

55th
AIIMS
ANNUAL REPORT

2010-2011



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

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

Twenty-five clinical departments including six super-speciality centres manage practically all types of disease conditions with support from pre-clinical and para-clinical departments. AIIMS also runs a 50-bedded hospital and the Comprehensive Rural Health Centre at Ballabgarh in Haryana and provides health cover to about 7.7 lakh people through the Centre for Community Medicine.

AIIMS AT A GLANCE

2010-2011

Year of establishment 1956

Teaching Departments and Centres	50	Medical graduates	2393
Faculty members (Sanctioned 629)	434	Postgraduates	7718
Non-faculty staff (Sanctioned 9793)	8359	Nursing graduates	1737
No. of Undergraduate students	715	Publications in journals	1611
No. of Postgraduate students	1219	Chapters in Books / monographs	259

Hospital Services

Hospital/Centre	Outpatient Attendance	Casualty Attendance	Total Outpatient Attendance (including Casualty)	Admission	Surgery (Operations/ Procedures)	Bed Strength
Main Hospital	13,60,974	1,04,084	14,65,058	72,148	70,894	1045
Cardio/CTVS	1,35,985	–	1,35,985	10,904	3,976	212
Neuro/Neurosurgery	1,08,597	–	1,08,597	6,246	2,906	199
Dr. R.P. Centre	3,49,393	25,468	3,74,861	31,743	29,934	302
Dr. BRA IRCH	82,597	–	82,597	28,314	6,333	182
C.D.E.R.	1,16,779	–	1,16,779	Included in Main Hospital	28,814	–
NDDTC (Ghaziabad)	37,191	–	37,191	754	–	50
CCM (Ballabgarh)	1,36,663	22,391	1,59,054	7,228	1,967	50
JPNATC	26,910	47,828	74,738	4,930	4,541	186
Total	23,55,089	1,99,771	25,54,860	1,62,267	1,49,365	2,226

Average Length of stay (Days)* : 5.3

Average Bed Occupancy rate (%)* : 80.9%

Net Death Rate (%)* : 2.6%

Combined Crude Infection Rate (%)* : 8.1%

*These figures are for AIIMS Main Hospital only.

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AIIMS

ORGANISATIONAL STRUCTURE

Institute Body



Governing Body



↓
Finance
Committee

↓
Selection
Committee

↓
Academic
Committee

↓
Estate
Committee

↓
Hospital Affairs
Committee

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

1. Director's Review

I am glad to present the Fifty-fifth Annual Report and audited statement of accounts for the year 2010–2011.

Established in 1956 by the Indian Parliament with the objective of developing a strong curricular foundation for undergraduate and postgraduate healthcare education in India, the All India Institute of Medical Sciences (AIIMS) continually seeks to achieve a high standard of healthcare education, research and service. It is recognized in India and globally, as Smt. Sonia Gandhi, Chairperson, National Advisory Council, Government of India stated during her address at the 39th Annual Convocation “as effectively the one medical institution in the country which best combines excellent medical education with cutting edge research and quality healthcare.” However, the need to train leaders in medicine and biomedical science has never been greater. To fulfil this need, AIIMS is geared up to build for the future. The year would be best remembered for manpower and infrastructure expansion.

Education: Setting the trend

AIIMS has a manpower of over 10,000 including 625 faculty members, supported by resident doctors, nurses, paramedics, scientists, non-medical officers and staff. It produces a large number of specialists (MD/MS), super-specialists (DM/MCh), PhD scholars and allied health and basic sciences experts, including nurses and paramedical professionals. In the year 2010–2011 it awarded 425 degrees in various disciplines. The training programs of AIIMS in the medicine and life sciences, have earned top rankings from the popular media. Our scholars lead institutes of medicine, science and education and biomedical laboratories in India and abroad. Importantly, they also serve on many expert groups on healthcare issues of national importance. However, rather than rest on past achievements, AIIMS decided to invest in the future. It saw a tremendous growth in manpower to support the vision of creating a centre that would set the pace for medical education and research in Southeast Asia. More than 2300 posts, which include 150 faculty positions, were created and an accelerated assured career progression scheme was implemented. In support of diversity, 27% reservation in admission for candidates from Other Backward Classes (OBCs) was implemented under the Central Educational Institutions (Reservation in Admission) Act, 2006. This move promises to increase the intake capacity of the Institute and also facilitate a more vibrant healthcare delivery system. The Institute is continually reinventing teaching methods and tools to retain its primacy as the key innovator and trend setter in healthcare education in the country.

Research: At the cutting edge and nationally relevant issues

The Institute is committed to high quality research. Its faculty and scientists conduct frontline research in areas like molecular medicine, nanotechnology, proteomics, radiocrystallography, newer diagnostics through imaging sciences, immunogenetics and transplant surgeries, cancer therapy, and technology-driven innovations including stem-cell therapy, biocompatible implant devices for joint replacement, and implants and stents in cardiology, otology, trauma-related clinical research and also newer surgical practices. The Institute is also active in research activities that aim to ameliorate human suffering caused by ill-health of the Indian people. National bodies like the Indian Council for Medical Research regularly request different departments of AIIMS to conduct studies on health issues of public importance and national relevance. Over 500 research projects were conducted in the year 2010–2011 and the institute attracted extramural research grants of more than Rs. 50 crores. During the year the faculty and the scientists of the institute published over 1600 research papers in national and international journals and over 250 monographs, chapters in books and books. Various departments organised over 150 medical conferences, workshops, CMEs, both national and international, during the year. Under its short term training scheme, the institute provided postgraduate training to more than 50 foreign nationals including 30 WHO fellows and about 1000 doctors and other healthcare professionals from different states of India. Infrastructure expansion projects, in particular the Convergence Block, are now under implementation to aid these efforts. This centre will draw on the collective intellectual and technological resources of the institute. By

building networks of researchers who pool ideas across disciplines, we aim to collectively move laboratory discoveries to the patient's bedside, then back to the laboratory for further investigation and ultimately to the utilization of these at the public health level.

AIIMS continues to be active in its partnership with the Wellcome Trust, the Department of Biotechnology, Department of Science and Technology and Indian Council of Medical Research, Government of India, to support research and develop projects that would provide innovative healthcare products at affordable costs. Funded projects would cover a wide range of applications including new treatments for tuberculosis, cardiovascular disease and stem cell-based therapy. Similarly, AIIMS continued to play an important role in the Stanford-India Biodesign Programme funded by the Department of Biotechnology, Ministry of Science and Technology, and Stanford University, and administered in collaboration with Stanford University, the Indian Institute of Technology Delhi, and the Indo-US Science & Technology Forum (IUSSTF) and aimed at training the next generation of medical technology innovators in India through fellowships, internships and events to develop cheap, affordable and indigenous bio-devices.

