 151455520	113473131		ii)	Non-Plan 480000000		806900000
v)	CT Patient A/c			C	N.D.D.T.C.		
a)	Bank 14403127	13752622		i)	Plan 50000000		40000000
b)	FDR 220000000	235000000		D	Scheme Cell		
vi)	Angiography A/c			i)	Grants against receipts 494570990		256927932
a)	Bank 12358587	12788961		ii)	Non Plan grant for National Service Scheme 50000		50000
b)	FDR 75000000	75000000		E	Dr.B.R.A.I.R.C.H.		
vii)	Gamma Knife patient A/c			a)	Plan 97500000		
a)	Bank 66823583	5330282		b)	Non-Plan 170000000		218600000
b)	FDR 42500000	82500000		F	J.P.N. APEX TRAUMA CENTRE		
viii)	Neuro Surgery patient A/c			i)	Plan EFC 80500000		533582000
a)	Bank 4985397	7577574		ii)	Plan Non-EFC 245136000		
b)	FDR 42000000	32000000		G	CENTRE FOR DENTAL EDUCATION & RESEARCH		
ix)	Dr.B.R.A.I.R.CH. 46707703	36218452		i)	Plan EFC 8900000		155000000
x)	J.P.N.A.T. Centre 32786727	6966601		ii)	Plan Non-EFC 5000000		
xi)	CDER 19511927			2	ADMINISTRATIVE EXPENDITURE		
xii)	a) N.D.D.T.C. 7499458	7389074			AIIMS (MAIN)		
b)	UNDCP 316153	257664		a)	Pay and allowances 1218187969		1139148677
xiii)	Hostels			b)	Travelling Allowances 12193800		12989951
a)	Cash in hand 23806	7541					
b)	Cash at bank 318341	221318					
c)	FDR's 2171124	1738028					

B	CASH IN HAND (IMPREST)			c)	Stipend	5666711	5528458
i)	AIIMS (Main)		172864	d)	Leave salary & Pension contribution	822792	584935
a)	Balance as per cash book of the cashier	498650		e)	Pensionary Benefits	210233184	186292072
b)	Excess paid by the cashier	307426	191224	3	Office Contingency	289723471	313716560
ii)	Dr. R.P. Centre		10000	4	Mat. & Supply (Non-Plan)	611268173	514535989
iii)	C.N. Centre		40000	5	Repair and maintenance of Mach. & Equip.	47969028	31073733
iv)	CT Patient A/c		793500	6	Furniture & Fixture	23498	26022
v)	Angio Pt. A/c		799000	7	Books & Publications	10229477	12377371
vi)	Neuro Surgery Pt. A/c	44000		8	Employees Insurance Scheme	5910941	2979524
C	AMOUNT LYING UNDISBURSED			9	G.P.F.	194674446	186224076
i)	AIIMS (Main)		500	10	Maintenance of buildings	50961015	47888085
ii)	Scheme Cell	108000	28000	11	Recoverable Advances		
iii)	C.N. Centre		—	a)	Car	985600	334600
D	POOR PATIENT A/C			b)	Scooter/Motor Cycle	826500	571400
i)	AIIMS (Main)			c)	Bicycle	-	4500
a)	Cash/Bank	861808	813303	d)	House Building Advance	2001400	779700
b)	FDRs	400226	327078	e)	Computer	1470000	985000
ii)	Dr.B.R.A.I.R.C.H.			12	Expenditure out of grant received for specific purpose (Scheme Cell)		
a)	Cash/Bank	1393911	1234844	i)	Appendix-A	362726832	
iii)	Dr. R.P. Centre			ii)	Add undisbursed for 2006-2007 paid now	108000	
a)	Cash/Bank	25052	12829	iii)	Less undisbursed for 2007-08	-47200	362787632
iv)	N.S. Centre			13	Post Partum	328535	208455
a)	Cash/Bank	83806	59004				
E	PATIENT TREATMENT A/C						
i)	AIIMS	18900463	14236140				
ii)	Dr.B.R.A.I.R.C.H.						
a)	Cash/Bank	5194183	11522423				
b)	Short Term Investment	10000000					
c)	FDR's	6000000	6000000				
2	GRANTS FROM GOVT. OF INDIA						
a)	NON-PLAN						
i)	AIIMS (Main)	2256750000					
ii)	R.P.C	190000000					
iii)	C.N.C.	480000000					

iv)	Dr.B.R.A.I.R.C.H.	170000000							Programme		
v)	Scheme Cell	50000	3096800000	2967294730					(Incentive money)		
b)	PLAN				14				College of Nursing		213496
i)	AIIMS (Main)	846164000									
ii)	RPC	90000000			15				PLAN		
iii)	CNC	226800000			a)			115931934	Mach. & Equip.	86890517	
iv)	Dr.B.R.A.I.R.C.H.	97500000			b)			135140739	Building Construction	113716049	
	Plan EFC				c)				V.V.I.P. CARE		
	Plan Non-EFC								at Parliament House Annexe.	-	432400
v)	J.P.N.A.Trauma Centre				16				Purchase of Vehicles		-
	Plan EFC	80500000							(a) Transport Office	958106	
	Non- EFC	245136000							(b) Hospital Store	232219	
vi)	C.D.E.R.				17				Advance Payments	-	
	Plan EFC	8900000			a)				Mat. & Supply (NP)		
	Non- EFC	5000000	1600000000	1603300000				12795645	for foreign purchase	16168532	
c)	N.D.D.T.C.		50000000	40000000	b)				Mach.&Equip.(Plan)		
									for foreign purchase	352743122	153487913
d)	V.V.I.P. CARE				c)				PAO for procurement of	900000	900000
	at Parliament House Annexe.		440000						Stores		
					d)				P. & A.O. etc. for Bldg.	4514413	2059706
									material		
3	Miscellaneous Receipts		60112090	88883367	e)			295166 4	Ty./Contigent Advances	2235302	
4	Hospital Receipts		125724661	114963061	f)			6294065	Private firms for stores	2345757	
5	Interest		67297799	28470764	g)				Secy. NDMC for AC Plant		-
								730000	for Admn. Block		
6	License Fee		20354267	15659351	h)				Secy. NDMC for Security		-
								670950	for Electric connection		
7	Tution Fee/Exam. Fee		4736602	1174242	i)			6272737	Custom Duty for Mach. & Equip.		-
					j)			20127253	For Books & Journals	3903205	
8	Employees Health Scheme (EHS)		10241433	9440192	k)			12223000	For cochelar Implant Pt. Treatment	12519000	
					l)			521124	For Vehicle Purchase		
9	Pot Fund		210914	281271	m)			1503458	M/s Shree Cement Ltd.		
									for purchase of cement		
									for construction		
10	Employees Insurance Scheme		6897219	2679645	n)			118000000	CPWD, SJHPD for Nallah		
					o)			1181250	CPWD, SJHPD for Dr. Hostel		
11	GPF		194674446	186224076	p)			5000000	CPWD, SJHPD		
12	Out side recoveries		128092636	112233314	q)				for construction of		
									sub-station		
									M/s Metro Rail Corporation Ltd.	60000000	

				r)	Caryair Equipment India(P) Ltd. For Building Construction		192602
13	Security Deposits/ Earnest Money	21061035	25368343	s)	Indian Oil Corporation for LDO		3194680
				t)	NDMC for Building Construction		18723000
14	Caution Money	55400	47400	u)	CAD Studio for upgradation Architectral cell of ESD AIIMS		45132
15	Leave Salary & Pension contribution	156450	156056	18	Security Deposit/ Earnest Money		
16	Recoverable Advances			(i)	Payment made against the receipts upto the year 2006-07	18427854	
a)	Car	888502	833838				
b)	Scooter/Motor Cycle	699799	1261348				
c)	Bicycle	3227	9350				
d)	H.B.A.	5806704	7322281	(ii)	During 2007-08	830000	20393395
e)	Computer	539913	317591				
17	NACO Generated from test charges		323950	19	Outside recoveries	127927892	109395426
				20	Investment of short term deposit	3500000000	981800000
18	Post Partum Programme (Incentive money)	550000	250000	21	NACO Mat. & Supply		20000
				ii)	Transfer to Scheme Cell		351865
19	Encashment of Short Term Deposit	3500000000	981800000	22	Misc. Donations (Appendix-D)	1725051	864595
20	Grants received for specific purpose Appendix-A (Scheme Cell)	442064653	314036193	23	Investment Major General Amir Chand	-	100000
				24	Pot Fund		29000
21	Schemes			25	P.M.R. ADIP Scheme		16837
i)	Grants against receipt	496233262	2559675				
ii)	Grants transfer from A.I.I.M.S. Non-Plan	50000	50000	26	Revolving Funds	37050175	36630413
iii)	Direct received	15401063	12532679	27	New Pension Scheme	19341074	10914500
22	Misc. Donations (Appendix-D)	1350494	1118481	28	Excess paid by the Cashier		19070

23	Revolving Funds	55837195	52763213
24	New Pension Scheme	5420744	3190277
25	Donation		
(i)	Major General Amir Chand	100000	
26	Recovery of excess which was paid by the Cashier		17930
27	Cochelar Inplant Patient Treatment A/c	24089000	25492000
28	Deposit Work		
(a)	Starford India	2000000	
(b)	Rajgarhia Vishram Sadan	1413300	

29	Cochelar Inplant Patient A/c	10169000	12845576
30	Deposit Work		
(a)	Starford India	410902	
(b)	Rajgarhia Vishram Sadan	713076	

DR. RAJENDER PRASAD CENTRE FOR OPTHALMIC SCIENCES

1	GRANT-IN-AID		
i)	Plan	90000000	
ii)	Non-Plan	190000000	280000000
2	GRANT-IN-AID (SCHEMES)		
i)	ICMR	356665	626838
ii)	USP	-	937150
iii)	Savers International	772000	136165
iv)	Surgeries	-	522275
v)	WHO-GS	625000	-
vi)	Baush & Lomb Pink Eye	287977	-
vii)	Manage	300000	870000
viii)	RAST	-	194000
ix)	NAB	1324935	1517545
x)	LCIF	594000	540000
xi)	NPCB-RAAB	-	502500
xii)	NPCB-SSU	200000	29272
xiii)	who-Child blindness	483750	64500
xiv)	DBT-MA		1801000
xv)	MBDL	25844	152599
xvi)	DOS	225000	900000
xvii)	CSIR	1593697	1065939
xviii)	NIAF	280000	350000
xvii)	CRP	187000	98000
xviii)	DSBC	10000	245000
xix)	ORBIS PECP	1046908	2059048
xix)	Clinical Evaluation		-

DR. RAJENDER PRASAD CENTRE FOR OPTHALMIC SCIENCES

1.a	Pay & allowances	161873575	149746943
b	Daily Wages	6712700	6102052
2	Travelling Expenses	1489447	1443346
3	Office Expenses	8851379	6810590
4	Capital Works	4985059	6442341
5	Maintenance of Buildings	5283600	3339892
6	Mat. & Supply(NP)	100147351	82196022
7	Repair & Maintenance of Mach. & Equip. (Non-Plan)	1345201	4388669
	Refund of Security	195000	165000
9	Mach. & Equip. (Plan)		
i)	Actual Payment	32951327	
ii)	Advance Payment made to Foreign Purchase	50747651	83698978
10	Furniture & Fixtures	589382	455367

	OZONE	279500	-					
xx)	Clinical Evaluation AOD	100000	-	1 1	PAYMENT TOWARDS NON RPC SCHEMES			
xxi)	Workshop	50800	1307091	i)	ICMR	451716		322789
xxii)	DST/DBT (Stem)	357200	853300	ii)	USP -Pay/Conty. M&E	804651 185166	989817	2507633
xiii)	ORP Vision 2020	-	50000	iii)	Savers		699820	630690
xxiv)	Multifocal IOL	118000	437323	iv)	Surgeries		-	813475
xxv)	Evaluation Study-anti Cataract	100000	230000	v)	ORBIS		-	925396
xxvii)	Reliance Clinical Research	181402	245978	vi)	Manage		491387	678613
xxviii)	NPCB RIO		3000000	vii)	RAST	-		194000
xxix)	Clinical Evaluation on B&C(AMO)	114000	577450	viii)	NAB		1825526	1280809
xxx)	Fame Study	1447479	1007800	ix)	LCIF		590956	540000
xxx)	Bausch & Lomb Akro Soft		200000	x)	NPCB-RAAB		193926	308574
xxxi)	National Survey on Cataract (NPCB)	150000	280000	xi)	NPCB-SSU		114166	63373
xxxii)	DST Evaluation of Tear fluid	809000		xii)	WHO Child blindness		546315	1935
xxxiii)	Collabotative surdy on dry eye Syndrom(DES)	200000		xiii)	DBT(MA)		691850	1107248
xxxiv)	DME	926655	319150	xiv)	MBDL		89675	141710
xxxiii)	DST/Specific grant		14000000	xv)	DOS TRAINING		370376	675797
xxxiv)	CGD in primary angel Glaucoma		500267	xiv)	CSIR		1593697	1065939
xxxv)	Clinical study of ketro conjectivities (Allergen India Pvt. Ltd.)		182496	xv)	NIAF		72033	162629
xxxvi)	FTG		118000	xvi)	CRP		164806	153934
xxxvii)	PDT Visdune pilot study	48244		xvii)	DBCS/NPCB (Conty.)		252500	1002500
xxxviii)	WHO SEIND/NCD 001001BB06 CDSTG	172150		xviii)	ORBIS-PECP			
xxxix)	INMAS Human Pharmacology	500000		a)	M&E	231919		
xxxx)	INMAS deopergulogy chenectorzatin	500000		b)	Pay & Conty.	1315023	1546942	1344928
xxxxi)	Lux-PRA International	43841		xix)	Allergan International		-	145600
xxxxii)	INDEGEN	3199437		xx)	Neema-Pilot Study		-	14175
				xxi)	Workshop		178100	1180991
				xxii)	DST/DBT (Stem)		1012001	254861
				xxiii)	ORP Vision 2020		-	136966
				xxiv)	Multifocal IOL		342146	143000
				xxv)	Evaluation of anit cataract Study-101235 anti Cataract		280346	
				xxvi)	Indeye		880469	1154240
				xxvii)	DST (Cyclo)		63913	125705
				xxviii)	Reliance Clinical Research		136083	248767
				xxix)	NPCB-RIO(M&E)		1221760	1778240
				xxx)	Clinical Evaluation on B&C(AMO)		98420	570060
				xxxi)	Cataract Surery (NPCB)		150000	321981

3	Hospital Receipts I/c Various kits	94364844	75863819	xxxii)	WHO Short Term training		40000	
				xxxiii)	Evaluation study of Glaucoma		20000	118000
4	Security Deposits	50000	165000	xxxiv)	FTG	-		
				xxxv)	CGD in primary angle closure of glaucoma		179815	15008
5	Interest on Recoverable Advance	102345	394708	xxxvi)	DME			
6	Misc. Receipts	1253684	1522068	a)	M& E	98307		
				b)	Pay & Conty.	808494	906801	222844
7	AIIMS Recovery Received	46673328	43010222	xxxvii)	Bausch & Lomb acro soft			
8	Outside Recovery received	7642240	7138389	a)	M& E	69400		
				b)	Pay & Conty.	7330	76730	122472
9	Interest on CLTD	3040085	1316721	xxxviii)	FAME Study	-		
				a)	M& E	98280		
10	Recoverable Advance			b)	Pay & Conty.	638801	737081	249225
a)	Car	14665	26004	xxxix)	Clinical study of ketro conjuncivities(Allergen India Pvt. Ltd.)	-	41021	141475
b)	Scooter	-	-	xxxx)	Lux-PRA international		11304	
c)	Cycle	-	-	xxxxi)	Evaluation Polyherbal OZONE			
d)	HBA	388590	403255	410680	a)	M& E	39700	
					b)	Pay & Conty.	132772	172472
					xxxxii)	Evaluation Polyherbal AOD	99279	
					xxxxiii)	DST evaluation of Tear fluid constituent	571943	
					xxxxiv)	Bausch & Lomb Pink eye	109137	
					xxxxv)	PDT visdune pilot study	46447	
					xxxxvi)	Collaborative study on dry eye syndron DES	107129	
					xxxxvii)	INMAS Biomedical	15000	
					xxxxviii)	INMAS Human Pharmacology	15000	
					xxxxix)	WHO-GS		
					a)	M& E	195770	
					b)	Pay & Conty.	413274	609044
					xxxxx)	DST/DBT Specific grant	14000000	
					xxxxxi)	WHO-DSTG	92150	
				12	Cash Withdrawl Tax	-		563
				13	AIIMS Recoveries remitted	46673328		43010222
				14	Outside recoveries remitted	7642240		7138962
				15	Recoverable Advance			
				(a)	Computer Adv.		30000	