Clinical care at its best: Quality and quantity

The AIIMS main hospital and its centres—the Cardiothoracic and Neurosciences Centre (CN Centre), the Jai Prakash Narain Apex Trauma Centre (JPNATC), the Dr. B.R. Ambedkar Institute–Rotary Cancer Hospital (Dr. BRAIRCH), the Dr. Rajendra Prasad Centre for Ophthalmic Sciences (RPCOS), the Centre for Dental Education and Research (CDER), the Centre for Behavioural Sciences (National Drug Dependence Treatment Centre, NDDTC) have a total bed strength of 2424, including day care beds. During the year 2010–2011, the institute attended to over 25 lakh OPD patients, admitted about 1.6 lakh patients and performed close to 1.5 lakh surgical procedures, which included highly sophisticated procedures. The Institute has maintained an ideal parameter in patient care services with an average bed occupancy of over 80%, and average hospital stay of about 6 days. The AIIMS hospital reported a net death rate of below 3%. Our doctors are doing pioneering work in patient care in areas like cardiothoracic surgery, joint replacement/implant surgery, organ transplant surgeries, cochlear implantation, corneoplasty and interventional cardiology and neuroradiology. The doctors at our trauma care centre have developed innovative and safe practice protocols for acute and emergency care medicine. We have also employed platform based technologies for diagnosis of diseases in pathology and laboratory medicine, besides research in cell biology, vaccine development and biotechnology. These innovations have provided high quality patient care delivery within the reach of each citizen of the country. The Institute is also aware that people have very high expectations from it and it has tried and succeeded in providing specialised medical care in the country at very low costs.

AIIMS doctors and staff pooled their knowledge and creativity as never before in the service of alleviation of human suffering caused by ill health. In clinical services, nothing captured the public's imagination like the robotic surgeries performed at the hospital under many super specialities like neurosurgery, urology and surgery. AIIMS quest for providing quality services at affordable prices was illustrated by the institution of the *in vitro* fertilisation treatment programme for infertile couples for whom other methods of assisted reproductive technology have failed. A screening OPD at AIIMS will now make the task of providing graded care to those with differential healthcare needs a reality. Early diagnoses will help save lives of patients with severe illnesses and would make care more convenient for patients with simple ailments. AIIMS continued to play a lead role on health issues of importance to the public, e.g. during the dengue outbreak, the radiation leak cases and during the commonwealth games. With its inclusive approach, the AIIMS community embraces the developing world without borders. An increasing number of foreigners are coming for treatment to AIIMS, mostly from South and South East Asia. This trend was particularly salient in the departments of neurosurgery, orthopaedics, oncology and surgery.

India's health care system which is largely dependent on out-of-pocket payments needs innovations in primary care to improve outcomes and to reduce costs for its ailing masses. Our Centre for Community Medicine is actively engaged in its mission to train leaders in primary care and health systems innovation, education and policy. Its faculty concentrates

in areas such as primary care, infectious disease, maternal and newborn health, surgery, non-communicable diseases and health systems, to name a few. The Centre has galvanized students, residents, faculty and community partners to discuss, collaborate and innovate in the field of primary care. Its public lectures drew capacity crowds. Other departments also continued to play a role in community care, e.g. the department of neurology launched Ekatwam—a support group for people with epilepsy under the Indian Rural Epilepsy Education and Prevention Programme (IREAP). The effort will target people suffering with epilepsy, their caregivers and families, and also the general population to ensure early diagnosis and treatment. This program should be a torchbearer for the concept of support groups for stigmatizing illnesses in the country and for rural support groups globally. The Dr Rajendra Prasad Centre for Ophthalmic Sciences continues to play a key role in the National Program for Control of Blindness. The Centre has been actively involved in the planning and implementation of various national and international initiatives. The National Drug Dependence Treatment Centre and the Department of Psychiatry continued to set standards on public health issues related to substance misuse and mental health; nationally and internationally. The NDDTC was called upon by the Ministry of Social Justice and Empowerment to prepare a ‘draft national policy on prevention of alcoholism and substance abuse and rehabilitation of its victims’. The centre is also represented on the prestigious International Narcotics Control Board (INCB). The Department of Psychiatry collaborated actively with the Central Mental Health Authority on issues related to implementation of the National Mental Health programme, with the Ministry of Health and Family Welfare regarding mental health policy and mental health act and the World Health Organization on the revision of classification of mental health and substance use disorders.

AIIMS has made a sincere effort to live up to the mandate given to it by Parliament as it strives to assist the government in its endeavour to provide quality health care to our people.



Professor R. C. Deka
Director, AIIMS

2. The Institute and its Committees

INSTITUTE BODY

1. **Shri Ghulam Nabi Azad** President
Union Minister for Health and Family Welfare,
Nirman Bhawan, New Delhi 110011
2. **Shri R. K. Dhawan, MP (Rajya Sabha)** Member (up to 7 July 2010)
Shri Motilal Vora, MP (Rajya Sabha) Member
33, Lodhi Estate, New Delhi 110011 (w.e.f. 29 August 2010)
3. **Smt. Sushma Swaraj, MP (Lok Sabha)** Member
8, Safdarjung Lane, New Delhi 110011
4. **Dr Jyoti Mirdha, MP (Lok Sabha)** Member
31, Meena Bagh, New Delhi
875, Sector-17B, Gurgaon, Haryana 122001
5. **Dr Deepak Pental** Member (Ex-Officio)
Vice Chancellor, University of Delhi, Delhi 110007 (up to 28 October 2010)
Professor Dinesh Singh Member (Ex-Officio)
Vice Chancellor, University of Delhi, Delhi 110007 (w.e.f. 29 October 2010)
6. **Ms. K. Sujatha Rao** Member
Secretary (Health), Ministry of Health and Family Welfare, (up to 30 November 2010)
Nirman Bhawan, New Delhi 110011
Shri K. Chandramauli Member
Secretary (Health), Ministry of Health and Family Welfare, (w.e.f. 24 January 2011)
Nirman Bhawan, New Delhi 110011
7. **Dr R. K. Srivastava** Member
Director General of Health Services, Ministry of Health and (Ex-Officio)
Family Welfare, Nirman Bhawan, New Delhi 110011
8. **Dr M. K. Bhan** Member
Secretary, Department of Biotechnology, 7th Floor,
Ministry of Science and Technology, CGO Complex,
Lodhi Road, Block-II, New Delhi 110003
9. **Dr S. P. Agarwal** Member
Secretary General, Indian Red Cross Society. Rafi Marg, New Delhi