				16	Cheque Book Charges	-	6000
	CARDIO-THORACIC & NEURO SCIENCES CENTRE				CARDIO-THORACIC & NEURO SCIENCES CENTRE		
1	GRANT-IN-AID			1	ADMINISTRATIVE EXPENDITURE		
	a) Plan	226800000	130000000	a) i)	Pay & Allowances	353265109	311075036
	(i) For C.N. Tower		23900000		(Non-Plan)		
	(ii) Intra operative MR(EFC)	200000000		b)	Wages	16997408	15933501
	(iii) For Stem Cell Facility		3000000	c)	Travelling Allowance	1277253	1590543
	b) Non-Plan	480000000	450000000	2	Stores (Non-Plan)		
2 a)	Misc. Receipts	4577376	6980937	a)	Repair & Maintenance of Mach. & Equip.	12501251	5605477
b)	Trf. from IRCH	1478400		b)	Material & Supply	130351256	127418912
c)	Private Ward	24058925	13663460	c)	ORBO	16700	70883
d)	X-Ray	797390	786420	d)	Stem Cell		1448577
e)	C.T.Scan charges	1281050	1108800	3	Stores (PLAN)		
f)	Ultra sound	113300	117000	a)	C.N. Tower		16131565
3	Interest	6286506	3864798	b)	Mach. & Equipment	204667810	124586624
4	Security Deposit/ Earnest Deposit	6280000	3418000	c)	M&E against EFC		183495873
5	Donations	52720	21500	d)	Stem Cell	96744	2335979
6	Refund and Recoveries	1548797	897867	e)	Furniture & Fixtures	714281	218168
7	Receipt from NDMC against CN Tower		6242000	4	Building maintenance	10039988	7762997
8	Neurology Patient A/c	5731641	3125800	5	Building construction (Plan)	11057792	5070172
9	Thallium Test	2903050	3112750	(a)	Advance payment C.N. Tower		1851852
10	Levy charges	394400	375760	6	Office Contingencies	2867004	1893041
11	Rent Charges/Licence Fee	730147	829261	7	Recoverable Advance (Non-Plan)		
12	GPF	56103120	52583845	a)	Scooter/Motor Cycle	390000	510000
13	New Pension Schemes	4699687	2732461	b)	House Building Advance	914550	
14	Recoverable Advances			c)	Computer	150000	
	a) Bicycle		2100	8	Refund of Security Deposit	3446000	3170000
	b) Scooter	393236	373555	9	Donation	26622	-
	c) Car	208392	64392	10	Heart Transplant	67267	1077
	d) House Building	1290252	2001312	11	Neurology Patient A/c	5746582	3668031
	e) Computer	15450	12600	12	Blood Test	4228109	2224412
15	Cardio Test	3635770	3505250	13	Cardio Test	3611700	3368822

16	Blood Test/Lab. Charges	5066000	3785055	14	Thallium Test	4017549	3771984
17	EHS	1513470	1418090	15	Amt. sent to P.A.O.	42600	132600
18	Outside Recovery	28935533	24633393	16	GPF	56060520	52451245
19	Institute Recovery (Computer Advances)	600	-	17	New Pension Schemes	4699687	2732461
20	Water Charges	36575	37387	18	EHS	1513470	1418090
21	Pot Fund	31206		20	Outside Recovery	28934214	24635015
				21	Amt. Sent to PAO	240	1080
				22	Pot Fund	31206	49866
				23	Water charges	36575	37387
				24	Amt. sent to Main Instt. (Comp. Adv.)	200	
				25	Amt. sent to Main Instt. (Comp. Adv.)	600	
	C.T. PATIENT A/C				C.T. PATIENT A/C		
1a)	Patient's Receipts during 2007-2008	251093855		1	Purchase of Stores	192396154	143340334
b)	Patient's Refunds 2007-2008	57707729		2	Mach. & Equip.		49025000
c)	Add Poor Patient's treatment out of interest earned during 2007-08	2754956	196141082	4	Fresh Cheque	2627796	64502
2 (a)	Interest during 2007-08	7530977					
(b)	Less Poor Patient's treatment expenditure 07-08	2754956	4776021				1148882
3	Cancelled Cheques	1881696	1668918				
	ANGIOGRAPHY PATIENT A/C				ANGIOGRAPHY PATIENT A/C		
1a)	Patient's Receipts 2007-08	187690285		1	Purchase for stores	172040687	168224014
b)	Patients refunds	29988422		2	Bank Charges	330	4450
c)	Poor Patient's treatment out of interest earned during 2007-08	135000	157836863	3	Fresh Cheque	890683	266586
2a)	Interest during 2007-08	3755313					
b)	Poor Patient's treatment expenditure 07-08	135000	3620313				2328289
3	Cancelled Cheques	1120871	311084				

GAMMA KNIFE PATIENT A/C			
1	Patient Receipts 2007-08	15838250	
	Refund to Patients	1511500	14326750
2	Interest		3315690
3	Cancelled Cheque		69900

NEURO SURGERY PATIENT A/C			
1	Patient Receipts 2007-08	38893547	
	Patient Refund 2007-08	6245809	32647738
2	Fixed/CLTD		30481823
	Interest		2753049
3	Cancelled Cheques		1059312

NATIONAL DRUG DEPENDENCE TREATMENT CENTRE (N.D.D.T.C.)			
1	Grant-in-Aid (DAC)	50000000	40000000
2	Hosp. Receipt	478295	387437
3	Interest on FDR		104546
4	Security Deposit		40000
5	Grant (Pilot Project)	500000	
6	Car Adv. Recovery		34560
7	Misc. Receipt	217288	12342
8	Temp. Adv. Refund	200000	
9	FDR Int.	28051	
10	Car Adv. Recovery	34560	

Institute Recovery			
	GPF Sub. & Adv.	3858450	3548330
	Conveyance	60713	104479
	HBA	140712	130392
	Licence fee	45763	325729
	Officer Association	2320	2120
	EIS	46900	38310
	EHS	86410	80730
	Society		820039
	Comp. Rec.	9204	8004

GAMMA KNIFE PATIENT A/C			
1	Purchase for Stores	3066960	1150477
2	MRI Charges	1526000	638000
3	Bank Charges		755

NEURO SURGERY PATIENT A/C			
1	Purchase for Stores	39554196	23486986
2	Contingency		47010
3	Bank charges	310	219
4	Fresh Cheques	1032312	

NATIONAL DRUG DEPENDENCE TREATMENT CENTRE (N.D.D.T.C.)			
1	Pay & Allowances	21720499	19165168
2	Mat. & Supply	16841057	15195875
3	Wages	2402242	1314737
4	Books & Pub.	1958693	1841503
5	Furniture	88594	638117
6	Pilot Project	500000	
7	Motar Vehicle	1122750	507973
8	Mach. & Equip.	3964877	1485128
9	Security Refund		20000
10	Temp. Advance	460978	300000

Institute Recovery Remitted			
	GPF Sub. & Adv.	3858450	3548330
	Conveyance	60713	104479
	HBA	140712	130392
	Licence fee	45763	325729
	Officer Association	2320	2120
	EIS	46900	38310
	EHS	86410	80730
	Society		820039
	Comp. Rec.	9204	8004

Faculty	800	800
New Pension Scheme	143066	89182
Misc. Recovery		500

Outside Recovery

GIS		60
Income Tax	1066866	879591
GPF		10000
LIC	33177	37164
Court Rec.	56086	26000
Society	1216232	

NATIONAL DRUG DEPENDENCE TREATMENT CENTRE (N.D.D.T.C.) (UNDCP PROJECT)

1	Grant-in-Aid	1543164	1167928
2	Misc. Receipt	23000	26400

Faculty	800	800
New Pension Scheme	143066	89182
Misc. Recovery		500

Outside Recovery

GIS		60
Income Tax	1066866	879591
GPF		10000
LIC	33177	37164
Court Rec.	56086	26000
Society	1216232	

NATIONAL DRUG DEPENDENCE TREATMENT CENTRE (N.D.D.T.C.) (UNDCP PROJECT)

1(a)	TA	164833	378411
(b)	DA	17300	124600
2(a)	Misc./Office Contingency		
(b)	Office contingency	109900	63960
(c)	Honorarium	62900	6500
(d)	Refreshment	31064	84929
(e)	Hiring accom.		8700
(f)	Printing material		
	Stationary	244510	46241
(g)	Correspondence	196403	143124
(h)	Salary	158227	184262
(i)	Transportation	27347	23250
3	Bank Charge	551	625
4	Refund to WHO	406318	71237
5	Transfer to NDDTC	55130	-

Dr.B.R.A. INSTITUTE ROTARY CANCER HOSPITAL

a)	Plan	97500000	
	i) Non-EFC		37400000
	ii) EFC		66200000
b)	Transfer from CNC	732000	
1	Grant in Aid		
	Transfer from JPNATC	690000	
c)	Non-Plan	170000000	115000000
2	Hospital Receipts	23148182	9230774

Dr.B.R.A. INSTITUTE ROTARY CANCER HOSPITAL

1	Pay & Allowances	104360420	73005967
2	TA/DA	1166238	1183072
3	Contingency	2489227	1290753
4	Medical Oncology	441378	
5	Revolving Fund	898811	4858671
6	Maintenance of Building	5314238	2946967
7	Mat. & Supp. (Non-Plan)	61449398	40443173
8	Computer Advance	150000	132000
9	Scooter Advance	30000	

3	Revolving Funds	3172450	2942250	10	NON-PLAN			
				i)	Out Sourcing		8466708	
				ii)	Transfer to CNC		1478400	
4	Medical Oncology Receipts	619230	516075					
5	ICMR (DCR)	375000	375000	11	PLAN (EFC)			
				i)	Man Power			2557620
				ii)	Mach. & Equipments	93429689		60555969
6	AIIMS Recoveries remitted	22349336	14048491	iii)	Outsourcing(Security & Sanitation)			2376026
				iv)	Recurring & consumables			21503773
7	Outside Recoveries remitted	922754	6620442	v)	Custom Duty & PDA	23267767		10300000
				vi)	Capital Works	6753472		1474343
8	Scooter Advance	26983	4620	vii)	AIIMS Recoveries Remitted	22349336		14048491
				viii)	Outside Recoveries Remitted	922754		6620442
9	Car Advance	18000	18000	ix)	Vehicle	968275		
				x)	Furniture and Fixtures	642453		
10	Interest Receipts	2566883	1430666					
11	Computer Advance	22460	200					
	J.P.N. APEX TRAUMA CENTRE				J.P.N. APEX TRAUMA CENTRE			
1	GRANT-IN-AID			1	EFC Expenditure			
	Plan		533582000	a)	Construction of Bldg.	5000000		29000000
	a) EFC	80500000		b)	Machinery & Equipment			333217199
	b) Non-EFC	245136000	325636000	c)	Manpowers	43700000		30885699
	Other Receipts		273031	d)	Recurring & Outsourcing	28003619		114932007
	a) Hospital	3229015		e)	HSCC	5000000	81703619	
	b) Security deposit	1475000		2	NON EFC			
	c) Int. on TDR	822240		A.	a)Pay & Allowance	27950635		
					b) Recurring &			
					Outsourcers	47568091		
					c) M&S	72201209	147719935	
					d) Furniture & Fixtures		2206678	
				B.	Capital Works		5572435	
				C.	M&E		35646952	
					a) I/c adv.	67206597		
					b) PDA adv.	1500000	68706597	
				D.	Refund of EM/			
					Security deposit		435000	
	CENTRE FOR DENTAL EDUCATION & RESEARCH				CENTRE FOR DENTAL EDUCATION & RESEARCH			
1	Grant in aid			1	Pay & Allowances		1851161	1628773
	Plan (EFC)	8900000	155000000					

	Plan (Non-EFC)	5000000		2	Material & Supply	1150716	6243
2	Security Deposit	85000	260000	3 (a)	Manpower & consumables for Engg. maintenances on contract	1902639	66051
3	Interest on STDR by bank	593506	948734	b)	Building Capital Works	410493	
4	Misc. Receipt	9000	163500	4	Machinery & Equipment		
5	Hospital Receipt	26990		(i)	Actual Payment	13824684	
				(ii)	Advance payments made to Foreign purchases	3685390	46859240
				5	Advance paid to HSCC	7000000	88300000
				6	Advance paid to NDMC	2404500	
				7	Security Refund	32800	
	POOR PATIENT ACCOUNTS				POOR PATIENT ACCOUNTS		
i)	a) AIIMS	378732	142407	i)	AIIMS	108024	93902
	b) Interest	-	73148	ii)(a)	R.P. Centre	61446	17102
ii)	R.P. Centre			(b)	amount wrongly credited by bank in 2006-07 rectified in 2007-08		30000
	a) Interest	923	600	iii)	I.R.C.H.	265230	384413
	b) Donation	80729	58725	iv)	N.S. Centre	11329	12716
iii)	(a) I.R.C.H.	205825	149069				
	(b) Interest on FDR's	484514	394411				
	c) Wrongly credited by bank	2000					
iv)	N.S. Centre						
	Donation	8952	37518				
	PATIENT TREATMENT ACCOUNTS				PATIENT TREATMENT ACCOUNTS		
1	(a) AIIMS	49488001	34370806	i)	AIIMS	41380274	30333618
	(b) Interest	778639	627135	ii)	Dr.B.R.A.I.R.C.H.	40424504	31013665
2	a) Dr.B.R.A.I.R.C.H.	45950380	33738008				
	b) Cheque Cancelled	1155266	467987				
	c) Dly Inntt.	677	479430				
	d) Wrong credited	115650					
	HOSTELS				HOSTELS		
a)	Receipts during 2007-08			a)	Security refunds	1034000	316846
	I) Security Deposits	1421500	719500	b)	Misc. Expenditure	42190	50671
	ii) Misc. Receipts	46915	54050				

iii) Interest earned

68030

140351

CLOSING BALANCES			
A CASH AT BANK			
i)	a) AIIMS(Main)	586048113	
	b) Unspent Balance of Specific Grants remained with AIIMS (Main)	129483547	715531660
ii)	Schemes Cell	192600145	665704210
iii)	Dr. R.P. Centre	31108947	43642652
iv)	C.N. Centre	158648226	42205910
v)	C.T. Patient A/c		151455520
	(a) Bank	12970986	14403127
	(b) FDRs	230000000	220000000
vi)	N.D.D.T.C.	9897962	7499458
vii)	Angiography A/c		
	a) Bank	2803934	12358587
	b) FDRs	75000000	75000000
viii)	UNDCP	407834	316153
ix)	I.R.C.H.	34272417	46707703
x)	J.P.N.Apex Trauma Centre	21957766	32786727
xi)	Gamma Knife Pt. A/c		
	a) Bank	3304760	66823583
	b) FDRs	119138203	42500000
xii)	Neuro Surgery Pt. A/c		
	a) Bank	10902678	4985397
	b) FDRs	32000000	42000000
vii)	Angiography A/c		
	a) Bank	2803934	12358587
	b) FDRs	75000000	75000000
viii)	UNDCP	407834	316153
ix)	I.R.C.H.	34272417	46707703
x)	J.P.N.Apex Trauma Centre	21957766	32786727
xi)	Gamma Knife Pt. A/c		
	a) Bank	3304760	66823583
	b) FDRs	119138203	42500000
xii)	Neuro Surgery Pt. A/c		
	a) Bank	10902678	4985397
	b) FDRs	32000000	42000000
xiii)	Centre for Dental Education and Research	1864040	19511927
B CASH IN HAND (IMPREST)			
i)	AIIMS (Main)		

a)	Balance as per cash book of the cashier	529450		
b)	Excess paid by the cashier	307426	222024	191224
ii)	Dr. R.P. Centre		10000	10000
iii)	C.N. Centre		40000	40000
iv)	CT Patient A/c			793500
v)	Angiography A/c			799000
vi)	Neurosurgery Pt. A/c			44000
C	AMOUNT LYING UNDISBURSED			
i)	AIIMS (Main)		-	
ii)	Scheme Cell		47200	108000
D	POOR PATIENT ACCOUNT			
i)	AIIMS (Main)			
	(a) Cash/Bank		1132516	861808
	(b) FDR's		400226	400226
ii)	IRCH			
	Cash/Bank		1821020	1393911
iii)	Dr. R.P. Centre			
	Cash/Bank		45258	25052
iv)	N.S. Centre			
	Cash at Bank		81429	83806
E	PATIENT TREATMENT A/C			
I)	AIIMS		27786829	18900463
ii)	IRCH			
a)	Cash/Bank		11991652	5194183
b)	Short term investment		10000000	6000000
c)	FDRs		6000000	10000000
F	HOSTELS			
I)	Cash in hand		18221	23806
ii)	Cash at Bank		732202	318341
iii)	FDR's		2223103	2171124
TOTAL		14037572568	10806059642	14037572568
			10806059642	10806059642