- | | |
|---|------------------|
| 10. Professor K. C. Pandey
Department of Zoology, Lucknow University, Lucknow 226007 | Member |
| 11. Ms. Vibha Puri Das
Secretary, Department of Higher Education, Ministry of
Human Resource Development, Shastri Bhawan, New Delhi 110001 | Member |
| 12. Professor K. K. Talwar
Director, Postgraduate Institute of Medical Education and
Research, Chandigarh | Member |
| 13. Dr R. A. Badwe
Director, Tata Memorial Hospital, Dr E. Borges Road,
Lower Parel, Mumbai | Member |
| 14. Dr Ramakant Panda
Vice Chairman, Asian Heart Institute, Bandra East,
Mumbai | Member |
| 15. Dr Abdul Hamid Zargar
Director, Sher-I-Kashmir Institute of Medical Sciences,
Soura, Srinagar 190011, Jammu and Kashmir | Member |
| 16. Shri Naved Masood
Additional Secretary and Financial Adviser, Ministry of Health
and Family Welfare, Nirman Bhawan, New Delhi 110011 | Member |
| 17. Professor R. C. Deka
Director, All India Institute of Medical Sciences | Member–Secretary |
| 18. Shri Debasish Panda
Joint Secretary, Ministry of Health and Family Welfare,
Nirman Bhawan, New Delhi 110011 | Special Invitee |
| 19. Professor Rani Kumar
Dean, All India Institute of Medical Sciences | Special Invitee |
| 20. Dr D. K. Sharma
Medical Superintendent, All India Institute of Medical Sciences | Special Invitee |

GOVERNING BODY

1. Shri Ghulam Nabi Azad	Chairman
2. Dr R.K. Srivastava	Member (Ex-Officio)
3. Shri Naved Masood	Member
4. Smt. Sushma Swaraj, MP (Lok Sabha)	Member
5. Shri R. K. Dhawan, MP (Rajya Sabha)	Member (up to 07 July 2010)
Shri Motilal Vora, MP (Rajya Sabha)	Member (w.e.f. 10 November 2010)
6. Ms. K. Sujatha Rao	Member (up to 30 November 2010)
Shri K. Chandramauli	Member (w.e.f. 01 March 2011)
7. Ms Vibha Puri Das	Member
8. Professor K.K. Talwar	Member
9. Dr R. A. Badwe	Member
10. Dr S. P. Agarwal	Member
11. Professor R. C. Deka	Member–Secretary
12. Shri Debasish Panda	Special Invitee
13. Professor Rani Kumar	Special Invitee
14. Dr D. K. Sharma	Special Invitee

STANDING FINANCE COMMITTEE

- | | |
|---|---|
| 1. Ms. K. Sujatha Rao, Secretary (Health) | Chairperson
(up to 30 November 2010) |
| Shri K. Chandramauli | Chairperson (w.e.f. 1 March 2011) |
| 2. Shri R. K. Dhawan, MP (Rajya Sabha) | Member (up to 07 July 2010) |
| Shri Motilal Vora, MP (Rajya Sabha) | Member (w.e.f. 10 November 2010) |
| 3. Dr R. K. Srivastava | Member |
| 4. Shri Naved Masood | Member |
| 5. Ms. Vibha Puri Das | Member |
| 6. Dr S. P. Agarwal | Member |
| 7. Dr Deepak Pental | Member (up to 28 October 2010) |
| Professor Dinesh Singh | Member (w.e.f. 1 March 2011) |
| 8. Professor R. C. Deka | Member–Secretary |
| 9. Professor Rani Kumar | Special Invitee |
| 10. Shri Debasish Panda | Special Invitee |

STANDING ACADEMIC COMMITTEE

- | | |
|------------------------------------|--------------------------------|
| 1. Dr R. K. Srivastava | Chairman |
| 2. Dr Jyoti Mirdha, MP (Lok Sabha) | Member |
| 3. Dr Deepak Pental | Member (up to 28 October 2010) |
| Professor Dinesh Singh | Member (w.e.f. 1 March 2011) |
| 4. Dr M. K. Bhan | Member |
| 5. Ms. Vibha Puri Das | Member |
| 6. Dr Ramakant Panda | Member |
| 7. Professor K. C. Pandey | Member |
| 8. Dr Abdul Hamid Zargar | Member |
| 9. Professor R. C. Deka | Member–Secretary |

STANDING SELECTION COMMITTEE

- | | |
|---------------------------|------------------|
| 1. Dr R. A. Badwe | Chairman |
| 2. Dr R. K. Srivastava | Member |
| 3. Ms. Vibha Puri Das | Member |
| 4. Dr M. K. Bhan | Member |
| 5. Professor K. K. Talwar | Member |
| 6. Dr Ramakant Panda | Member |
| 7. Dr Abdul Hamid Zargar | Member |
| 8. Professor R. C. Deka | Member–Secretary |

STANDING ESTATE COMMITTEE

- | | |
|------------------------------------|------------------|
| 1. Dr S. P. Agarwal | Chairman |
| 2. Dr Jyoti Mirdha, MP (Lok Sabha) | Member |
| 3. Shri Naved Masood | Member |
| 4. Dr M. K. Bhan | Member |
| 5. Professor R. A. Badwe | Member |
| 6. Dr R. K. Srivastava | Member |
| 7. Dr K. K. Talwar | Member |
| 8. Professor R. C. Deka | Member–Secretary |

STANDING HOSPITAL AFFAIRS COMMITTEE

- | | |
|---------------------------------------|------------------------------------|
| 1. Shri R.K. Dhawan, MP (Rajya Sabha) | Chairman (up to 07 July 2010) |
| Shri Motilal Vora, MP (Rajya Sabha) | Chairman (w.e.f. 10 November 2010) |
| 2. Dr Jyoti Mirdha, MP (Lok Sabha) | Member |
| 3. Dr R. A. Badwe | Member |
| 4. Professor K. C. Pandey | Member |
| 5. Dr Ramakant Panda | Member |
| 6. Professor K. K. Talwar | Member |
| 7. Dr Abdul Hamid Zargar | Member |
| 8. Professor R. C. Deka | Member–Secretary |

3. Academic Section

Dean

Rani Kumar

Sub-Dean

Sunil Chumber
(up to 30 June 2010)

Rakesh Yadav
(w.e.f. 11 July 2011)

Registrar

V.P. Gupta

EDUCATION

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

UNDERGRADUATE EDUCATION CELL

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 5½ years, including one year of compulsory internship training. The training during this period is as follows.