TOTAL

14037572568 10806059642

TOTAL

14037572568

10806059642

(S.P. MAHLA)
FINANCE & CHIEF ACCOUNTS OFFICER

(P. VENUGOPAL)
DIRECTOR

ALL INDIA INSTITUTE OF MEDICAL SCIENCES
INCOME AND EXPENDITURE ACCOUNT
FOR THE YEAR 2007-2008

AIIMS 2007-2008 / 671

	EXPENDITURE	2007-08	2006-07		INCOME	2007-08	2006-07
A	AIIMS (MAIN)				AIIMS (MAIN)		
	NON-PLAN				GRANT-IN-AID		
					Non-Plan	2253869772	2220938132
1	Pay & Allowances	1218187969	1139148677				
2	Stipend	5666711	5527958		REVENUE RECEIPTS		
3	Travelling Allowances	12193800	12989951	1	Hospital Receipts	125569837	115958381
4	Pensionary Benefits	210233184	186292072	2	Tution Fee and Exam. Fee	4736602	1174242
5	Mat.& Supply	635857868	536702644	3	Employees Health Scheme	10241433	9440192
6	Office Contingency	291958773	316647167	4	Licence fee	20354267	15659351
7	Repair & Maintenance of Mach. & Equip.	47969028	31073733	5	Interest	67297799	28470764
8	Maintenance of Buildings	50961015	47888085	6	Miscellaneous Receipts	60112090	88883367
9	New Pension Scheme	19341074					
	i) Less Receipts	5420744	13920330				
10	L.S.P.C.	822792					
	i) Less Receipts	156450	666342				
	DR. RAJENDER PRASAD CENTRE FOR OPTHALMIC SCIENCES				DR. RAJENDER PRASAD CENTRE FOR OPTHALMIC SCIENCES		
					Grant-in-Aid		
1	Pay & Allowances	161873575	149746943	1	Non-Plan	190000000	177500000
2	Daily Wages	6712700	6102052	2	Hospital Receipts	94364844	75863819
3	Travelling Allowances	1489447	1443346	3	Interest on Recoverable Advances	102345	394708
4	Material & Supply	100147351	82196022				
5	Office Expenses	8851379	6810590	4	Misc. Receipts	1253684	1522068

6	Maintenance of Buildings	5283600	3339892
7	Repair & Maintenance	1345201	4388669
8	Cash withdrawal Tax	-	563
9	Cheque Book Charges	-	6000

**CARDIO-THORACIC & NEURO SCIENCES CENTRE
Non-Plan**

1	Pay & Allowances & Wages	370262517	327008537
2	Travelling Exp.	1277253	1590543
3	Material & Supply	130367956	128938372
4	Office Contingency	2867004	1893041
5	Repair & maintenance of Mach. & Equip.	12501251	5605477
6	Maint. of Buildings	10039988	7762997
7	Mat. & Supply Stores(Plan)	16131565	

C.T. PATIENT A/C

1	Purchase for Stores	192396154	143340334
2	Mach. & Equip. (Transferred to CNC)	49025000	
3	Bank Charges	490	9660

ANGIOGRAPHY PATIENT A/C

1	Purchase for Stores	172040687	168224014
2	Bank Charges	330	4450

GAMMA KNIFE PATIENT A/C

1	Purchase of Stores	3066960	1150477
2	MRI Charges	1526000	638000
3	Bank Charges		755

NEURO SURGERY PATIENT A/C

1	Purchase of Stores	39554196	23486986
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5	Interest on CLTD	3040085	1316721
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CARDIO-THORACIC & NEURO SCIENCES CENTRE

Grant-in-Aid

1	(a) Plan		16150000
(b)	Non-Plan	480000000	450000000

Revenue Receipts

2	a) Hosp. Receipts	26250665	
b)	Amount received from outside patients 2007-2008	360054	
c)	Amount due 2007-08	253785	26144396
3	Misc. Receipts		4577376
4	Rent Charges/ Licence Fee		730147
5	Refund & Recoveries		1548797
6	Interest earned		6286506
7	Levy Charges		394400

C.T. PATIENT A/C

1	Patient's Receipts	196141082	176065701
2	Interest during 2007-2008	4776021	1148882
3	Cancelled Cheque	1881696	1668918

ANGIOGRAPHY PATIENT A/C

1	Patient's Receipts	157836863	166224303
2	Interest during the year 2007-2008	3620313	2328289
3	Cancelled Cheques	1120871	311084

GAMMA KNIFE PATIENT A/C

1	Patient Receipts	14326750	16614450
2	Interest	3315690	6598183

NEURO SURGERY PATIENT A/C

1	Patient Receipts	32647738	30481823
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2	Contingency		47010	2	Fixed/CLTD Interest	2753049	504215
3	Bank Charges	310	219	3	Cancelled Cheques	1059312	
NATIONAL DRUG DEPENDENCE TREATMENT CENTRE (N.D.D.T.C.)				NATIONAL DRUG DEPENDENCE TREATMENT CENTRE (N.D.D.T.C.)			
1	Pay & Allowances	21720499	19165168	1	Grant-in-aid (Plan)	50000000	
2	Wages	2402242	1314737		Mach. & Equip.	3964877	
3 i)	Material & Supply				Motar Vehicle	1122750	
	2007-08	16941057	15195875		Furniture	88594	
4	Pilot Project	500000			Books & Pub.	1958693	42865086
				2	Grant(Pilot Project)	500000	
				3	Hospital Receipt	478295	387437
				4	Miscellaenous Receipt	217288	12342
				5	FDR's Interest	28051	104546
NATIONAL DRUG DEPENDENCE TREATMENT CENTRE (N.D.D.T.C.) (UNDCP PROJECT)				NATIONAL DRUG DEPENDENCE TREATMENT CENTRE (N.D.D.T.C.) (UNDCP PROJECT)			
1	TA	164833	378411	1	Grant-in-aid (Plan)	1543164	1167928
2	DA	17300	124600	2	Misc. Receipt	23000	26400
3	Misc./Office Contingency	475721	233580				
4	Transfer to NDDTC a/c	55130					
5	Refund to WHO	406318	71237				
6	Bank Charges	551	625				
7	Pay & Allowances	158227	184262				
8	Correspondences	196403	143124				
Dr.B.R.A. INSTITUTE ROTARY CANCER HOSPITAL				Dr.B.R.A. INSTITUTE ROTARY CANCER HOSPITAL			
1	Pay & Allowances	104360420	73005967	1	Grant-in-aid	170000000	115000000
2	Manpower(Pay and allowances EFC)		2557620	2	Hospital Receipts	23148182	9230774
3	Travelling expenses/DA	1166238	1183072	3	ICMR (DCR)	375000	375000
4	Material & Supply	61449398	40443173	4	Interest Receipts	2566883	1430666
5	Maintenance of Building	5314238	2946967	5	Interest on Scooter Advance		4620
				6	Manpower + Outsourcing	26600000	

6	Outsourcing(Security & sanitation) & DEO	8466708	
7	Sulabh Services		2376026
8	Contingency Expenditure	2489227	1290753
9	Recurring & Consumables		21503773
10	Transfer to CNC	1478400	

Recurring & consumables (EFC)

J.P.N. APEX TRAUMA CENTRE

1	Material & Supply	72201209	
2	Manpower	43700000	30885699
3	Recurring & Outsourcing	75571710	68889836
4	Pay & Allowances	27950635	

J.P.N. APEX TRAUMA CENTRE

Grant-in-aid

1	Plan		219423554
2	Recurring & Outsourcing Grant		69906618
3	Manpower		30600000
4	Miscellaneous		3229015
5	Int. on TDR		822240
			273031

CENTRE FOR DENTAL EDUCATION & RESEARCH

1	Pay & Allowances (Plan)	1851161	1628773
2	Material & Supply (Plan)	1150716	6243
	Manpower & consumable(plan)		
	For Engineering maintenance on contract	1902639	66051

CENTRE FOR DENTAL EDUCATION & RESEARCH

1	Grant in Aid (Plan)		4904516	1701067
2	Interest on STDR by Bank		593506	948734
3	Misc. Receipts		9000	163500
4	Hospital Receipts		26990	

HOSTELS

1	Misc. Expenditure	42190	50671
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1	Misc. Receipts	46915	54050
2	Interest	68030	140351

EXCESS OF INCOME OVER EXPENDITURE

1	AIIMS (Main)	54566780	196101040
2	DR. R.P. CENTRE	3057705	2563239
3	C.N. CENTRE		6028521
4	CT PATIENT A/C	10402155	
5	ANGIO PATIENT A/C	635212	
6	NEURO SURGERY A/C	7451823	
7	GAMMA KNIFE PATIENT A/C	13049480	21423401
8	N.D.D.T.C.	2524922	355824
9	I.R.C.H.	11365436	7333709
10	Hostel	72755	143730
11	UNDCP Project	91681	58489
12	J.P.N. Apex Trauma Centre	4051255	1004114
13	Centre for Dental Education & Research	629496	1112234

EXCESS OF EXPENDITURE OVER INCOME

1	CNC	7634347	
2	CT PATIENT A/C		13491493
3	ANGIO PATIENT A/C	9462970	
4	NEURO SURGERY PT. A/C	3094407	

TOTAL 4261164204 3941172482

TOTAL 4261164204 3941172482

(S.P. MAHLA)
FINANCE & CHIEF ACCOUNTS OFFICER

(P. VENUGOPAL)
DIRECTOR

ALL INDIA INSTITUTE OF MEDICAL SCIENCES

BALANCE SHEET AS ON 31.3.2008

LIABILITIES		2007-08	2006-07	ASSETS		2007-08	2006-07
AIIMS (MAIN)				AIIMS (MAIN)			
1	BALANCE			1	CASH IN HAND		
a)	Amount due but not paid (Scheme Cell)	47200	108000	a)	Imprest (AIIMS CASHIER)	222024	191224
				b)	Amount due but not paid (Scheme Cell)	47200	108000
2	CAPITAL GRANTS FROM GOVT. OF INDIA			2	Cash at Bank		
i)	Upto 2006-2007	5647120138		a)	(i) AIIMS (Main)	586048113	
ii)	During 2007-08 (AIIMS)	846164000			(ii) Unspent Balance of Specific Grants remained with AIIMS (Main)	129483547	715531660
iii)	Non-Plan Capitalisation	2880228		b)	Scheme Cell	192600145	43642652
iv)	Less on account of Mach. & Equip. condemned dg. 2007-08	26639273		3	GPF BANK ACCOUNT	10859651	42023283
v)	Less Books weeded out during 2007-08	8628		4	NPS Bank Account	26980605	5795530
vi)	Less on account of furniture condemned during 2007-08	195739		5	Investment (Appendix-C)	1765368899	1585368899
vii)	Less on a/c of vehicle condemned dg. 2007-08	167528	6469153198	6	Silver Jubilee Fund	200000	200000
			5647120138	7	Sundry Debtors Scheme Cell (Appendix-B)	3207437	3255838
3	Grant recd. From Min. of Welf. for P.M.R. ADIP Scheme Upto 07-08	1218	1218	8	Misc. Deposits (Appendix-E)	330986	330986
4	Centralised Accident & Trauma Services	29142	29142	9	Recoverable Advances		
				i)	Car	2447380	2350282
5	Diabetes Control	420000	420000	ii)	Motor Cycle-Scooter	1128108	1001407
				iii)	Bicycle	124528	127755

AIIMS 2007-2008 / 675

6	AIDS		2400000	2400000	iv)	Computer Advance		3293569	2363482
7	NON-INSTT. SCHEMES Unspent balance of grants received for specific purpose (APPENDIX-A)		325291129	228888374	v)	House Building Advance		23386764	27192068
					10	Outside Recoveries		—	137872
					11	Employee Insuarace Scheme		—	236793
8	Donated Vehicles				12	Furniture & Fixture (AIIMS)			
a)	Up to 2007-2008		3036507	3036507	a)	Upto 2006-2007	1417679		
9	Donated books				b)	During 2007-2008	23498		
a)	Upto 2007-08		143673	143673	c)	Furniture condemned During 2007-2008	-195739	1245438	1417679
10	Donations (Appendix-C)		11059524	11059524	13	Machinery & Equipment			
					A	AIIMS (MAIN)			
					a)	Upto 2006-2007	2910251214		
11	Misc. Donations (Appendix-D)				b)	During 2007-2008	115931934		
a)	Up to 2006-2007	2300469			c)	Goods received during 2007-2008	245372748		
b)	Receipts during 2007-2008	1350494			d)	Mach. Condemned during 2007-08	26639273	3244916623	2910251214
c)	Less Expdr. During 2007-2008	1725051	1925912	2300469					
12	Employees Insurance Schemes		749485		B	AIDS		820600	820600
13	Outside Recoveries		26872		C	NACO			
						Mach. & Equip purchased		1932605	1932605
14	Deposit Work				14	Advance Payments			
(a)	Starford India				A	Mat. & Supply (Non-Plan)			
	(i) Receipts dg. 07-08	2000000			a)	Upto 2006-2007	8202766		
	(ii) Expenditure dg. 07-08	410902	1589098		b)	During 2007-2008	12795645		
(b)	Rajgarhia Vishram Sadan				c)	Less M&S received During 2007-2008	17340481	3657930	8202766
	(i) Receipts dg. 07-08	1413300			B	For Foreign purchase of MACH. & EQUIP (PLAN)			
	(ii) Expenditure dg. 07-08	713076	700224		a)	Upto 2006-2007	152069945		
15	Security Deposits/ EarnestMoney				b)	During 2007-2008	352743122		
a)	Upto 2006-07	68396879			c)	Less equip. received During 2007-2008	245372748	259440319	152069945
b)	During 2007-08	21061035							

c)	Payment against receipts Upto 2006-07	-18427854			C	Advance payment to P&AO for purchase of Building Material			
d)	Payment against receipts of year 2007-08	-830000	70200060	68396879	a)	Upto 2006-2007	34082600		
					b)	During 2007-2008	4514413		
					c)	Less Adjustment in 2007-2008	3245827	35351186	34082600
16	Caution Money				D	Ty. Contigent Adv.			
a)	Upto 2006-07	1112033			a)	Upto 2006-2007	2285302		
b)	Receipts dg. 2007-08	55400	1167433	1112033	b)	During 2007-2008	2951664		
17	G.P.F. Account (Appendix F)		1740553116	1601716748	c)	Adj.during 2007-2008 of previous year	2235302	3001664	2285302
18	NPS (Appendix F)		51980605	20795530	E	Private Firms for stores			
19	Pot Fund				a)	Upto 2006-2007	7480497		
	i)Upto 2006-2007	617030			b)	during 2007-2008	6294065		
	ii)During 2007-08	210914	827944	617030	c)	Less adj. during 2007-2008	6882139	6892423	7480497
20	N.A.C.O.				F	Secy., NDMC for AC plant for Admn. Block		730000	
a)	Mach. & Equipment	-	1932605	1932605	G	Secy., NDMC for security for electric connection		670950	
21	Revolving funds				H	P. & AO (for procurement of stores)			
	a) Upto 2006-07	52211290			a)	Upto 2006-07	2840476		
	i) Receipt	55837195			b)	During 2007-08	900000		
	ii) Expenditure	37050175	70998310	52211290	c)	Adjustment of advances made during 2007-08	367075	3373401	2840476
22	P.P. Programme				I	Custom duty for Mach.&Equip.			
	a) Upto 2006-07	203640			a)	Upto 2006-07	193083		
	b) Receipts during 2007-08	550000			b)	Add dg. 2007-08	6272737	6465820	193083
	c) Expenditure during 2007-08	328535	425105	203640	J	For Books & Journals			
23	V.V.I.P.		1207055	1207055	a)	Upto 06-07	3903205		
					b)	Add dg 07-08	20127253	24030458	3903205
24	College of Nursing				K	For Cochelar Implant Patient Treatment A/c			
(i)	Upto 06-07	61827							