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

From August 2008 onwards, intake of number of MBBS students has gone up from 50 to 77. Of the 77 seats, 5 are reserved for foreign nationals and the screening and admissions for these is done on the recommendation of the Ministry of External Affairs, Government of India. For the remaining 72 seats (11 for Scheduled Caste, 6 for Scheduled Tribe, 19 Other Backward Castes and 36 General Category), students are selected on the basis of their performance in an All-India Entrance Examination. Further, 3% seats are reserved for orthopaedic physically handicapped candidates on an horizontal basis. During 2010–11, there were 33,522 applicants and 22,986 candidates appeared in the entrance examination held on 1 June 2010. The total number of undergraduate (MBBS) students as of 31 March 2011 was 340 including 54 interns.

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

PARAMEDICAL AND NURSING EDUCATION CELL

All activities pertaining to the admission and training of paramedical and nursing students are handled by this cell. Sixty-four students were admitted to the BSc (Hons) Nursing course and 23 students were admitted to the BSc Nursing

(Post-Certificate) Course in August 2010. Fourteen students were admitted to the BSc (Hons) Ophthalmic Techniques and 9 students were admitted to the BSc (Hons) Medical Technology in Radiography in August 2010.

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)	48
BSc (Hons) Nursing	258
<i>Paramedical courses</i>	
BSc (Hons) Ophthalmic Techniques	43
BSc (Hons) Medical Technology in Radiography	26

POSTGRADUATE EDUCATION CELL

This cell 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 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 which 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 478 students, including 17 state-sponsored and 31 foreign nationals, were admitted to the above-mentioned courses and 313 students successfully completed their courses during the year under review. The total number of postgraduate and doctoral students of 31 March 2011 was 1219. The subject-wise distribution of these students is given below.

PhD	General	Sponsored
Anatomy	19	–
Biochemistry	38	–
Biophysics	32	–
Biostatistics	03	1 (in service)
Biotechnology	21	–
Cardiology	01	–
Cardiac Biochemistry	02	–
Cardiac Radiology	–	1
Forensic Medicine	03	–
Gastroenterology	07	–
Neurosurgery	01	–
Obstetrics and Gynaecology	–	2 (in service)
Haematology	12	1 (in service)
Cardiothoracic and Vascular Surgery	03	–
Laboratory Medicine	14	–
Medical Oncology	03	–
Medical Physics	03	–
Medicine	09	–
Microbiology	23	–
Neurology	14	–
Nuclear Magnetic Resonance	05	1
Nuclear Medicine	05	1
Otorhinolaryngology (ENT)	01	–

Ophthalmology	07	2
Ocular Pharmacology	03	–
Ocular Microbiology	03	–
Community Ophthalmology	02	–
Ocular Pathology	03	–
Ocular Biochemistry	04	–
Paediatrics	12	–
Pathology	12	–
Centre for Community Medicine	02	–
Endocrinology	06	–
Paediatric Surgery	02	–
Neuro-Biochemistry	04	–
Pharmacology	12	–
Physiology	18	2
Psychiatry	09	–
Dermatology	02	–
Surgery	–	1 (in service)
Radiation Oncology	03	–
Reproductive Biology	04	–
Transplant Immunology and Immunogenetics	10	1
TOTAL	350	13

DM	General	Sponsored
Cardiac Anaesthesiology	6	3
Cardiology	16	1
Clinical Haematology	5	3
Endocrinology	8	3
Gastroenterology	10	3
Haemato-Pathology	4	3
Medical Oncology	12	-2
Neonatology	4	3
Nephrology	8	4
Neuro-Anaesthesiology	8	3
Neurology	15	3
Neuroradiology	3	–
Paediatric Neurology	6	1
Clinical Pharmacology	3	–
TOTAL	140	32

MCh	General	Sponsored
Cardiothoracic and Vascular Surgery	16	1
Gastrointestinal Surgery	5	3
Neurosurgery	27	2
Paediatric Surgery	12	1
Urology	8	2
TOTAL	77	9

MD	General	Sponsored
Anaesthesiology	29	1
Anatomy	18	–
Biochemistry	10	–
Biophysics	09	–
Community Medicine	19	–
Dermatology and Venereology	11	2
Forensic Medicine	09	–
Hospital Administration	04	7
Laboratory Medicine	08	–
Medicine	42	3
Microbiology	08	–
Nuclear Medicine	13	2
Obstetrics and Gynaecology	33	3
Ophthalmology	78	1
Paediatrics	21	3
Pathology	19	1
Pharmacology	09	–
Physical Medicine and Rehabilitation	09	–
Physiology	12	–
Psychiatry	21	1
Radiodiagnosis	19	3
Radiotherapy	09	–
MS		
Orthopaedics	15	3
Otorhinolaryngology	17	2
Surgery	41	3
MDS		
Conservative Dentistry and Endodontics	07	1
Orthodontics	07	2
Prosthodontics	07	1
Oral and Maxillofacial Surgery	07	1
TOTAL	551	40

MSc	General	Sponsored
Anatomy	01	–
Biochemistry	08	03
Biophysics	01	–
Perfusion Technology	06	–
Biotechnology	22	02
Nuclear Medicine Technology	11	–
Pharmacology	06	01
Physiology	03	–
MSc Nursing		
Oncological Nursing	03	–
Cardiological/CTVS Nursing	06	–
Nephrological Nursing	03	–

Neurosciences Nursing	07	–
Paediatric Nursing	07	01
Psychiatric Nursing	08	–
Critical Care Nursing	02	–

SANCTIONED SEATS 61

TOTAL 101 94 07

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

Junior Residents ₹ 15600–39100 + (Grade pay ₹ 5400) plus allowances as per rules

Senior Residents ₹ 15600–39100 + (Grade pay ₹ 6000) plus allowances as per rules.

TRAINING PROGRAMMES

During the year, 930 short and 9 long term trainees in both the medical and paramedical fields enrolled in various programmes. In addition, 20 WHO fellows (foreign nationals) under WHO fellowship programme and 30 foreign trainees were imparted training in various departments. There were no WHO Fellows (Indian) for the WHO-in-country fellowship training programme (2010–11). Fifty-four foreign undergraduate medical students underwent elective training during the year. One hundred and sixteen conferences, workshops and symposia were organized during the year under review.

COMMITTEE MEETINGS

The Academic Section is responsible for arranging meetings such as those of the Academic Committee, Staff Council, Faculty and Dean's Committee. The following meetings were held during the year under review.

Academic Committee	02
Staff Council	01
Dean's Committee	01
Faculty	13

ORATIONS

The following orations were organized during 2010–11.

S.No.	Oration	Orator	Date of Oration, time and venue
1.	Dr Sujoy B. Roy	Dr Jagat Narula, Professor of Medicine, Chief, Division of Cardiology, University of California, Irvine School of Medicine, USA	6 September 2010, Monday, 4.00 pm, Lecture Theatre-I
2.	Sarveshwari Memorial	Dr Andrew Kay AM, James Stewart Professor of Surgery, Head, Department of Surgery, The University of Melbourne, Director, Department of Neurosurgery, The Royal Melbourne Hospital, Australia	17 February 2011, Thursday, 4.00 pm, Jawaharlal Auditorium

CONVOCATION

The Annual Convocation was held on Monday, 1 October 2010 at Jawaharlal Auditorium, AIIMS. Dr Manmohan Singh, Hon'ble Prime Minister of India was the Chief Guest and 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.

RESEARCH

The intramural research grant allotted to faculty members ranged from ₹ 50,000 to ₹ 1,00,000 per annum depending on the research project. The projects were reviewed by specialty review groups on 15 March and the recommendations of the Research Committee were finalized on 31 March. Funds were allocated over the next 15 days. The details of the funded projects are given below (all projects were given ₹ 1,00,000 unless otherwise stated).

Clinical subjects: New projects

S.No.	Name and department of investigator	Title of the project	Duration (years)
1.	Neeta Singh, Obstetrics and Gynaecology	To study and compare the cost effectiveness of a minimal stimulation IVF protocol versus the conventional protocols in a developing country hospital setup	2
2.	Sanjay Sharma, Radiodiagnosis	Evaluation of transrectal ultrasound, elastography and contrast enhanced sonography for detection of prostate cancer	2
3.	Sandeep Mahajan, Nephrology	Oxidative stress, carotid intimal media thickness and endothelial dysfunction in renal transplant recipients and effect of therapy with N-acetyl cysteine	2
4.	Neeti Makhija, Cardiac Anaesthesia	Comparison of epsilon aminocaproic acid and tranexamic acid in aneurysmal surgery: Safety and clinical efficacy	2
5.	Jagriti Bhatia, Pharmacology	Study of liver fatty acid binding protein as a biomarker of cisplatin-induced nephrotoxicity in paediatric patients	1
6.	J.B. Sharma, Obstetrics and Gynaecology	Correlation of erythropoietin levels and serum transferrin receptor levels with other haematological indices in patients with iron deficiency anaemia in late pregnancy	1
7.	Neelam Pushker, Ophthalmology	Conjunctivodacryocystorhinostomy using high-density porous polyethylene coated tear drain tube	1
8.	Sushma Bhatnagar, Anaesthesiology Dr. BRA IRCH	Bedside ultrasound-guided celiac plexus neurolysis in advanced upper abdominal cancer patients: A randomized control trial for comparison of bilateral anterior paramedian needle entry technique and anterior single median needle technique	1
9.	Hemanshu Prabhakar, Neuro-Anaesthesiology	Evaluation of cerebroprotective effects of isoflurane and propofol anaesthesia in patients undergoing neuroendoscopic procedures	1
10.	Bhavna Chawla, Ophthalmology	Correlation between clinical features, imaging characteristics and histopathological findings in advanced intraocular retinoblastoma	1

11.	Rachna Seth, Paediatrics	Understanding the biology of childhood cancer survivorship in India	1
12.	Virender Kumar Bansal, Surgical Disciplines	A prospective randomized trial comparing chronic pain and quality of life in lightweight versus heavyweight polypropylene mesh in laparoscopic inguinal hernia repair	2
13.	Rama Jayasundar, Nuclear Magnetic Resonance	Body composition analysis and insulin response pattern in different constitution (<i>prakruti</i>) types	2
14.	Jyotsna Punj, Anaesthesiology	Mean time to low flow anesthesia-comparison of Baums clinical practice and FE/FI=0.8 to state entropy d'' 50	2 ₹ 50,000
15.	Rajesh Khadgawat, Endocrinology and Metabolism	A study on the molecular etiology underlying skeletal dysplasia	2
16.	Gurpreet Singh Gulati, Cardiac Radiology	Utility of 3 Tesla MRI in evaluating response to immunosuppressant therapy in Takayasu's arteritis	2
17.	Girija Prasad Rath, Neuro- Anaesthesiology	Effect of pregabalin on postcraniotomy pain in patients undergoing supratentorial tumor surgery	1
18.	Sanjay Gupta, Nephrology	Tacrolimus as induction therapy for proliferative lupus nephritis	1
19.	Babita Gupta, Anaesthesia, JPNATC	Prospective, randomized comparison of efficacy and safety of thoracic epidural analgesia with bupivacaine and opioid in two different concentrations versus intravenous two drug analgesia in thoracic trauma	1
20.	Meera Vaswani, National Drug Dependence Treatment Center	A study on the association of serotonergic pathway gene polymorphisms and alcohol dependence	2
21.	Sandeep R. Mathur, Pathology	Analysis of chemotherapy induced morphologic alterations and expression of prognostic markers in post-neoadjuvant chemotherapy advanced stage ovarian serous cystadenocarcinomas	1
22.	V. Seenu, Surgical Disciplines	To study the correlation of lymphovascular invasion in primary breast tumor with sentinel and non-sentinel lymph node involvement in operable and locally advanced breast cancer with clinically negative axilla	1

Basic subjects: New projects

S.No.	Name and department of investigator	Title of the project	Duration (years)
1.	Kh. Reeta, Pharmacology	In vitro assessment of DNA damage as predictor of response to chemotherapy in acute myeloid leukemia	2

2.	Madhu Vajpayee, Microbiology	Role of newly identified T _H 17 cells: Its interplay with other T helper (T _H) subsets and consequence on disease progression, in HIV infected Indian individuals	2
3.	Seema Kashyap, Ocular Pathology, RP Centre	Detection of cancer stem cell markers in retinoblastoma by flow cytometry	1
4.	Suman Jain, Physiology	Effect of prenatal chronic auditory stimulation on expression of synaptic proteins in visual wulst of chicks (<i>Gallus domesticus</i>)	2
5.	Kalpana Luthra, Biochemistry	Drug selected mutations in the reverse transcriptase and protease genes of HIV-1 viruses from proviral DNA of HIV-1 infected pediatric patients-A pilot study	2
6.	Sujata Mohanty, Stem Cell Facility	Isolation, expansion and characterization of oral mucosal epithelial stem cells	1
7.	R. Lakshmy, Cardiac Biochemistry	Effect of trans fatty acids on expression of transcription factors, PPAR γ and SREBP 1c	2 ₹ 71,000
8.	Bimal Kumar Das, Microbiology	Molecular diagnosis of acute bacterial meningitis	2
9.	Jatinder Katyal, Pharmacology	Effect of different doses of pioglitazone and cyclooxygenase-2 (Cox-2) inhibitor etoricoxib in pentylenetetrazole kindled rats	1
10.	Surender Singh, Pharmacology	Efficacy and safety of essential oil and hydro alcoholic extract of <i>Rosa centifolia</i> in experimental arthritis in rats	1
11.	D.S. Arya, Pharmacology	Evaluation of aqueous fruit extract of <i>Aegle marmelos</i> in experimentally induced myocardial infarction	1
12.	Tulika Seth, Haematology	A study of the genetic profile of chronic immune thrombocytopenic purpura patients at a North Indian tertiary care centre	2
13.	T.C. Nag, Anatomy	Cellular localization of markers of oxidative stress in aging human retina: An immunohistochemical study	1.2
14.	T. Velpandian, Ocular Pharmacology and Pharmacy, RP Centre	Evaluation of the role of organic cation drug transporters in the ocular disposition of drugs	2