(ii)	Correction of 2005-06	6803	68630	61827	a)	Upto 06-07	12519000		
					b)	Add dg 07-08	12223000		
					c)	Adjustment dg. 07-08	10610000	14132000	12519000
25	VVIP Care at Parliament House Annexe Upto 07-08		7600	7600	L	For Vehicle purchase		521124	
26	Cochelar Patient treatment A/c				M	M/s Shree Cement Ltd. for p/o cement for construction		1503458	
	Upto 2006-07	12973526							
	a) Receipt	24089000			N	CPWD,SJHPD for Nallah		118000000	
	b) Expenditure	10169000							
	c) Expd. against adv. payment	10610000	16283526	12973526	O	CPWD,SJHPD for Dr.Hostel		1181250	
					P	CPWD,SJHPD for const. of sub-station		5000000	
					Q	M/s Delhi Metro Rail Corp.		60000000	
					R	NDMC for augmenting L.T-Line in Eastern & Western Campus		12755500	12755500
					S	(a) Delhi Vidyut Board for Installation of 11 K.V.A. Sub-Station	3362787		
						(b) Adv. adjusted dg. 2007-08	3362787	0	3362787
					T	NDMC for HT Transformer and laying of cable		7463500	7463500
					U	Covering of Nallah	153383000		153383000
					V	CPWD for Lift	14000000		14000000
					W	CPWD for Surgical Ward	1711770		1711770
					X	Caryair Equip. India Pvt. Ltd. for building construction	192602		192602
					Y	Indian Oil Corporation for LDO		3194680	3194680
					Z	NDMC for Building Construction	18723000		18723000
					Z1	Upgrading Architectural cell of ESD at AIIMS		45132	45132
					15	Books & Publications			
					a)	Upto 2006-2007	170650734		
					b)	During 2007-2008	10229477		
					c)	Less books weeded out dg.2007-08	8628	180871583	170650734
					ii)	Books donated			
					a)	Upto 2006-2007	143673		

	b) During 2007-2008	—	143673	143673
16	Building Construction AIIMS (Main)			
a)	Upto 2006-2007	1896253235		
b)	during 2007-2008	135140739		
c)	Add Adjustment during 07-08	3245827		
d)	Add adjustment during 2007-08	3362787	2038002588	1896253235
17	Advance Payment			
i)	Indian Iron & Steel Co.		572139	572139
ii)	Tata Iron & Steel Co.		654154	654154
iii)	Hindustan Steel Ltd.		520295	520295
iv)	Indian Iron & Steel Co.		594000	594000
18	Land Account			
	Upto 2007-08		112832263	112832263
19	Vehicles			
A	Vehicle (purchased for AIIMS)			
a)	Up to 2006-2007	31344165		
b)	During 2007-08			
(i)	Transport Office	958106		
(ii)	Hospital Store	232219		
c)	Less Vehicles Condemned	167528	32366962	31344165
B	Vehicles donated for AIIMS			
a)	Upto 2007-08		3036507	3036507
22	Hospital receipts recoverable from outside patients			
a)	Up to 2006-07	6582692		
b)	During 2007-08	5040725		
c)	Amount recd. during 2007-08	5195549	6427868	6582692
23	Amount recoverable from the cashier			
a)	Upto 2006-07	307426		

DR. RAJENDER PRASAD CENTRE FOR OPHTHALMIC SCIENCES

1.	Balances			
	Amount due but not paid	-	-	
2	Capital Grant from Govt. of India			
a)	Upto 2006-2007	615021880		
b)	During 2007-2008	90000000		
c)	Furniture condemned during 2007-08	226830		
d)	M&E condemned During 2007-2008	10041720	694753330	615021880
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)	ICMR			
a)	Upto 2006-2007	1775540		
b)	Rec. during 2007-2008	356665		
c)	Expenditure during 2007-2008	451716	1680489	1775540
(ii)	USP			
a)	Upto 2006-2007	3735342		
b)	Rec. during 2007-2008	-		
c)	Expenditure during 2007-2008	989817	2745525	3735342
(iii)	Savers International			
a)	Upto 2006-2007	-		
b)	Rec. during 2007-2008	772000		
c)	Expenditure during 2007-2008	699820	72180	0
(iv)	DST Evaluation Tear Fluid Surgeries			
a)	Upto 2006-2007	-		
b)	Rec. during 2007-2008	809000		
c)	Expenditure during 2007-2008	571943	237057	0

b)	During 2007-08	-		
c)	Recovery	-	307426	307426
	DR. RAJENDER PRASAD CENTRE FOR OPHTHALMIC SCIENCES			
1	CASH IN HAND			
a)	Imprest	10000		10000
2	Cash at Bank	31108947		42205910
3	RECOVERABLE ADVANCE			
a)	Car			
i)	Upto 2006-07	14665		
ii)	Paid during 2007-08	-		
iii)	Recovered during 07-08	14665	0	14665
b)	H.B.A.			
i)	Upto 2006-07	2197115		
ii)	Paid during 2007-08			
iii)	Recovered during 07-08	388590	1808525	2197115
c)	Computer Advance			
i)	Upto 2006-07	-		
ii)	Paid during 2007-08	30000		
iii)	Recovered during 07-08	0	30000	—
4	Machinery & Equipment (Plan)			
i)	Upto 2006-07	495147795		
ii)	During 2007-08	94230302		
iii)	M&E condemned during 2007-08	10041720	579336377	495147795
5	Machinery & Equipment (Non-Plan)			
	Upto 2006-07		5872266	5872266
6	Building Construction			
i)	Upto 2006-07	84738846		
ii)	During 2007-08	4985059	89723905	84738846
7	NPCB (M & E)		7002852	7002852
8	ICMR (M&E)		605150	605150
9	Vehicles			
i)	RPC Vehicle Upto 2006-07	3178768		
ii)	Vehicle purchase dg. 07-08	-	3178768	3178768
ii)	Donated Vehicles			

a)	Upto 2006-2007	1673			iii)	M&E received during 2007-08	98307	0	0
b)	Rec. during 2007-2008	200000							
c)	Expenditure during 2007-2008	114166	87507	1673	D. USP				
(xiii)	WHO-Child blindness				i)	Upto 2006-07	-		
a)	Upto 2006-2007	62565			ii)	Payment made dg. 07-08	185166		
b)	Rec. during 2007-2008	483750			iii)	M&E received during 2007-08	185166	0	0
c)	Expenditure during 2007-2008	546315	0	62565					
(xiv)	DBT-MUTIONAL(M.A.)				E. WHO G. SURVEY				
a)	Upto 2006-2007	693752			i)	Upto 2006-07	-		
b)	Rec. during 2007-2008	-			ii)	Advance payment made dg. 07-08	195770		
c)	Expenditure during 2007-2008	691850	1902	693752	iii)	M& E received during 2007-08	195770	0	0
(xv)	MBDL				F. FAME Study				
a)	Upto 2006-2007	128310			i)	Upto 2006-07	-		
b)	Rec. during 2007-2008	25844			ii)	Payment made to purchase M&E dg. 07-08	98280		
c)	Expenditure during 2007-2008	89675	64479	128310	iii)	M&E received during 2007-08	98280	0	0
xvi)	DOS-Training				G. Bausch & Lomb Akros Soft				
a)	Upto 2006-2007	224203			i)	Upto 2006-07	-		
b)	Rec. during 2007-2008	225000			ii)	Payment made to purchase M&E dg. 07-08	69400		
c)	Expenditure during 2007-2008	370376	78827	224203	iii)	M&E received during 2007-08	69400	0	0
xvii)	CSIR				H. Polyherbal -Ozone				
a)	Upto 2006-2007	-			i)	Upto 2006-07	-		
b)	Rec. during 2007-2008	1593697			ii)	Payment made to purchase M&E dg. 07-08	39700		
c)	Expenditure during 2007-2008	1593697	0	0	iii)	M&E received during 2007-08	39700	0	0
xviii)	NIAF								
a)	Upto 2006-2007	961666							
b)	Rec. during 2007-2008	280000							
c)	Expenditure during 2007-2008	72033	1169633	961666					
xix)	CRP								
a)	Upto 2006-2007	-							

b)	Rec. during 2007-2008	187000		
c)	Expenditure during 2007-2008	164806	22194	0
xx)	DBCS			
a)	Upto 2006-2007	242500		
b)	Rec. during 2007-2008	10000		
c)	Expenditure during 2007-2008	252500	0	242500
xxi)	ORBIS-PECP			
a)	Upto 2006-2007	714120		
b)	Rec. during 2007-2008	1046908		
c)	Expenditure during 2007-2008	1546942	214086	714120
xxii)	Allargan International			
a)	Upto 2006-2007	1843		
b)	Rec. during 2007-2008	-		
c)	Expenditure during 2007-2008	-	1843	1843
xxiii)	Neema-International Pilot study			
a)	Upto 2006-2007	34343		
b)	Rec. during 2007-2008	-		
c)	Expenditure during 2007-2008	-	34343	34343
xxiv)	Workshop			
a)	Upto 2006-2007	163444		
b)	Rec. during 2007-2008	50800		
c)	Expenditure during 2007-2008	178100	36144	163444
xxv)	DST/DBT (Stem)			
a)	Upto 2006-2007	701618		
b)	Rec. during 2007-2008	357200		
c)	Expenditure during 2007-2008	1012001	46817	701618
xxvi)	WHO Short term Training Programme			
a)	Upto 2006-2007	41191		
b)	Rec. during 2007-2008	-		
c)	Expenditure during 2007-2008	40000	1191	41191
xxvii)	Evaluation Study on glaucoma			
a)	Upto 2006-2007	65800		
b)	Rec. during 2007-2008	-		
c)	Expenditure during 2007-2008	20000	45800	65800

xxviii)	ORP-VISION 2020			
a)	Upto 2006-2007	10467		
b)	Rec. during 2007-2008	-		
c)	Expenditure during 2007-2008	-	10467	10467
xxix)	Multifocal IOL			
a)	Upto 2006-2007	383323		
b)	Rec. during 2007-2008	118000		
c)	Expenditure during 2007-2008	342146	159177	383323
xxx)	Evaluation of Anti Cat			
a)	Upto 2006-2007	1235		
b)	Rec. during 2007-2008	100000		
c)	Expenditure during 2007-2008	101235	0	1235
xxxi)	DST (CYCLO)			
a)	Upto 2006-2007	86099		
b)	Rec. during 2007-2008	-		
c)	Expenditure during 2007-2008	63913	22186	86099
xxxii)	Reliance/Clinical Research			
a)	Upto 2006-2007	72091		
b)	Rec. during 2007-2008	181402		
c)	Expenditure during 2007-2008	136083	117410	72091
xxxiii)	NPCB RIO			
a)	Upto 2006-2007	1221760		
b)	Rec. during 2007-2008	-		
c)	Expenditure during 2007-2008	1221760	0	1221760
xxxiv)	Clinical Evaluation B&C(AM0)			
a)	Upto 2006-2007	9933		
b)	Rec. during 2007-2008	114000		
c)	Expenditure during 2007-2008	98420	25513	9933
xxxv)	Cataract Surgery (NPCB)			
a)	Upto 2006-2007	280000		
b)	Rec. during 2007-2008	150000		
c)	Expenditure during 2007-2008	150000	280000	280000
xxxvi)	CGD In Primary Angle Closure Glucoma			
a)	Rec. during 2007-2008	485259		

b)	During 2007-2008	-		
c)	Expenditure during 2007-2008	179815	305444	485259
xxxvii)	FAME Study			
a)	Upto 2006-2007	758575		
b)	Rec. during 2007-2008	1447479		
c)	Expenditure during 2007-2008	737081	1468973	758575
xxxviii)	CLINICAL STUDY ON KRECTRO			
	CONJECTIVITIES(Allergan India Ltd.)			
a)	Upto 2006-2007	41021		
b)	Rec. during 2007-2008	-		
c)	Expenditure during 2007-2008	41021	0	41021
xxxix)	PDT-Visudune			
a)	Upto 2006-2007	-		
b)	Rec. during 2007-2008	48244		
c)	Expenditure during 2007-2008	46447	1797	0
xl)	DST/Specific Grant			
a)	Upto 2006-2007	14000000		
b)	Rec. during 2007-2008	-		
c)	Expenditure during 2007-2008	14000000	0	14000000
xli)	AKROSOFT (BAUCH & LOMB)			
a)	Upto 2006-2007	77528		
b)	Rec. during 2007-2008	-		
c)	Expenditure during 2007-2008	76730	798	77528
xlii)	DME			
a)	Upto 2006-2007	96306		
b)	Rec. during 2007-2008	926655		
c)	Expenditure during 2007-2008	906801	116160	96306
xliii)	WHO DSTG (SEIND/NCD 001 BB06)			
a)	Upto 2006-2007	-		
b)	Rec. during 2007-2008	172150		
c)	Expenditure during 2007-2008	92150	80000	-
xliv)	INMAS Humas Pharmacology			
a)	Upto 2006-2007	-		

b)	Rec. during 2007-2008	500000			
c)	Expenditure				
	during 2007-2008	15000	485000	-	
xlv)	INMAS Biomedical Products				
a)	Upto 2006-2007	-			
b)	Rec. during 2007-2008	500000			
c)	Expenditure				
	during 2007-2008	15000	485000	-	
xlvi)	Lux-PRA International				
a)	Upto 2006-2007	-			
b)	Rec. during 2007-2008	43841			
c)	Expenditure				
	during 2007-2008	11304	32537	-	
xlvii)	Indgen (LSTM)				
a)	Upto 2006-2007	-			
b)	Rec. during 2007-2008	3199437			
c)	Expenditure	-			
	during 2007-2008		3199437	-	
xlviii)	WHO G.S.				
a)	Upto 2006-2007	-			
b)	Rec. during 2007-2008	625000			
c)	Expenditure				
	during 2007-2008	609044	15956	-	
xlix)	Pink Eye(Baush & Lomb)				
a)	Upto 2006-2007	-			
b)	Rec. during 2007-2008	287977			
c)	Expenditure				
	during 2007-2008	109137	178840	-	
l)	Evaluation Polyherbal (ozone)				
a)	Upto 2006-2007	-			
b)	Rec. during 2007-2008	279500			
c)	Expenditure				
	during 2007-2008	172472	107028	-	
li)	Evaluation on Polyherbal in AOD				
a)	Upto 2006-2007	-			
b)	Rec. during 2007-2008	100000			
c)	Expenditure				
	during 2007-2008	99279	721	-	
6	Refund of Security Deposits				
a)	Upto 2006-2007	1916000			
b)	Rec. during 2007-2008	50000			
c)	Expenditure				
	during 2007-2008	195000	1771000	1916000	

7	A.I.I.M.S. Remittance As per last year		214410	214410
	Outside Recoveries			
	Upto 2006-07	11923		
	Remitted 2007-08	-	11923	11923

CARDIO-THORACIC & NEURO SCIENCES CENTRE

1	Capital Grant from Govt. of India			
i)	Upto 2006-2007	2650633530		
ii)	During 2007-2008	226800000		
iii)	Less Mach. Condemed	51225046		
ii)	Less Furniture Condemed	933018	2825275466	2650633530
2	Amount transfer from IRCH		1478400	
3	Cost of the vehicle donated by Sai Bhakta Samaj		613384	613384
4	CT Patient A/c Mach. & Equip. Transfer Sai Bhakta Samaj		49025000	49025000
5	Neurology Patient A/c			
i)	Upto 2006-2007	16988561		
ii)	Receipt during 2007-2008	5731641		
iii)	Less refund/Exp. 2007-2008	5746582	16973620	16988561
6	Outside recoveries			
i)	Upto 2006-2007	301966		
ii)	2007-2008 (+)	879	302845	301966
7	Donations			
i)	Upto 2006-2007	1995286		
ii)	Receipt during 2007-2008	52720		
ii)	Less expenditure 2007-2008	26622	2021384	1995286
8	Security Deposits			

CARDIO-THORACIC & NEURO SCIENCES CENTRE

1	Cash in hand			
a)	Imprest (CTNS-Cashier) 2007-2008		40000	40000
2	Cash at Bank		158648226	151455520
3	Recoverable Advance			
a)	Computer		295350	160800
b)	Car		472548	680940
c)	Cycle			-
d)	Scooter		1052248	1055484
e)	House Building Advance		8193238	8568940
4	Mach. & Equip.			
i)	Upto 2006-2007	1897421229		
ii)	During 2007-2008	183439324		
ii)	Less Mach. condemned	51225046	2029635507	1897421229
5	Mach. & Equip. Transfer From CT Patient A/C		49025000	49025000
6	Advance payment for Foreign purchase Mach. & Equip.			
i)	Upto 2006-2007	270374663		
ii)	During 2007-2008	184265013		
iii)	Less Equip.received	162939783	291699893	270374663
7	Building construction			
i)	Upto 2006-2007	191491882		
ii)	During 2007-2008	11057792	202549674	191491882
8	Advance Agt. works		174596762	174596762
9	Amount due from outside patients			

i)	Upto 2006-2007	17992964		
ii)	During 2007-2008	6280000		
iii)	Less refund	3446000	20826964	17992964
9	Thallium			
i)	Upto 2006-2007	2418419		
ii)	During 2007-2008	2903050		
iii)	Less Expenditure 2007-2008	4017549	1303920	2418419
10	Heart Transplant Donation			
i)	Upto 2006-2007	385810		
ii)	During 2007-2008	-		
iii)	Less Expenditure	67267	318543	385810
11	Lab Test			
i)	Upto 2006-2007	2887349		
ii)	During 2007-2008	5066000		
iii)	Less Expenditure 2007-2008	4228109	3725240	2887349
12	Cardiac Test			
i)	Upto 2006-2007	5220258		
ii)	During 2007-2008	3635770		
iii)	Less Expenditure 2007-2008	3611700	5244328	5220258