Clinical subjects: Continuing

S.No.	Name and department of the investigator	Title of the project	Duration (years)
1.	Sumit Sinha, Neurosurgery, JPNATC	Role of simvastatin in prevention of vasospasm and improving functional outcome after aneurysmal sub-arachnoid hemorrhage: A randomized double blind placebo-controlled trial	1 ₹ 75,000
2.	Sandeep Agarwala, Paediatric Surgery	Genetic parameters of neuroblastoma: A study of fine needle aspiration cultures	1

3.	Sandeep Seth, Cardiology	Labelling of stem cells with Technetium-99m hexamethylene propylene amine oxine (TC99m HMPAO) and to detect the homing of stem cells in the myocardium after intra-coronary injection	1
4.	Sambhunath Das, Cardiac Anaesthesia	Role of pentoxifylline in reducing neurocognitive decline and inflammatory response after coronary artery bypass grafting using cardiopulmonary bypass	1
5.	D.N. Sharma, Radiation Oncology	Clinical Impact of PET scan in patients with pelvic recurrence from cervical cancer following radiation therapy	1
6.	Venkateswaran K. Iyer, Pathology	Prognostication of pediatric abdominal solid tumors on the basis of 1p and 16q chromosomal deletions	1
7.	Vandana Jain, Pediatrics	Adiponectin, C-reactive protein and interleukin-6 in overweight children and adolescents and their relationship with dyslipidemia and insulin resistance	1

Basic subjects: Continuing

S.No.	Name of the investigator	Title of the project	Duration (years)
1.	S.K. Maulik, Pharmacology	Evaluation of preventive potential of atorvastatin and coenzyme-Q10 in doxorubicin-induced cardiomyopathy in rats	1
2.	Ratna Sharma, Physiology	Cognition induced changes in brain oscillations	1
3.	Arundhati Sharma, Anatomy	To evaluate the possible presence of mutations in VSX1 gene in keratoconus	1
4.	Pushpa Dhar, Anatomy	To study the effects of antioxidant supplementation on rat hippocampus following sodium arsenite exposure during early postnatal period	1
5.	Rima Dada, Anatomy	Cytogenetic and pax6 gene mutation analysis in ocular coloboma	1
6.	Tushaar Aggarwal, RP Centre	CRYAA gene profile in congenital cataract patients	1
7.	Seema Sen, Ocular Pathology, RP Centre	Identification of HPV types in malignant ocular tumors	1 ₹ 1,50,000
8.	Anjana Talwar, Physiology	To study the effect of Ocimum sanctum (Tulsi) leaf extract on event related potentials in healthy adults	1
9.	N.C. Chandra, Biochemistry	A comparative study on expression and/or transcription between LDL receptor (LDLR) and tumor suppressor proteins (p53, pRB) in presence of insulin, thyroxin and benzo (a)-pyrene	1
10.	Kunzang Chosdol, Biochemistry	A case-control study of the genetic polymorphism (SNP) of folate metabolizing enzymes and their association with meningioma and glioma in Indian population	1

Total : 51,64,000
Total allocated : 50,00,000
Balance : 1,64,000

4. Examination Section

Professor-Incharge (Exams)

Kaushal K. Verma

Sub-Dean (Exams)

A.K. Dinda

Assistant Controller

B.K. Joshi

Accounts Officer

S.K. Gupta

Office Superintendents

Raj Kumar

Kulvinder Singh

During 2010–11, the following professional and entrance examinations were conducted.

POSTGRADUATE AND UNDERGRADUATE PROFESSIONAL EXAMINATION

Professional examinations

S.No.	Month and year	Examination	Number of students			
			Appeared	Absent	Passed	Failed
1	May 2010	Final Postgraduate/Postdoctoral	135	0	122	13
2	-do-	MSc (Nursing) Phase I	22	0	22	0
3	-do-	MSc (Nursing) Phase II	15	0	15	0
4	-do-	Final MBBS (Supplementary)	6	0	6	0
5	-do-	Second MBBS (Supplementary)	16	1	15	0
6	-do-	B.Sc. Nursing (Post-certificate) Phase I	25	0	19	6
7	-do-	B.Sc. Nursing (Post-certificate) Phase II	25	0	25	0
8	-do-	B.Sc. (Hons) Nursing Phase I	62	1	52	9
9	-do-	B.Sc. (Hons) Nursing Phase II	61	1	59	1
10	-do-	B.Sc. (Hons) Nursing Phase III	53	3	49	1
11	-do-	B.Sc. (Hons) Nursing Phase IV	46	0	46	0
12	July 2010	First Professional MBBS	81	1	64	16
13	-do-	B.Sc. (Hons) Ophthalmic Techniques Phase I	17	1	7	9
14	-do-	B.Sc. (Hons) Ophthalmic Techniques Phase II	11	0	5	6
15	-do-	B.Sc. (Hons) Ophthalmic Techniques Phase III	10	0	9	1
16	-do-	B.Sc.(H) Medical Tech. in Radiography Phase I	8	1	5	2
17	-do-	B.Sc.(H) Medical Tech. in Radiography Phase II	9	0	4	5
18	-do-	B.Sc.(H) Medical Tech. in Radiography Phase-III	6	0	6	0
19	August 2010	First MBBS Professional (Supplementary)	17	1	13	3

20	November 2010	B.Sc. (H) Ophthalmic Tech. Phase I (Supplementary)	7	0	5	2
21	-do-	B.Sc. (H) Ophthalmic Tech. Phase II (Supplementary)	5	0	5	0
22	-do-	B.Sc. (H) Ophthalmic Tech. Phase III (Supplementary)	1	0	1	0
23	-do-	B.Sc. (H) Medical Tech. in Radiography Phase I (Supplementary)	2	0	2	0
24	-do-	B.Sc. (H) Medical Tech. in Radiography Phase II (Supplementary)	4	0	3	1
25	-do-	B.Sc. (H) Medical Tech. in Radiography Phase III (Supplementary)	0	0	0	0
26	December 2010	Final Postgraduate/Postdoctoral	126	2	121	3
27	-do-	MSc (Nursing) Phase-II (Supplementary)	3	0	3	0
28	-do-	Final MBBS	47	3	38	6
29	-do-	Second MBBS	72	3	66	3
30	-do-	B.Sc. Nursing (Post-Certificate) Phase I (Supplementary)	6	0	4	2
31	-do-	B.Sc. Nursing (Post-Certificate) Phase II (Supplementary)	0	0	0	0
32	-do-	BSc (Hons) Nursing Phase I (Supplementary)	9	0	9	0
33	-do-	BSc (Hons) Nursing Phase II (Supplementary)	4	0	3	1
34	-do-	BSc (Hons) Nursing Phase III (Supplementary)	7	0	7	0
35	-do-	BSc (Hons) Nursing Phase IV (Supplementary)	1	0	1	0
36.	January 2011	Final MBBS (Compartmental examination)	2	0	2	0
		Grand Total	921	18	813	90

Entrance examinations

S.No.	Courses	Date of examination	No. of candidates applied	No. of candidates appeared
1.	MD/MS/MDS (AIIMS) July 2010	09-05-2010	19506	16778
2.	DM/MCh/MHA July 2010	16-05-2010	1629	1365
3.	M.B.B.S. (AIIMS) August 2010	01-06-2010	33522	22986
4.	BSc (Hons) Nursing 2010	13-06-2010	736	520
5.	BSc Nursing (Post-Certificate) 2010	19-06-2010	62	40

6.	BSc (Hons) Paramedical Courses 2010	05-06-2010	148	114
7.	MSc Courses 2010	10-07-2010	261	137
8.	MSc Nursing 2010	27-06-2010	539	406
9.	M. Biotechnology Entrance Examination 2010	17-07-2010	714	361
10.	PhD July 2010	04-07-2010	431	271
11.	Senior Residents Entrance Examination , January 2011	13-03-2011	645	471
12.	MD/MS/MCh (6 years)/MDS (AIIMS) January 2011	14-11-2010	34897	33004
13.	DM/MCh/MHA January 2011	12-12-2010	1548	1269
14.	All India PG Entrance Exam: MD/MS/Diploma/MDS-2011	09-01-2011	67822	63605
15.	PhD January 2011	16-01-2011	412	263
			162872	141590

Candidates passed in PhD Viva-Voce examination 1 April 2010–31 March 2011: 53

Examination for recruitment

S. No.	Name of exam	Written exam	Interview	Applied	Appeared	Result
1.	Sister Grade-II	22.08.2010	18.1.2011	14755	8553	25.10.2010
2.	Tutor in Nursing	14.12.2010	18-22.10.2010	219	128	01.02.2011
	Total			14974	8681	

Entrance examinations conducted

- All India PG Entrance Examination for admission to MD/MS/Diploma/MDS Courses against 50% open merit seats quota was held in 146 centres (Local 32, Outstation 114) in 15 cities of India on 9 January 2011. The results were declared on 15 February 2011.
- AIIMS PG Entrance Examination for admission to MD/MS/MDS courses was conducted on 9 May 2010 for July 2010 session at 43 centres (Local 19, Outstation 24) and 14 November 2010 for January 2011 session at 71 centres (Local 30, Outstation 41) respectively. The results were declared on 25 May 2010 and 27 November 2010, respectively.
- Selections for various Post-Doctoral (super specialty) courses (DM/MCh and Master in Hospital Administration) for July 2010 and January 2011 sessions were done on the basis of a 2-stage performance evaluation during 16–24 May 2010 and 12–21 December 2010, respectively.
- A written test was conducted for the post of Senior Residents/Senior Demonstrators on 13 March 2011.
- Selections of candidates for registration to PhD programme for July 2010 and January 2011 sessions were held on 4 July 2010 and 16 January 2011. The results were declared on 12 July 2010 and 24 January 2011, respectively.
- The Entrance Examination for admission to MBBS course of AIIMS for August 2010 session was held in 76 centres (Local 29, Outstation 47) in 10 cities of India on 1 June 2010.
- BSc (Hons.) Nursing Entrance Examination was held in Delhi and Thiruvananthapuram on 13 June 2010.

8. The Entrance Examination for admission to MSc and M. Biotechnology courses for the August 2010 session was held in Delhi on 10 and 17 July 2010, respectively.
9. The Entrance Examination for admission to MSc Nursing course was introduced from the year 2005. This examination was held on 27 June 2010 in Delhi only. The admission was made by allotment of seats on merit basis through counseling held on 16 July 2010.
10. BSc Nursing (Post-Certificate) Entrance Examination was held in Delhi on 19 June 2010 followed by the personal assessment of candidates on 22 June 2010.
11. The entrance examination for admission to Para-medical courses, viz. BSc (Hons.) Ophthalmic Techniques and BSc (Hons.) Medical Technology in Radiography for August 2010 session was held in Delhi at 1 centre on 5 June 2010. The admissions to these two courses were made by allotment of seats on merit basis through counseling held on 15 and 22 July 2010.
12. The Examination Section has also conducted Written/Skill Test for recruitment to the following posts:
 - (i) Written test for the post of Technical officer at AIIMS was held on 29 August 2010. The interview for the same was held on 9 May 2010.
 - (ii) For Departmental candidates written test for the post of UDC was conducted on 6 September 2010.
 - (iii) Skill test for the post of Stenographer was conducted on 25 October 2010. The interview for same was held on 9 May 2010.

Participation in other events:

1. The section actively participates in counselling for admission to AIIMS-PG, BSc (Hons.) Para-medical, MSc (Nursing) courses and interview for BSc (Nursing) Post-Certificate course.
2. Professor-in-charge (Exam) has been co-ordinating the evaluation of P.G. students thesis from B.P. Koirala Institute of Health Sciences, Dharan, Nepal.

SIGNIFICANT EVENTS

The Examination Section has been conducting the following examinations.

1. MBBS Entrance Examination of North Eastern Indira Gandhi Regional Institute of Health and Medical Sciences, Shillong, Meghalaya from 2010 on 26 July 2010.
2. Post Graduate Entrance Examination of North Eastern Indira Gandhi Regional Institute of Health and Medical Sciences (NEIGRIHMS), Shillong, Meghalaya for 2011 on 20 March 2011.
3. Pre-PG Medical/Dental Examination of Rajasthan University of Health Sciences (RUHS) on 10 February 2011 at Jaipur, Rajasthan.