C.T. PATIENT A/C

ANGIOGRAPHY PATIENT A/C

GAMMA KNIFE PATIENT A/C

NEURO SURGERY PATIENT A/C

	Upto 2006-2007	1638710		
	During 2007-2008	253785		
	Less amount Recd.	360054	1532441	1638710
9	Vehicles			
i)	Ambulance ORBO		2025954	2025954
10	Furniture & Fixture			
i)	Upto 2006-07	855168		
ii)	During 2007-08	714281		
iii)	Furniture condemned	933018	636431	855168

C.T. PATIENT A/C

1	Fixed Deposits	230000000	220000000
2	Cash in hand		793500
3	Cash at Bank	12970986	14403127

ANGIOGRAPHY PATIENT A/C

1	Cash recoverable from Sh. Dal Chand Verma, Cashier	3245441	3245441
2	Fixed Deposits	75000000	75000000
3	Cash in hand		799000
4	Cash at bank	2803934	12358587

GAMMA KNIFE PATIENT A/C

1	Fixed Deposit	119138203	42500000
2	Cash at Bank	3304760	66823583

NEURO SURGERY PATIENT A/C

NATIONAL DRUG DEPENDENCE TREATMENTCENTRE (N.D.D.T.C.)			
1	Capital fund of DAC		
a)	Upto 2006-2007	139338439	
b)	Mach.& Equip.	3964877	
c)	Motar Vehicle	1122750	
d)	Furniture	88594	
e)	Books & Pub.	1958693	
f)	Less on account of vehicle condemned during 2007-08	549628	145923725
			139338439
2	Institute Recovery		
i)	Upto 2006-07	113215	
ii)	2007-08	-	113215
			113215
3	Security Deposit		
a)	Upto 2006-07	135000	
b)	During 2007-08	-	
c)	Refund 2007-08	-	135000
			135000
NATIONAL DRUG DEPENDENCE TREATMENT (N.D.D.T.C.)(UNDCP PROJECT)			
	Opening balance	316153	257664

Dr.B.R.A. INSTITUTE ROTARY CANCER HOSPITAL			
1	Capital Grant		
	Upto 2006-07	1144279232	

1	Fixed Deposits		32000000	42000000
2	Cash in hand			44000
3	Cash at bank		10902678	4985397
NATIONAL DRUG DEPENDENCE TREATMENTCENTRE (N.D.D.T.C.)				
1	Cash at Bank		9897962	7499458
2	Mach. & Equip.			
a)	Upto 2006-2007	22046956		
b)	During 2007-2008	3964877	26011833	22046956
3	Books & Publication			
a)	Upto 2006-07	9055738		
b)	During 2007-08	1958693	11014431	9055738
4	Furniture & Fixture			
a)	Upto 2006-07	2744372		
b)	During 2007-08	88594	2832966	2744372
5	Building Construction			
a)	Upto 2006-07	101953715		
b)	During 2007-08	-	101953715	101953715
6	Vehicle			
a)	Upto 2006-07	3901284		
b)	During 2007-08	1122750		
c)	Vehicle condemned	549628	4474406	3901284
7	Outside recovery			
a)	Upto 2006-07	40708		
b)	During 2007-08	-	40708	40708
8	Car Advance			
a)	Upto 2006-07	86400		
b)	Adj during 2007-08	34560	51840	86400
9	Mat. & Supply			
a)	Upto 2006-07	300000		
b)	Refund	300000		
c)	Add during 2007-08	460978	460978	300000
NATIONAL DRUG DEPENDENCE TREATMENTCENTRE CENTRE (N.D.D.T.C.)(UNDCP PROJECT)				
	Cash in hand		407834	316153
Dr.B.R.A. INSTITUTE ROTARY CANCER HOSPITAL				
1	Cash at Bank		34272417	46707703

(a)	Plan	97500000								-	-
(b)	Transfer from CNC	732000			2	Furniture & Fixtures					
(c)	Transfer from JPNATC	690000			a)	Upto 2006-2007	10359311				
(d)	Less condemnation of M&E As per CSD/Store letter No.X-1-4/04-05				b)	During 2007-08	642453				
	Budget/V-IV dt.29.4.08	3372572	1239828660	1144279232	c)	Less condemned	109176	10892588			10359311
					3	Computer Advance					
2	Revolving Fund					Upto 06-07	131800				
(i)	Upto 2006-2007	1590561				During 07-08	150000				
(ii)	Add during 2007-2008	3172450				Less recoveries	22460	259340			131800
(iii)	Less payment during 2007-08	898811	3864200	1590561	4	Car/HBA Advance	189750				
						Less	18000	171750			189750
3	Medical Oncology Fund				5	Scooter Advance	30000				
(i)	Upto 2006-2007	579038				Less	26983	3017			
(ii)	Add during 2007-2008	619230			6	Mach. & Equip.					
(iii)	Less payment during 2007-08	441378	756890	579038	a)	Upto 2006-2007	546703544				
					b)	Add during 2007-2008	25944554				
					c)	Add Adj. of Custom Advance	17927134				
					d)	Less condemnation of M&E as per CSD/Store Section	3263396	587311836			546703544
					7	Advance Payments					
					a)	During 2006-2007	242667167				
					b)	Add during 2007-2008(+)	93429689				
					c)	Less Advance Adjustments during the year 2007-08	25944554				
					d)	Add Customs duty unadjust.	5340633	315492935			242667167
					8	Security Deposit with NDMC as per Audit Objection during 2004-05		2626000			2626000
					9	Building Construction		296256915			296256915
					10	Vehicle					
					a)	Upto 2006-2007	941321				
					b)	During 2007-08	968275	1909596			941321
					11	Capital Works					
					a)	Upto 2006-07	5538544				
					b)	During 2007-08	6753472	12292016			5538544

J.P.N. APEX TRAUMA CENTRE			
1	Capital Grants upto 06-071100713189		
	Add during 2007-08	106212446	1206925635 1100713189
2	Security deposit		
	Receipt during 2007-08	1475000	
	Refund dg. 2007-08	435000	1040000

CENTRE FOR DENTAL EDUCATION & RESEARCH			
1	Capital Grant		
(i)	Upto 06-07 transferred from AIIMS Main A/c	357250420	

J.P.N. APEX TRAUMA CENTRE			
1	Cash at Bank	21957766	32786727
Construction of Building			
2	Advance paid to M/s HSCC87912064		87912064
3	Advance to M/s HSCC during 2006-07 towards construction of buildings	29000000	
	Add during 2007-08	5000000	121912064 29000000
4	Machinery & Equipment		
(a)	L/C Advances on M&E dg. 06-07	333217199	
(ii)	L/C adv. dg. 07-08	67206597	
(iii)	L/C Received upto 07-08352309634	48114162	333217199
(b)	Custom duty adv. upto 06-0727647825		
(ii)	Adjusted dg. 07-08	9968158	17679667
(c)	PDA adv. upto 06-07	982880	
(ii)	Adv. pad dg. 07-08	1500000	
(iii)	Adjusted dg. 07-08	1529540	953340 28630705
5	Construction of Building transferred from AIIMS(M)	449825743	449825743
6	Land Account transferred from AIIMS(M) Account	9900000	9900000
7 A	(i) Machinery & Equipments		
	Upto 2006-07	112932400	
	(ii) Add dg. 07-08	35646952	
	(iii) M&E received 07-08352309634	500888986	
B	Custom duty adjusted		
	Upto 06-07	14447544	
	(ii) Adjusted dg. 07-08	9968158	24415702
C	PDA adjusted upto 06-07	588540	
	Adj. dg. 07-08	1529540	2118080 127968484
8	Furniture & Fixtures		
	Upto 06-07	2375382	
	Add dg. 07-08	2206678	4582060 2375382
9	Capital Works dg. 07-08	10572435	
CENTRE FOR DENTAL EDUCATION & RESEARCH			
1	Cash at bank	1864040	19511927
2	Machinery & Equip.(Plan)		
	(i) Upto 2006-07	29724246	
	(ii) During 2007-08	13824684	

(ii)	During 2007-08				(iii) Add M&E received against advances during 07-08	4907555	48456485	29724246	
	(a) EFC	8900000							
	(b) Non-EFC	5000000			3	Advance Payment made to foreign purchases			
(iii)	Less transferred to					(i) Upto 2006-07	17134994		
	Income & Exp. A/c	4904516	366245904	357250420		(ii) During 2007-08	3685390		
2	Security Deposits					(iii) Less advances adjusted during 2007-08	4907555	15912829	
	(i) Upto 2006-07	260000			4	Building		17134994	
	(ii) During 07-08	85000			(i)	Upto 06-07 transferred from AIIMS Main A/c	215754235		
	(iii) Less refunded during 2007-08	32800	312200	260000	(ii)	During 07-08	37829136		
					(iii)	Capital Works	410493	253993864	
					5	Advance paid to HSCC			
					(i)	Upto 06-07 transferred from AIIMS Main A/c	76497252		
					(ii)	During 07-08	7000000		
					(iii)	Less adjusted during 07-08	37829136	45668116	
					6	Advance to NDMC	2404500	76497252	
POOR PATIENT A/C					POOR PATIENT A/C				
1	AIIMS (Main)				1	AIIMS (Main)			
a)	Opening Balance				a)	Cash/Bank	1132516	861808	
	i) Cash/Bank	861808			b)	FDR's	400226	400226	
	ii) FDR's	400226			2	Dr.B.R.A.I.R.C.H			
b)	Receipts					Cash/Bank	1821020	1393911	
	i) Grants	378732			3	DR. R.P. CENTRE			
	ii)Interest on FDR's	-			a)	Cash/Bank	45258	25052	
	iii) Payments	108024			4	N.S. CENTRE			
c)	Closing Balance				a)	Cash/Bank	81429	83806	
	i) Cash/Bank		1132516	861808					
	ii) FDR's		400226	400226					
2	Dr.B.R.A.I.R.C.H.								
a)	Cash/Bank	1393911							
b)	Receipts								
	i) Grants	205825							
	ii)Interest on FDR's	484514							
	(iii) Wrongly credited Bank	2000							

	(iv) Payment	265230		
c)	Closing Balance			
	Cash/Bank		1821020	1393911
3	DR. R.P. CENTRE			
a)	Cash	25052		
b)	Receipts			
	i) Interest	923		
	ii) Donation	80729		
	iii) Payments	61446		
c)	Closing Balance		45258	25052
4	N.S. Centre			
a)	Cash/Bank	83806		
b)	Donations	8952		
c)	Payments	11329		
d)	Closing Balance		81429	83806

PATIENT TREATMENT ACCOUNTS

1	AIIMS			
a)	Opening Balance	18900463		
b)	Receipts			
	(i) Grants	49488001		
	(ii) Interest	778639		
	(iii) Payments	41380274		
c)	Closing Balance		27786829	18900463
2	Dr.B.R.A.I.R.C.H.			
a)	Opening Balance	5194183		
b)	Short Term Investment	10000000		
c)	FDR	6000000		
d)	Receipts			
i)	Grants	45950380		
ii)	Cheque Cancelled	1155266		
iii)	Dly. Inntt.	677		
iv)	Wrong credited	115650		
v)	Payments	40424504		
c)	Closing Balance			
i)	Cash/Bank		11991652	5194183
ii)	Short Term Investment		10000000	10000000
iii)	FDR's		6000000	6000000

HOSTELS

1	Security Deposits			
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PATIENT TREATMENT ACCOUNTS

1	AIIMS	27786829	18900463
2	Dr.B.R.A.I.R.C.H.		
a)	Cash/Bank	11991652	5194183
b)	Short Term Investment	10000000	10000000
c)	FDR's	6000000	6000000

HOSTELS

1	Cash in hand	18221	23806
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i) Upto 2006-07	979780			2	Cash at Bank	732202	318341
ii) receipts during 2007-08	1421500			3	FDR's	2223103	2171124
iii) less refunds during 2007-08	-1034000	1367280	979780				

EXCESS OF INCOME OVER EXPENDITURE

EXCESS OF EXPENDITURE OVER INCOME

1	AIIMS (Main)			
	(i) During 2006-07	299609699		
	(ii) During 2007-2008	54566780		
	(iii) Correction of 2005-06	6803	354169676	299609699
2	R.P. Centre			
a)	Upto 2006-2007	13060779		
b)	During 2007-2008	3057705	16118484	13060779
3	C.N.C.			
a)	Upto 2006-2007			
b)	Excess of Income over expenditure during 2007-08		0	928525
4	C.T. PATIENT A/C			
i)	Upto 2006-07	235196627		
ii)	Add excess of income over expenditure 07-08	10402155		
iii)	Less fresh cheques issued against cancelled cheques	2627796	242970986	235196627
5	ANGIOGRAPHY PATIENT A/C			
i)	Upto 2006-07	91403028		
ii)	(-) Excess of expdr. over income 2007-08	9462970		
iii)	Less fresh cheques issued against cancelled cheques	890683	81049375	91403028
6	GAMMA KNIFE PATIENT A/C			
i)	Upto 2006-2007	109323583		
ii)	during 2007-08	13049480		
iii)	Cancelled Cheque	69900	122442963	109323583
7	NEURO SURGERY PATIENT A/C			
i)	Upto 2006-07	47029397		
ii)	(-) Excess of expenditure			

1	C.N.C.			-	-
(i)	Upto 2006-07 (-)	928525			
(ii)	During 2007-08	7634347	6705822		

	over income 2007-08	3094407					
iii)	Fresh Cheques	1032312	42902678	47029397			
8	NDDTC						
	Upto 2006-07	8041977					
	During 2007-08	2524922	10566899	8041977			
9	Dr.B.R.A.I.R.C.H.						
(I)	Upto 2006-07	5673224					
(ii)	During 2007-08	11365436	17038660	5673224			
10	HOSTEL						
i)	Upto 2006-07	1533491					
ii)	During 2007-08	72755	1606246	1533491			
11	NATIONAL DRUG DEPENDENCE TREATMENT PROJECT (UNDCP)		91681	58489			
12	J.P.N. Apex Trauma Centre						
i)	Upto 2006-07	903115					
ii)	Add during 2007-08	4051255	4954370	903115			
13	CENTRE FOR DENTAL EDUCATION & RESEARCH						
i)	Upto 06-07	1112234					
ii)	Add during 07-08	629496	1741730	1112234			
	TOTAL	16359353138	14681235877		TOTAL	16359353138	14681235877

Note:

- 1 The accounts have been prepared on actual Receipts and Expenditure basis.
- 2 No depreciation on Mach. & Equipment, vehicles etc. has been provided as the Institute is fully funded by the Govt.
- 3 A statement showing by various project Investigators during 2007-08 is attached at Appendix-A-I. It may be mentioned that on completion of Research Projects, the equipment are either returned to the funding agencies or are used in the Departments.
- 4 Institute is exempted from Income-Tax under Section 8G(5)(vi) of the Income Tax Act, 1961.

(S.P. MAHLA)
FINANCE & CHIEF ACCOUNTS OFFICER

(P. VENUGOPAL)
DIRECTOR

Appendix A

ALL INDIA INSTITUTE OF MEDICAL SCIENCES STATEMENT SHOWING THE EXPENDITURE OF THE GRANT RECEIVED FOR THE SPECIFIC PURPOSE FOR THE YEAR 2007-08

Funding Agency		Opening Balance		Receipt	Total	Expenditure	Balance	
		Credit	Debit				Credit	Debit
1	ICMR	33116116	0	71061102	104177218	61179580	42997638	0
2	C.S.I.R.	10220879	0	35175848	45396727	31698039	13698688	0
3	DST	39284582	0	115230772	154515354	57565379	96949975	0
4	UNICEF	1211735	0	1000000	2211735	1185631	3397366	0
5	D.B.T.	57385436	0	141776312	199161748	117707640	81454108	0
6	W.H.O.	13623789	0	12362058	25985847	14124534	11861313	0
7	U.G.C.	2659395	0	3418980	6078375	5898298	180077	0
8	Ministry of Health and Family welfare	2620801	0	6598788	9219589	5026629	4192960	0
9	Ministry of Environment & Forest	0	0	1087894	1087894	713490	374404	0
10	Dabur Research Foundation	816403	0	0	816403	230883	585520	0
11	DEPTT. OF ELECTRONICS	114542	0	0	114542	845	113697	0
12	Himalaya Drug Co.	195537	0	171590	367127	274721	92406	0
13	International Atomic Energy Agency	946824	0	1081043	2027867	1029161	998706	0
14	Convatec Sayibb	2328	0	0	2328	0	2328	0
15	Rajiv Gandhi Foundation	109987	0	810303	920290	682636	237654	0
16	Directorate of Education (NSS)	54683	0	86000	140683	23119	117564	0
17	Torrent Pharma	0	0	51279	51279	1538	49741	0
18	INDO-US	764123	0	0	764123	0	764123	0
19	Ford Foundation	458594	0	0	458594	0	458594	0
20	Fulford India Ltd.	551571	0	0	551571	217979	333592	0
21	National Thalassemia Welfare Society	41644	0	20000	61644	46099	15545	0

22	INCLIN	0	0	1196530	1196530	256314	940216	0
23	Institute of Cancer Research UK co-ordination Committee	416466	0	0	416466	320025	96441	0
24	Central Council for Research in Yoga And Naturopathy	0	63681	1008249	944568	922131	22437	0
25	Ranbaxy /Elililly & company pvt Ltd	403911	0	2305479	2709390	1713582	995808	0
26	NATIONAL INSTITUTE OF HEALTH, USA	6112561	0	2408363	8520924	5707880	2813044	0
27	Norad, Norway	33287	0	0	33287	33287	0	0
28	NIE	17513860	0	11661087	29174947	7314000	21860947	0
29	INSA	25331	0	0	25331	0	25331	0
30	SRB-Clinical Pharamacology	0	3154100	0	3154100	0	0	3154100
31	Panacea biotech Ltd.	4187	0	316357	320544	259832	60712	0
32	Revolving Funds for Drugs. / SNMC	195710	0	0	195710	0	195710	0
33	Atomic Energy Regulatory Board	376208	0	581250	957458	169625	787833	0
34	Pfizer Ltd.	1282673	0	2192760	3475433	2418937	1056496	0
35	NATCO Pharma India	72048	0	0	72048	71696	352	0
36	University of Maryland	209436	0	0	209436	120561	88875	0
37	Glaxo India Ltd.	217377	0	0	217377	0	217377	0
38	Ministry of Defence (D.R.D.O)	445565	0	0	445565	400291	45274	0
39	Nova Nordisk India	182779	0	272598	455377	9021	446356	0
40	Indian Institute of Technology	0	0	35000	35000	1050	33950	0
41	Cystic Fibrosis/World Wide, USA	364809	0	0	364809	80979	283830	0
42	CONARD, USA	591	0	0	591	0	591	0
43	The Cancer Foundation	85355	0	275000	360355	329340	31015	0
44	Novartis India Ltd.	335768	0	823980	1159748	315092	844656	0
45	Maharishi Ayurveda	5870	0	279111	284981	219469	65512	0
46	UN International Drug and crime Control Programme	1662457	0	461254	2123711	1357478	766233	0
47	Russan Pharma Ltd Mumbai	390776	0	0	390776	227091	163685	0
48	Central Council for Research in Ayurveda & Sidha	1038253	0	0	1038253	3934	1034319	0
49	Ministry of Social Justice and Empowerment	77882	0	0	77882	0	77882	0
50	Quintiles Spectral India	3646262	0	2981224	6627486	2675808	3951678	0
51	Ministry of Communication and Information& Technology	711755	0	1340000	2051755	1654021	397734	0
52	University of Bergan, Norway	3063348	0	2034228	5097576	3691365	1406211	0

53	Zydas Healthcare Ltd	0	398	0	398	0	0	398
54	Oxford University, UK	1266700	0	2869045	4135745	1057809	3077936	0
55	Federation of Obstetric & Gynaecological	0	276	0	276	0	0	276
56	Aimil Pharmaceutical India Ltd.	0	0	0	0	331	0	331
57	INCTR USA	52183	0	1650742	1702925	1040093	662832	0
58	Emcure Pharmaceutical Ltd.	0	6380	0	6380	0	0	6380
59	Neon Laboratories Ltd.	0	0	0	0	0	0	0
60	Delhi State Control Society/AIDS	0	10145	163984	153839	152584	1255	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	0	668
63	Wockhardt, Mumbai	21169	0	0	21169	0	21169	0
64	NSD (Security Deposit)	2170650	0	1061000	3231650	1719000	1512650	0
65	Sanofi Pasteur India Pvt Ltd	58216	0	0	58216	42382	15834	0
66	Johnson & Johnson	91558	0	962936	1054494	421838	632656	0
67	Beijing Toshiba Pharmaceuticals Co. Ltd.	180235	0	0	180235	0	180235	0
68	C.P.W.W. Jersulam	6534	0	0	6534	0	6534	0
69	AVENTIS PHARMACEUTICALS, USA	41752	0	0	41752	27617	14135	0
70	Dr. Reddy's Lab. Pvt. Ltd.	326677	0	729917	1056594	485262	571332	0
71	SIRO CLIN PHARMA PVT. LTD	805628	0	162323	967951	843326	124625	0
72	Charak Pharma (P)Ltd.	42781	0	0	42781	42781	0	0
73	INCLEN & USAID	4914139	0	2439759	7353898	6239997	1113901	0
74	SAVING NEWBORN LIVES, USA	126840	0	0	126840	54773	72067	0
75	DANIDA RESEARCH COUNCIL	19429	0	0	19429	19410	19	0
76	THE MICRONUTRIENT INITIATIVE, ASIA	0	4702	0	4702	0	0	4702
77	Ministry of Health And Family Welfare(N.A.C.O)	7480177	0	4997973	12478150	4764799	7713351	0
78	The University of Albama, USA	250898	0	389880	640778	555740	85038	0
79	Indian council of Philosophical Research	7920	0	0	7920	0	7920	0
80	Sterling Synergy System (P) Ltd.	113580	0	0	113580	10000	103580	0
81	Reliance Clinical Research Services (P) Ltd.	47421	0	339852	387273	107933	279340	0
82	KLPP,USA	656774	0	0	656774	640301	16473	0
83	Vulimini Ramalingaswami Foundation	0	6508	0	6508	0	0	6508

84	Texas A&M Research Foundation (TAMRF) USA	16237	0	0	16237	0	16237	0
85	Biomerieux India (P)Ltd.	44899	0	0	44899	32888	12011	0
86	Media Lab Asia	48367	0	0	48367	59668	0	11301
87	University of Warwick U.K	431966	0	632400	1064366	269838	794528	0
88	BHARAT SERUMS AND VACCINES LTD.	0	3888	0	3888	6112	0	10000
89	CD PHARMA INDIA PRIVATE LIMITED	686521	0	1182342	1868863	1595384	273479	0
90	KHANDELWAL LABORATORIES LTD.	0	2521	53000	50479	19674	30805	0
91	Directorate General of Health Services	560099	0	2154923	2715022	2485795	229227	0
92	Lajolla Pharmaceutical Company, California	188392	0	320850	509242	448348	60894	0
93	Institute De Recherches Internationales Servier (IRIS), France	0	0	168650	168650	112290	56360	0
94	BONE & JOINT DECADE INDIA	35880	0	25000	60880	60750	130	0
95	ANTISENSE PHARMA GmbH, GERMANY	69584	0	205497	275081	194292	80789	0
96	I.S.H.T.M	8972	0	260549	269521	197292	72229	0
97	National Institute of Nutrition (NIN) Hyderabad	0	2571	100000	97429	97320	109	0
98	Peregrine Pharmaceuticals, USA	0	0	683003	683003	601849	81154	0
99	Ozone pharmaceuticals ltd.	86662	0	413840	500502	198468	302034	0
100	Ovation Pharmaceuticals, USA	0	0	626833	626833	314350	312483	0
101	DELHI TAPEDIK UNMULAN SAMITI	149336	0	302511	451847	257368	194479	0
102	JOHN HOPKINS BLOOMBERG SCHOOL OF PUBLIC HEALTH	856326	0	539605	1395931	991436	404495	0
103	Clinigene International Pvt. Ltd	115466	0	101402	216868	76419	140449	0
104	FREEDOM TRIAL	86253	0	0	86253	0	86253	0
105	DIGENE CORPORATION, USA	0	0	1254200	1254200	738064	516136	0
106	KOBE, JAPAN	32236	0	0	32236	22015	10221	0
107	AYUSH, Ministry of Health and Family Welfare	0	0	640540	640540	638444	2096	0
108	Troikaa Pharmaceutical Ltd	36858		44850	81708	81346	362	0
109	International Paedtrics Nephrology Association	99400	0	238500	337900	325333	12567	0
110	National Perinatal Epidemiology Unit, University UK of Oxford,	0	0	1552015	1552015	818987	733028	0
111	ABBOTT VASCULAR, USA	0	0	216071	216071	219464	0	3393
112	European Commission	0	0	4138457	4138457	2823906	1314551	0

113	Synergy Network India Pvt Ltd,	551	0	0	551	0	551	0
114	Solvey Pharma Ltd.	50665	0	48000	98665	85200	13465	0
115	Relisys Medical Devices Ltd.	0	0	75000	75000	78433	0	3433
116	PPD Pharmaceutical Development India Pvt. Ltd.	138696	0	534253	672949	505838	167111	0
117	Auxilium Technical & Management Services Pvt. Ltd.	400	0	0	400	0	400	0
118	M/S ASPREVA PHARMACEUTICAL CORPORATION, CANADA	73267	0	263341	336608	160863	175745	0
119	CLINIRx RESEARCH PVT. LTD. GURGAON, HARYANA	1514767	0	1862674	3377441	1564335	1813106	0
120	Central Council for Research in Unani Medicine	60799	0	1132661	1193460	777508	415952	0
121	CLINCYTE, USA	247287	0	0	247287	234349	12938	0
122	M/S Markansas Research Division	246356	0	0	246356	87884	158472	0
123	THRESHOLD PHARMACEUTICALS, USA	36184	0	0	36184	39320	0	3136
124	London School of Hygiene & Tropical Medicine, UK	0	0	306279	306279	309090	0	2811
125	GlaxoSmith Kline Asia Private Ltd	198257	0	1752123	1950380	556256	1394124	0
126	AJINOMOTA CO. JAPAN	127043	0	198350	325393	163137	162256	0
127	The International Society for Paediatric Neurosurgery (ISPNE)	0	0	81000	81000	77631	3369	0
128	MSD (India) Pvt. Ltd.	860241	0	0	860241	10135	850106	0
129	Solumiks Herbaceuticals Limited	33411	0	87700	121111	121098	13	0
130	Cadila Health care Ltd.	0	0	265913	265913	159161	106752	0
131	South Asian Pneumococcal Alliance (SAPNA)	0	0	400000	400000	348453	51547	0
132	Neeman Medical International Asia Ltd.	0	0	133005	133005	3990	129015	0
133	Apothecaries Ltd	0	0	46500	46500	3852	42648	0
134	PAREXEL INTERNATIONAL LTD., U.K.	0	0	124301	124301	15275	109026	0
135	Hindustan Latex Limited	0	0	80000	80000	2400	77600	0
136	Global Cancer Concern India	0	0	60000	60000	1800	58200	0
		228888374	3255838	459177988	684810524	362726832	325291129	3207437

(S.P. Mahla)
Finance & Chief Accounts Officer

APPENDIX - A1

ALL INDIA INSTITUTE OF MEDICAL SCIENCES RESEARCH SECTION

Statement of Expenditure Made for Purchasing Equipment during the Financial Year 2007-2008

S.No.	Code No.	Project Investigators	Month	Amount
1	I536	DR. A.B.DEY	Mar-08	34,750
2	N681	DR. A.K.DEORARI	8-Mar	121,722
3	N891	DR. A.K.DINDA	7-Jun	149,635
4	N891	DR. A.K.DINDA	7-Jul	-8,320
5	N891	DR. A.K.DINDA	7-Sep	271,787
6	N891	DR. A.K.DINDA	7-Dec	-149,635
7	N659	DR. A.K.MAHAPATRA	7-May	550,610
8	N659	DR. A.K.MAHAPATRA	7-Nov	139,375
9	N669	DR. ALKA KRIPLANI	7-May	41,808
10	N910	DR. ALKA KRIPLANI	Sep-07	18,740
11	I476	DR. ASHUTOSH HALDER	7-May	44,641
12	I476	DR. ASHUTOSH HALDER	7-Jul	5,500
13	D217	DR. B.K.DAS	7-Jun	205,461
14	I508	DR. B.K.MOHANTI	7-May	49,504
15	N800	DR. D.K.GUPTA	7-Nov	30,000
16	N885A	DR. D.K.MITRA	7-May	48,776
17	N885A	DR. D.K.MITRA	7-Sep	77,700
18	N892	DR. D.K.MITRA	7-May	97,552
19	N892	DR. D.K.MITRA	7-Jun	94,357
20	N892	DR. D.K.MITRA	7-Oct	15,485
21	N892	DR. D.K.MITRA	7-Nov	392,500
22	N914	DR. D.K.MITRA	Nov-07	9,009,098
23	N914	DR. D.K.MITRA	Mar-08	9,009,098
24	C616	DR. D.N.RAO	Mar-08	213,762
25	N871	DR. D.N.RAO	7-Jun	41,457
26	N871	DR. D.N.RAO	7-Jul	198,293
27	N871	DR. D.N.RAO	8-Mar	19,994
28	N904	DR. D.N.RAO	Jul-07	85,631
29	D210	DR. G.P.BANDOPADHYAYA	7-Jul	348,000
30	N940	DR. H.K.PRASAD	Aug-07	60,972
31	N940	DR. H.K.PRASAD	Sep-07	564,397
32	N940	DR. H.K.PRASAD	Oct-07	11,250
33	N940	DR. H.K.PRASAD	Jan-08	216,896
34	I507	DR. H.N MALLICK	7-Aug	106,793

35	N823	DR. J.S.TYAGI	7-May	181,981
36	N823	DR. J.S.TYAGI	8-Jan	150,023
37	N930	DR. J.S.TYAGI	Aug-07	873,355
38	N930	DR. J.S.TYAGI	Oct-07	57,517
39	N930	DR. J.S.TYAGI	Dec-07	3,284,320
40	N930	DR. J.S.TYAGI	Jan-08	140,955
41	N930	DR. J.S.TYAGI	Mar-08	3,353
42	N915	DR. JAYASREE SENGUPTA	Sep-07	10,803,123
43	N915	DR. JAYASREE SENGUPTA	Dec-07	-473,733
44	N915	DR. JAYASREE SENGUPTA	Mar-08	-496,391
45	I532	DR. K.ANAND	Nov-07	21,079
46	I532	DR. K.ANAND	Dec-07	56,940
47	D175	DR. K.K.DEEPAK	8-Jan	33,924
48	N746	DR. K.K.DEEPAK	8-Mar	188,511
49	I543	DR. KALPANA LUTHRA	Jan-08	219,597
50	I543	DR. KALPANA LUTHRA	Mar-08	196,650
51	I481	DR. KAUSHAL K VERMA	7-Oct	8,250
52	N927	DR. LALIT KUMAR	Jul-07	311,824
53	I533	DR. M.R.RAJESWARI	Mar-08	409,490
54	N727	DR. M.R.RAJESWARI	7-Oct	43,500
55	i516	DR. MADHULIKA KABRA	Aug-07	384,099
56	N962	DR. MADHULIKA KABRA	Mar-08	641,809
57	I534	DR. MADHURI BEHARI	Feb-08	211,341
58	n899	DR. MADHURI BEHARI	7-Oct	305,394
59	n899	DR. MADHURI BEHARI	7-Dec	486,490
60	I486	DR. N.C.CHANDRA	7-Aug	5,000
61	I486	DR. N.C.CHANDRA	7-Sep	25,005
62	I486	DR. N.C.CHANDRA	7-Oct	15,000
63	N992	DR. N.C.CHANDRA	Mar-08	75,622
64	N781	DR. N.K.MEHRA	7-May	1,443,188
65	N934	DR. N.K.MEHRA	Nov-07	212,960
66	N934	DR. N.K.MEHRA	Jan-08	479,439
67	N934	DR. N.K.MEHRA	Mar-08	203,085
68	D179	DR. N.R.JAGANNATHAN	7-Oct	271,637
69	N850	DR. NEERJA BHATLA	7-May	122,200
70	N903	DR. NEERJA BHATLA	Sep-07	73,570
71	I494	DR. NEETA SINGH	7-Sep	457,570
72	I474	DR. O.P.KHARBANDA	7-May	38,500
73	N632	DR. PRATIMA RAY	8-Feb	77,553
74	I380	DR. PUNIT KAUR	7-May	106,775
75	I380	DR. PUNIT KAUR	7-Jul	9,450
76	N844	DR. R.HANDA	7-Nov	54,930
77	D227	DR. R.LAKSHMY	Mar-08	661,281
78	n284a	DR. R.M.PANDEY	7-Sep	48,800

79	N735	DR. R.S.TYAGI	7-May	27,675
80	N735	DR. R.S.TYAGI	7-Oct	33,160
81	N735	DR. R.S.TYAGI	8-Feb	19,470
82	D208	DR. RADHIKA TANDON	7-Aug	35,276
83	I490	DR. RAJESH MALHOTRA	7-May	36,449
84	N615	DR. RAJESH SAGAR	Jun-07	162,400
85	N969	DR. RAMA CHAUDHARY	Mar-08	653,286
86	D211	DR. RANDEEP GULERIA	7-May	228,800
87	D211	DR. RANDEEP GULERIA	7-Aug	421,875
88	i519	DR. RANDEEP GULERIA	Jul-07	170,000
89	i519	DR. RANDEEP GULERIA	Sep-07	170,560
90	N671	DR. RANDEEP GULERIA	7-Jun	88,000
91	D199	DR. S.K.ACHARYA	7-May	197,600
92	D199	DR. S.K.ACHARYA	7-Aug	331,875
93	N687	DR. S.K.ACHARYA	7-Nov	69,300
94	N879	DR. S.K.AGARWAL	7-May	65,180
95	N879	DR. S.K.AGARWAL	7-Aug	6,700
96	D173	DR. S.K.PANDA	7-Sep	11,550
97	D216	DR. S.K.PANDA	Mar-08	9,880
98	D220	DR. S.K.PANDA	Sep-07	15,304,764
99	N885	DR. S.K.SHARMA	7-Oct	49,725
100	N941	DR. S.K.SHARMA	Nov-07	71,404
101	N941	DR. S.K.SHARMA	Feb-08	451,112
102	N941	DR. S.K.SHARMA	Mar-08	73,598
103	D181	DR. SARMAN SINGH	7-Oct	2,716
104	D207	DR. SARMAN SINGH	7-Aug	331,875
105	N906	DR. SARMAN SINGH	Oct-07	212,960
106	N906	DR. SARMAN SINGH	Feb-08	220,870
107	D022A	DR. SHASHI WADHWA	7-May	2,344,217
108	D022A	DR. SHASHI WADHWA	7-Jul	-2,136
109	D022A	DR. SHASHI WADHWA	7-Aug	1,010
110	D022A	DR. SHASHI WADHWA	8-Feb	3,026,973
111	D022A	DR. SHASHI WADHWA	8-Mar	314,332
112	N725	DR. Shinjini Bhatnagar	7-Apr	8,392,071
113	N737	DR. Shinjini Bhatnagar	8-Mar	16,400
114	N868	DR. Shinjini Bhatnagar	8-Mar	154,350
115	I435	DR. SHOBHA BROOR	7-Jun	29,604
116	I435	DR. SHOBHA BROOR	7-Aug	521,863
117	I435	DR. SHOBHA BROOR	7-Sep	402,692
118	I435	DR. SHOBHA BROOR	7-Oct	669,487
119	I435	DR. SHOBHA BROOR	8-Feb	11,419
120	I435	DR. SHOBHA BROOR	8-Mar	19,500
121	i521	DR. SHOBHA BROOR	Jun-07	367,817
122	i521	DR. SHOBHA BROOR	Sep-07	40,500

123	i521	DR. SHOBHA BROOR	Mar-08	17,420
124	n920	DR. SHOBHA BROOR	Aug-07	433,417
125	n920	DR. SHOBHA BROOR	Sep-07	19,900
126	n920	DR. SHOBHA BROOR	Nov-07	40,300
127	N945	DR. SNEH ANAND	Feb-08	40,686
128	N893	DR. SUBRATA SINHA	7-May	1,786,908
129	N893	DR. SUBRATA SINHA	7-Aug	-107,698
130	N893	DR. SUBRATA SINHA	7-Sep	1,113,533
131	N893	DR. SUBRATA SINHA	7-Oct	7,827
132	D200	DR. SUJATA SHARMA	7-May	41,705
133	I013	DR. SUNEETA MITTAL	8-Mar	566,442
134	N878	DR. T.P.SINGH	Mar-08	392,401
135	D224	DR. T.S.ROY	Feb-08	787,776
136	N970	DR. T.VELPANIDAN	Mar-08	549,595
137	N764	DR. UMESH KAPIL	7-Aug	18,928
138	N812	DR. V.K. PAUL	7-May	34,500
139	N825	DR. V.K. PAUL	7-Aug	72,288
140	N985	DR. V.K. PAUL	Mar-08	95,000
141	N358	DR. V.RAINA	8-Mar	87,500
142	N847	DR. V.RAINA	8-Jan	8,850
143	N847	DR. V.RAINA	8-Feb	7,280
144	N807	DR. VINEET AHUJA	7-Oct	75,930
145	N052	DR. Y.D.SHARMA	8-Mar	569,305
146	N672	DR. CHETAN D. PATEL	7-Jul	70,500
147	N881	DR. NAVAL K. VIKRAM	7-Jul	39,896
148	N881	DR. NAVAL K. VIKRAM	7-Sep	750,222
149	N750	DR. ARVIND BAGGA	8-Feb	54,688
150	i513	DR. RIMA DADA	Oct-07	49,975
151	N933	DR. G. KARTHIKEYAN	Aug-07	56,837
152	N860	DR. MADHU VAJPAYEE	May-07	9,932
153	N000	SH. S.P.MAHLA	7-Oct	138,765
154	N000	SH. S.P.MAHLA	8-Mar	30,632
155	N932	DR. SEEMA SOOD	Mar-08	777,867
156	D186	Dr. ROHIT SAXENA	7-Jul	292,257
157	D186	Dr. ROHIT SAXENA	7-Oct	46,800
158	N817	DR. V.K.SHARMA	7-Jul	55,755
159	N802	DR. SUDHIIR BAHADUR	7-Dec	48,693
160	D196	Dr. Rashmi Mathur	8-Feb	1,015,548
161	N880	DR. AJOY ROYCHOUDHRY	8-Feb	26,000
162	N872	DR. Sanjeev Sinha	7-May	60,000
163	N872	DR. Sanjeev Sinha	7-Nov	405,219
164	N975	DR. Sanjeev Sinha	Feb-08	88,823
165	N975	DR. Sanjeev Sinha	Mar-08	265,000
166	I501	DR. V. SREENIVAS	7-Aug	44,900

167	N372	Dr. Suman Bhasker	7-Oct	10,213
168	I491	DR. SURENDER SINGH	7-Jul	9,980
169	I491	DR. SURENDER SINGH	7-Oct	70,326
170	I491	DR. SURENDER SINGH	7-Nov	82,688
171	I491	DR. SURENDER SINGH	7-Dec	39,965
172	I491	DR. SURENDER SINGH	8-Mar	116,594
173	N808	DR. BALRAM AIRAN	8-Feb	96,390
174	I500	Dr. AMLESH SETH	7-Jul	254,411
175	N964	DR. VIVEKANANDHAN S.	Mar-08	45,000
176	D218	DR. AJAY GARG	7-May	423,143
177	D218	DR. AJAY GARG	7-Jul	193,276
178	D218	DR. AJAY GARG	7-Sep	18,500
179	D218	DR. AJAY GARG	7-Nov	-19,120
180	D218	DR. AJAY GARG	8-Feb	57,057
181	N938	DR. S.C.MAHAPATRA	Dec-07	20,000
182	D206	DR. RITU GUPTA	7-Oct	5,044
183	N944	DR. RITU GUPTA	Feb-08	329,897
184	N890	DR. RAVINDER GOSWAMI	7-Jul	183,592
185	N907	DR. TANUJ DADA	Aug-07	399,206
186	N907	DR. TANUJ DADA	Oct-07	71,841
187	N907	DR. TANUJ DADA	Feb-08	-83,000
188	N907	DR. TANUJ DADA	Mar-08	49,920
189	N865	Dr. P.Venugopal	7-May	5,834,147
190	N875	DR. SANJEEV SHARMA	8-Mar	70,000
191	N867	DR. DEEPAK KUMAR GUPTA	Jan-08	9,850
192	N867	DR. DEEPAK KUMAR GUPTA	Feb-08	73,000
193	I535	Mrs. Kanchan Mittal	Oct-07	80,100
194	I535	Mrs. Kanchan Mittal	Nov-07	29,900
195	D221	DR. B.S.SHARMA	7-Oct	4,396,276
196	D221	DR. B.S.SHARMA	8-Feb	1,340,000
197	D221	DR. B.S.SHARMA	8-Mar	1,307,148
198	N895	DR. VANDANA JAIN	Jul-07	82,390
199	N912	DR. J.B. SHARMA	Dec-07	191,678
200	N912	DR. J.B. SHARMA	Jan-08	13,950
201	I548	Dr. Achal Kumar Srivastava	Jan-08	60,000
202	N919	DR. PRATAP SHARAN	Aug-07	23,130
203	N861	DR. ASHISH SURI	8-Mar	72,800
204	N991	DR. VEENA JAIN	Mar-08	290,952
205	I544	Dr. K.H.Reeta	Mar-08	203,579
		GRAND TOTAL		107,752,639

(S.P. Mahla)
Finance & Chief Accounts Officer

Appendix B

ALL INDIA INSTITUTE OF MEDICAL SCIENCES LIST OF SUNDRY DEBTORS (SCHEME CELL)

S.No.	Funding Agency	Debit
1	SRB-Clinical Pharmacology	3154100
2	Zydas Healthcare Ltd	398
3	Federation of Obstetric & Gynaecological	276
4	Aimil Pharmaceutical India Ltd.	331
5	Emcure Pharmaceutical Ltd.	6380
6	L.G. Chemicals India Pvt Ltd.	668
7	THE MICRONUTRIENT INITIATIVE, ASIA	4702
8	Vulimini Ramalingaswami Foundation	6508
9	Media Lab Asia	11301
10	BHARAT SERUMS AND VACCINES LTD.	10000
11	ABBOTT VASCULAR, USA	3393
12	Relisys Medical Devices Ltd.	3433
13	THRESHOLD PHARMACEUTICALS, USA	3136
14	London School of Hygiene & Tropical Medicine, UK	2811
		3207437

(S.P. Mahla)

Finance & Chief Accounts Officer

Appendix-C

ALL INDIA INSTITUTE OF MEDICAL SCIENCES STATEMENT SHOWING THE DONATIONS & INVESTMENT AS ON 31-03-08

S.NO.	PARTICUALRS & MODE OF INVESTMENT	AMOUNT OF DONATION	AMOUNT OF INVESTMENT
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	DR. K.L. WIG (UNIT TRUST)	15000	14910
10	ZENITH FINANCE & CO. (UNIT TRUST) D.C. BHUTANI	6000	6000
11	KAMANI CHARITY TRUST (UNIT TRUST)	5000	5100
12	SARUP CHAND HANS RAJ	20000	19500
13	RAJ KUMARI AMRIT KAUR	25000	25000
14	KATHERINE SORAL FREYMAN	5000	5000
15	DR. S.L. KALRA	6000	5800
16	R.L. RAJGARHIA	850000	850000
17	SMT. PRAKASH WATI DONATION	13800	13800
18	SMT. KRIPAL KAUR (UNIT TRUST)	6000	5908
19	SMT. KAUSHALYA THAPAR (UNIT TRUST)	12000	12017
20	SH. G.D JHANGINI	25500	25602
21	LALA KHUSHI RAM	247753	247753
22	SMT. BRIJ RANI SAWHENY (UNIT TRUST)	22501	22472
23	S.P. VIRMANI (FIXED DEPOSIT)	1500	1500
24	EAST INDIA COMMERCIAL PVT. LTD CALCUTTA (FIXED DEPOSIT) SRB	3200000	2800000

25	DR. KANTI KAPILA (UNIT TRUST)	10079	10002
26	DR. V. RAMALINGASWAMI (UNIT TRUST)	8000	7996
27	SR. S. SABHARWAL (UNIT TRUST)	10000	9951
28	DR. N.H. KASWANI (UNIT TRUST)	10000	9990
29	DR. B.K. ANAND (UNIT TRUST)	5000	4995
30	DR. V. HINGORANI	15000	15000
31	KUMUDINI KRISHNA MOORTHY	15000	15000
32	G.D. RADHAKRISHNA (SARWESHWARI MEMORIAL ORATION, UNIT TRUST)	20000	19987
33	P.L. TANDON (FIXED DEPOSIT)	15000	15000
34	XV INTERNATIONAL CONGRESS OF PEADIATRICS (UNIT TRUST)	40000	40000
35	RAM LOBHAYA DONATION (FIXED DEPOSIT)	15000	15000
36	SUBHASH MEMORIAL FOUNDATION (V.L. TELEKAR DONATION)	10101	10101
37	SMT. INDIRA SATYANAND	10000	10000
38	SH. K.V. SUBA RAO	10000	10000
39	NEWZELAND HIGH COMMISSION	10000	10000
40	AKHILESH MITTAL (SUMITH MOHAN SADAN DAYAL TRUST)	20000	20000
41	PREMALATA KAPOOR	10000	10000
42	DWARKA PRASAD TRUST	50000	50000
43	LATE. SH. D.R. BAHRI	15000	15000
44	SEWA RAM	15000	15000
45	FACULTY BENEVELENT FUND	60065	60065
46	V.RANGA MEMORIAL TRUST	50000	50000
47	SH. DORABJI TRUST	10000	10000
48	CORPUS FUND	30000	30000
49	AIIMSONIANS	10000	10000
50	SARLA ATAM PRAKASH	15000	15000
51	K.L. WIG RESEARCH FOUNDATION	100000	100000
52	KAMLA B.K. ANAND	100000	100000
53	V.K. MITTAL	130000	130000

54	SNEH LATA SONI	15000	15000
55	AIIMSONIAN OF AMERICA	129850	129850
		151630	151630
		126471	126471
56	SMT. LEELA WATI SALWAN	15000	15000
57	DR. D.K. GUPTA	100000	100000
58	J.R. CHAWLA	15000	15000
59	URMIL SHARMA IN R/O SHYAM SHARMA	15000	15000
60	SMT. SUSHILA WATI MALHOTRA	500000	500000
61	BASANTI KUMARI	100000	100000
62	ORTHOPAEDICS FUND	250000	250000
63	DR. S.B. ROY	125000	125000
64	MR. R.V. KANDHARI	100000	100000
65	DR. B.K. KAPOOR	125000	125000
66	SMT.SAVITRI UGGARSEAN	100000	100000
67	VIMAL LAUMAS	200000	200000
68	MRS. PRAMADA BAJAJ	200000	200000
69	DR. V. RAMALINGASWAMI	100000	100000
70	DR. N.C. NAYAK	100000	100000
71	DR. H.D. TANDON	100000	100000
72	PROF. N. GOPINATH (CTVS)	1200000	1200000
73	PROF. L.K. BHUTANI ORATION	500000	500000
74	BINEY ROHTAGI & SMT. SHAKUNTALA	36000	-
75	MRS. PRAMIDA BAJAJ (FOR TREATMENT	200000	200000
76	G.P.F. INVESTMENT		1729693465
77	N.P.S. INVESTMENT		25000000
	TOTAL	11059524	1765368899

(S.P. Mahla)
Finance & Chief Accounts Officer

Appendix-D

ALL INDIA INSTITUTE OF MEDICAL SCINECES Details of Misc. Donations as on 31.3.2008

S.NO.	DEPARTMENT	OP. BAL. AS ON 1/4/2007	GRANT	TOTAL	EXPD.	CL. BAL AS ON 31-03-2008
1	R & AL	19475		19475		19475
2	PSYCHIATRY	28495		28495		28495
3	HEAMATOLOGY	58710		58710	46330	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		44199
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		25235		25235
21	I.C.G.E.B. DR. T.P SINGH	444630		444630		444630
22	DR. VEENA KALRA	138200		138200	53422	84778
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	807045	645494	1452539	1096899	355640
27	MRS. USHA SHARMA		705000	705000	528400	176600
		2300469	1350494	3650963	1725051	1925912

(S.P. Mahla)
Finance & Chief Accounts Officer

Appendix-E

ALL INDIA INSTITUTE OF MEDICAL SCIENCES
Details of Misc. Deposits as on 31.3.2008
2007-2008

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

(S.P. Mahla)
Finance & Chief Accounts Officer

Appendix - F

All India Institute of Medical Sciences
Details of GPF Investment
2007-2008

Opening Balance of Investment as on 1.4.2007	1559693465
Investment during 2007-08	255000000
Closing balance as on 31.3.2008	10859651
	<hr/>
	1825553116
Investment matured during 2007-08	85000000
	<hr/>
	1740553116

Details of NPS Investment 2007-2008

Opening Balance of Investment as on 1.4.2007	15000000
Investment during 2007-08	10000000
Closing balance as on 31.3.2008	26980605
	<hr/>
	51980605

(S.P. Mahla)
Finance & Chief Accounts Officer

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 2008

We have audited the attached Balance Sheet of All India Institute of Medical Sciences (AIIMS) as at 31 March 2008 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.
 - iii In our opinion, books of accounts on double entry system of accounting and other relevant records have not 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 (C.T.Patient)

A.1 Liabilities

A.1.1 Non-depiction of liability (CT Patient, Angiography and Neurosurgery Patient Accounts)

Based on the estimates given by the doctors (fixed packed rates+ cost of stents, valves etc), patients had to deposit amounts with the Institute. A test check of three patient accounts i.e CT patient, Angiography, and Neurosurgery Patient Accounts

for the period for the years 2003-04 to 2007-08 revealed that Rs. 5.30 crore which was refundable to patients was not shown as liability in the balance sheet of the Institute. This resulted in overstatement of income and understatement of Liabilities. The liability in respect of earlier periods and other centers had not been ascertained by the Institute. Hence we are unable to form an opinion in this regard.

A.2 Assets

A.2.1 Advances (CT Patient Account)

As per the cash book of the CT Patient Accounts, an amount of Rs. 1 crore was transferred to the Angiography Patient Account but it been shown neither under the Payments side of the Receipt & Payment Accounts nor as advance in the Balance Sheet of the CT Patient Account, resulting in understatement of Payments and understatement of Advances by Rs. 1 crore.

A.2.2 Overstatement of assets (New Pension Scheme)

The closing balance of the New Pension Bank Account as at 31.3.2008 was Rs. 2.37 crore but a closing balance of Rs. 2.70 crore as on 30.4.2008 was included in the Balance Sheet of AIIMS (Main). This resulted in overstatement of Assets and Liabilities by Rs. 0.33 crore.

A.2.3 Understatement of assets (Institute Rotary Cancer Hospital)

The Institute had paid Rs. 2.06 crore as advance for Machinery and Equipment but adjusted only Rs. 1.79 crore under the head 'Machinery and Equipment – Adjustment of Customs advances' on the Assets side of the balance sheet, resulting in understatement of expenditure and assets of Rs. 0.27 crore.

A.2.4 Overstatement of assets (J.P.N.Apex Trauma Centre)

The actual closing balance of advance with Customs under 'Machinery and Equipment (Customs)' was Rs. 1.15 crore which was taken as Rs. 1.86 crore, resulting in overstatement of Machinery and Equipment by Rs. 0.71 crore and overstatement of excess of income over expenditure.

A.2.5 Understatement of assets (J.P.N.Apex Trauma Centre)

The closing balance of 'Machinery and Equipments' was Rs. 55.65 crore which had been taken as Rs. 50.08 crore, resulting in understatement of assets by Rs. 5.57 crore and understatement of Capital Fund by the same amount.

A.2.6 Fixed assets

No depreciation had been provided on fixed assets, resulting in overstatement of Assets and understatement of Expenditure. Fixed assets for Rs 9.34 crore condemned during the year were reduced from the assets side and from the Capital Fund of the respective centres for which sanction of the competent authority was not made available. Hence, the correctness of the figures under Fixed Assets could not be ensured.

The Schedule of Fixed Assets showing the opening balance, additions, deletion, depreciation and closing balance has not been attached.

A.2.7 Investments-Non-adherence to the approved pattern of investment for G. P. Fund accumulations.

Investment of accumulated funds under General Provident Fund, amounting to Rs.172.97 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.

B Income and Expenditure Account

B 1. Income

B.1.1 Understatement of income (Main-AIIMS)

An amount of Rs. 32.00 lakh was directly paid by the Ministry of Health and Family Welfare to advocates and booked as expenditure under the Grant-in-aid (Non-Plan) of AIIMS which was not accounted for in the accounts resulting in understatement of income under Grant-in-aid (Non-Plan) and understatement of expenditure by Rs.32.00 lakh.

B.1.2 Understatement of income (CN Centre Account) (Rs. 16.26 lakh)

Interest of Rs. 16.26 lakh earned on the LCs had not been taken as income resulting in understatement of income by Rs. 16.26 lakh and overstatement of Machinery and Equipment by the same amount as it had been credited to it.

B 1.3 Understatement of income (CT Patient Account)(Rs. 1.25 crore)

Interest of Rs. 1.25 crore was earned on FDRs of Rs. 18.00 crore but only Rs. 0.25 crore had been taken as interest income, resulting in understatement of income by Rs. 1.00 crore.

B 1.4 Understatement of income (Gamma Knife Patient Account) (Rs. 25.81 lakh)

Interest of Rs. 25.81 lakh earned on FDRs had not been taken as income, resulting in understatement of income by Rs.25.81 lakh.

B 1.5 Understatement of income (Neuro Surgery Patient Account)(Rs.17.95 lakh)

Interest of Rs. 17.95 lakh earned on the FDRs have not been taken as income, resulting in understatement of income by Rs. 17.95 lakh.

C General

C.1.1 Non-consolidation of accounts

The different departments of the institute were treated as separate entities and for each department, Receipt and Payment account, Income and Expenditure account and Balance Sheet was prepared and excess of income over expenditure, capital fund and investments worked out but the consolidation of these accounts was not done. As such, the headwise consolidated financial position of the institute was not available.

Significant accounting policies adopted by the Institute in the preparation of annual accounts were not disclosed.

C.1.2 Assets included assets valued at Rs. 14.39 lakh destroyed due to fire and theft during the year 2007-08.

C.1.3 A trial balance had not been prepared and hence, it could not be ensured that all debits were equal to all credits.

D Grants-in-aid

The institute is financed mainly from grants of Government of India. During the year 2007-08, the institute received grants of Rs. 470 crore (Plan Rs. 160 crore and Non-Plan Rs. 310 crore). It also had its own income of Rs. 87.84 crore from hospital receipts, tuition fees, examination fees, license fees, interest income etc. The total Plan expenditure was Rs. 67.28 crore and Rs.96.59 crore was utilised for giving advances for various purposes. The total Non Plan expenditure was Rs. 345.18 crore and Rs. 2.29 crore was given to suppliers etc as advances. The institute received grants for various schemes for Rs. 45.92 crore from various funding agencies and incurred an expenditure of Rs. 36.27 crore. It also received Rs.5 crore for NDDTC and Rs. 15.43 lakh for NDDTC (UNDCP) against which an expenditure of Rs.4.30 crore was incurred.

E. Management Letter

Deficiencies which have not been included in the Audit Report have been brought to the notice of the Director, All India Institute of Medical Sciences, through a management letter issued separately for remedial action.

- v Subject to our observations in the preceding paragraphs, we report that the Balance Sheet and Income & Expenditure Account/Receipt and Payment 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 subject to the significant matters stated above. The disclaimer stated in para A.1.1 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, 2008 and
 - b In so far as it relates to Income and Expenditure Account of the surplus for the year ended on that date.

For and on behalf of the C&AG of India

Place: New Delhi	Director General of Audit
Date: 12-02-2009	Central Revenues

PARA WISE REPLIES TO THE AUDIT OBSERVATIONS ON THE ACCOUNTS OF ALL INDIA INSTITUTE OF MEDICAL SCIENCES, ANSARI NAGAR, NEW DELHI-110029.

FOR THE YEAR 2007-08

A Balance Sheet (C.T.Patient)

A.1 Liabilities

A.1.1 Non-depiction of liability (CT Patient, Angiography and Neurosurgery Patient Accounts)

Based on the estimates given by the doctors (fixed package rates+ cost of stents, valves etc), patients had to deposit amount with the Institute. A test check of three patient accounts i.e CT patient, Angiography, and Neurosurgery Patient Accounts for the period for the years 2003-04 to 2007-08 revealed that Rs. 5.30 crore which was refundable to patients was not shown as liability in the balance sheet of the Institute. This resulted in overstatement of income and understatement of Liabilities. The liability in respect of earlier periods and other centers had not been ascertained by the Institute. Hence we are unable to form an opinion in this regard.

The amount is deposited as per direction and estimate issued by treating doctor. The account section has to keep the amount with it till procedure is done or advised by the doctor to refund the money. Accumulated balance comprises amount deposited by patients who are to undergo prescribed procedure and in respect of those patients whose surgery/procedure have been deferred for the time being due to health problem. Refunds are made immediately where either the procedure is not required or the treatment completed.

It is not liability. There is not a single case where the patient has asked for refund of money deposited, and has been denied the same. It is not clear how the audit party has arrived at the amount to be refunded without confirming the conduct of procedure or surgery. However, efforts are being made to confirm from consultant/treating doctor about the future plan of procedure/surgery where the file is not closed as on date. It is also stated that money will be refunded as and when the patient demands it, after getting a certificate from the consultant that the procedure/surgery has not been done. The amount as such cannot be classified as liability.

A.2 Assets

A.2.1 Advances (CT Patient Account)

As per the cash book of the CT Patient Accounts, an amount of Rs. 1 crore was transferred to the Angiography Patient Account but it been shown neither under the Payments side of the Receipt & Payment Accounts nor as advance in the Balance Sheet of the CT Patient Account, resulting in understatement of Payments and understatement of Advances by Rs. 1 crore. The amount of Rs.1.00 crore has since been transferred back to C.T.Patients Accounts. However, the observation of the Audit has been noted for future compliance.

A.2.2 Overstatement of assets (New Pension Scheme)

The closing balance of the New Pension Bank Account as at 31.3.2008 was Rs. 2.37 crore but a closing balance of Rs. 2.70 crore as on 30.4.2008 was included in the Balance Sheet of AIIMS (Main). This resulted in overstatement of Assets and Liabilities by Rs. 0.33 crore.

In this connection it is stated that closing Balance of April, 2008 was inadvertently shown in the balance instead of closing balance of March 2008. The closing balance of March, 2008 is Rs.2,36, 92, 623.85. The Necessary rectification will be done in the account of the year 2008-09.

A.2.3 Understatement of assets (Institute Rotary Cancer Hospital)

The Institute had paid Rs. 2.06 crore as advance for Machinery and Equipment but adjusted only Rs. 1.79 crore under the head 'Machinery and Equipment – Adjustment of Customs advances' on the Assets side of the balance sheet, resulting in understatement of expenditure and assets of Rs. 0.27 crore.

It is informed that due to oversight the expenditure of C.D and P.D.A was shown less for Rs.26,40,389/- (C.D of Rs.25,11,499/- + P.D.A of Rs.1,28,890/-). This will be corrected in the current financial year 2008-09.

A.2.4 Overstatement of assets (J.P.N.Apex Trauma Centre)

The actual closing balance of advance with Customs under 'Machinery and Equipment (Customs)' was Rs. 1.15 crore which was taken as Rs. 1.86 crore, resulting in overstatement of Machinery and Equipment by Rs. 0.71 crore and overstatement of excess of income over expenditure.

The point as raised by Audit has been noted. The necessary adjustments will be made in the current financial years accounts.

A.2.5 Understatement of assets (J.P.N.Apex Trauma Centre)

The closing balance of 'Machinery and Equipments' was Rs. 55.65 crore which had been taken as Rs. 50.08 crore, resulting in understatement of assets by Rs. 5.57 crore and understatement of Capital Fund by the same amount.

As far as the understatement of assets by Rs.5,56,14,499/- under the head Machinery & Equipment is concerned, it is stated that necessary reconciliation is being carried out with our store section and the outcome of the same will be furnished to Audit in due course.

A.2.6 Fixed assets

No depreciation had been provided on fixed assets, resulting in overstatement of Assets and understatement of Expenditure. Fixed assets for Rs 9.34 crore condemned during the year were reduced from the assets side and from the Capital Fund of the respective centres for which sanction of the competent authority was not made available. Hence, the correctness of the figures under Fixed Assets could not be ensured.

The Schedule of Fixed Assets showing the opening balance, additions, deletion, depreciation and closing balance has not been attached.

AIIMS is preparing 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 and no such provision has been made for depreciation. A note regarding the same has already been mentioned in the balance sheet. Moreover, AIIMS is under the process of finalization of the Annual Accounts as per new format then depreciation will also be taken into account.

The schedule of fixed assets showing the opening balance, addition, deletion, depreciation and closing balance will be attached with accounts as per new format.

All the receipts and payments in respect of schemes are reflected in the Institute Main Accounts. Please refer point no. 12 on payment side of Main A/c. The Appendix A-1 mentioned details of machinery & equipment purchased during the year by Scheme Cell.

A.2.7 Investments-Non-adherence to the approved pattern of investment for G. P. Fund accumulations.

Investment of accumulated funds under General Provident Fund, amounting to Rs.172.97 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.

All the investments have been made keeping in view the safe guard of the funds of employees. Besides to get more interest, investment was mainly made in public sector banks. However, efforts are being made in getting the achievement as per Ministry of Finance circular by making the investment in the bonds being issued by the public sector companies.

B Income and Expenditure Account

B 1. Income

B.1.1 Understatement of income (Main-AIIMS)

An amount of Rs. 32.00 lakh was directly paid by the Ministry of Health and Family Welfare to advocates and booked as expenditure under the Grant-in-aid (Non-Plan) of AIIMS which was not accounted for in the accounts resulting in understatement of income under Grant-in-aid (Non-Plan) and understatement of expenditure by Rs.32.00 lakh.

An amount of Rs.32.00 lakh was directly paid by the Ministry of Health & Family Welfare to advocates so this amount was neither taken as the receipt nor as the expenditure in Non-Plan. Hence does not result in under statement of Income/understatement of expenditure.

B.1.2 Understatement of income (CN Centre Account) (Rs. 16.26 lakh)

Interest of Rs. 16.26 lakh earned on the LCs had not been taken as income resulting in understatement of income by Rs. 16.26 lakh and overstatement of Machinery and Equipment by the same amount as it had been credited to it.

The observation of the Audit has been noted for future compliance. Necessary correction will be done in the accounts for the year 2008-09.

B 1.3 Understatement of income (CT Patient Account)(Rs. 1.25 crore)

Interest of Rs. 1.25 crore was earned on FDRs of Rs. 18.00 crore but only Rs. 0.25 crore had been taken as interest income, resulting in understatement of income by Rs. 1.00 crore.

Receipt of F.D of Rs.18.00 crore made on 25.11.2006 matured on 25.11.2007 earning a interest of Rs.1,24,61,021. Rs.1.00 crore was invested as FDR which is included in the total FD of Rs.23.00 crore already shown in the Balance Sheet and Rs.24,61,021 was given as interest by the bank.

B 1.4 Understatement of income (Gamma Knife Patient Account) (Rs. 25.81 lakh)

Interest of Rs. 25.81 lakh earned on FDRs had not been taken as income, resulting in understatement of income by Rs.25.81 lakh.

Interest of Rs.25.81 lakh earned on FDR has been noted and will be reflected in the accounts for the current financial year 2008-09.

B 1.5 Understatement of income (Neuro Surgery Patient Account)(Rs.17.95 lakh)

Interest of Rs. 17.95 lakh earned on the FDRs have not been taken as income, resulting in understatement of income by Rs. 17.95 lakh.

Rs.17,94,802 appeared in bank statement on 3.4.2008 as interest income has been noted and will be reflected in current financial year 2008-09.

C General

C.1.1 Non-consolidation of accounts

The different departments of the institute were treated as separate entities and for each department, Receipt and Payment account, Income and Expenditure account and Balance Sheet was prepared and excess of income over expenditure, capital fund and investments worked out but the consolidation of these accounts was not done. As such, the headwise consolidated financial position of the institute was not available.

Significant accounting policies adopted by the Institute in the preparation of annual accounts were not disclosed.

AIIMS is in the process of finalizing its accounts as per new format of accounts. Audit observation will be taken into consideration at the time of finalization of next year accounts.

C.1.2 Assets included assets valued at Rs. 14.39 lakh destroyed due to fire and theft during the year 2007-08.

Audit observation will be taken into consideration at the time of finalization of next year accounts.

C.1.3 A trial balance had not been prepared and hence, it could not be ensured that all debits were equal to all credits.

Audit observation will be taken into consideration at the time of finalization of next year accounts.

Annexure –I 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 2007-08 but only 23 units were audited.

2. Adequacy of Internal Control System

Control Environment

- Three posts of Accounts Officers were lying vacant. The post of Financial Advisor was vacant w.e.f. 30.11.06.
- Twenty six disciplinary cases were pending from 2000 to till date. The agewise break-up was not given by the Institute.

Monitoring

- The settlement of outstanding paras of external audit was poor. No review meeting was taken by the Management to monitor the settlement of outstanding paras of statutory audit. 65 paras for the period from 1992-93 to 2004-05 were outstanding.

3. System of physical verification of fixed assets:

- The physical verification of fixed assets had not been conducted during 2007-08 and as such, the actual existence of fixed assets included in the accounts could not be assured.

4. Regularity in payment of statutory dues:

- As per the accounts, no statutory dues over six months were outstanding