As a further step towards introduction of more checks and balances, so as to maintain complete confidentiality and integrity of the examination system, question papers for outstation centres are now kept in the safe custody of State Bank of India branches. In order to avoid any case of impersonation, all candidates are digitally photographed and thumb impressions obtained during the entrance examination. In addition to this physical frisking of every candidate at main entrance of the examination centre has been introduced to prevent the usage of electronic gadgets during the examination has also been started.

The Examination Section has been inviting online applications for various entrance examinations from January 2010. Candidates can now apply online and also get their Admit Cards downloaded from the Internet. This has been done to

overcome the difficulty in obtaining Prospectus and Application Forms, as reported by the candidates, from time to time. After Launch of Online method of submission of application forms, the problem of non-availability of Prospectus-cum-Application form has been completely tackled.

Examination Section is also providing technical expertise to various Universities and Institutions in India and abroad to conduct their Entrance Examinations.

In All India PG Entrance Examination, each candidate was provided pen to write. This was done to prevent use of any electronic feature inbuilt in the pen carried by them.

Photography (Snapshot) is being done in case of doubt of genuineness of the identity of a candidate during the course of the examination.

Cash transaction has been minimized by sending 90%–95% amount through Demand Draft/Bankers Cheque in advance to the designated examination centres.

5. General Administration

Deputy Director (Administration)

Sharat Chauhan, IAS
(up to 25.05.2010)

Vineet Chawdhry
(w.e.f. 26.05.2010)

Chief Administrative Officer

Attar Singh

Senior Administrative Officers

E. Lakra

K.K. Vaid

Administrative Officers

Recruitment and Hostel

Ravi Chauhan

JPNA Trauma Centre

Rajavelu Simon
(upto 06.12.2010)

Hospital
Kundan Kumar

General, Estate and Transport

V.V. Mishra

ACR/SC/ST and Coordination Cell

A.K. Nim

Legal Cell

Bhagirath Jha

Faculty Cell/Estt. Section I and II

Lalit Kumar

Dheeraj (w.e.f. 25.03.2011)

Assistant Administrative Officers

NDDTC

Uday Singh

CDER

Narender Kuma

CT and NS Centre

Shyam Lal

JPNAT Centre

Mahesh Kumar Sharma

SECURITY

Deputy Chief Security Officers

Rajiv Lochan

R.S. Rawat (w.e.f. 11.01.2011)

Security Officer

Deepak Kumar

STORES

Stores Officers

S.S. Bhaduria

Pradeep Kumar Gupta

K.D. Sharma

V.M.S. Gandhi

R.L. Prasad
(under suspension up to 31.01.2011)

ENGINEERING SERVICES DEPARTMENT

Superintending Engineer

B.S. Anand

Executive Engineers

M. Rastogi

S. Bhasker

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

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

The total sanctioned staff of AIIMS is 10422, including the main hospital, all the centres and administration. These include the following.

S. No.	Category/group	Sanctioned strength	In position staff
1.	Faculty	629	434
2.	Group 'A'	548	407
3.	Group 'B'	4,646	3,792
4.	Group 'C'	2,710	1,953
5.	Group 'D'	1,889	2,207
	Total	10,422	8,793

OFFICE OF THE LIAISON OFFICER SC/ST CELL (AIIMS)

Liaison Officer

V. K. Paul

Administrative Officer

A. K. Nim

Details of the representations received during the period 01/04/2010 to 31/03/2011 are as under:-

Total representations received	11
Cases resolved/disposed off	07
Cases under consideration	04

Brief summary of cases are as under:

1. A representation was received from Sh Ghanshyam Dagar, OT Technician regarding promotion from backdate with consequential benefit. His representation was considered/ examined by the Institute number of times and the decision of the Institute has already been communicated to the Parliamentary Committee on welfare of SC/ST (Lok Sabha).
2. A representation was received from Dr. Chowphi Chen Rapthap, Scientist, HLA Lab. AIIMS regarding re-appointment (Scientist II-ST Category) in AIIMS. Her request has been considered by Competent Authority, but in view of the fact that she had resigned from service of the Institute w.e.f 02/12/05, i.e. more than 4 and half year back, it was regretted that her request could not be acceded to as it was not permissible under the rules.

3. A representation was received from National Commission for Scheduled Castes of Dr Braham Prakash, Supervising, MSSO, NDDTC, AIIMS regarding his promotion. The matter is Under Consideration.
4. A representation received from AIIMS SC/ST Employees Welfare Association of Sh Avadh Narayan, Khalasi (Adhoc) regarding discrimination amongst equals in regularization of service. The matter is Under Consideration.
5. A representation received from Sh Om Prakash Benwal, Sr. Steward, Dr R.P. Center, AIIMS, regarding fixation of Pay in the scale of 5500–9000 instead of 4500–7000. His representation was considered by the Competent Authority and the proposal was approved by the Standing Finance Committee and Governing Body subject to the concurrence of Ministry of Finance (Deptt. of Expenditure). Accordingly the matter was referred to the Ministry of Health and Family Welfare and the same was not acceded to by the Ministry of Health and Family Welfare.
6. A representation received from National Commission for Scheduled Castes of Dr V. Subramani, Senior Medical Physicist & Radiation Safety Officer, Deptt. of Radiotherapy, AIIMS regarding defaming his Name as he belongs to Scheduled Caste, among medical physicist & radiation oncology professionals all over the country by Dr G. K. Rath, Head of the Department, RT & Chief, Dr BRA IRCH, AIIMS. The matter was examined by the Competent Authority and found that there has never been any bias, prejudice or discrimination against Dr V. Subramani from anybody in the department at any stage. He was making false allegation against Dr G. K. Rath to deflect the attention of the authorities from the investigations being carried out against him on the complaints of his colleagues.
7. A representation of Sh Ram Naresh, Junior Engineer (Civil) was received from AIIMS SC/ST Employees Welfare Association (Regd.) with a request for promotion to the post of Assistant Engineer (Civil) against the Reserved Post. The matter is Under Consideration
8. A representation of Sh Mehar Chand, Part Time Social Guide at Cardio-Neuro Center, AIIMS was received from National Commission for Scheduled Castes regarding reinstatement of job. His representation was examined and found that there was a complaint against him and his performance report had also been reported unsatisfactory. On the basis of his unsatisfactory work and conduct, his services were terminated under clause No. 2 (I) of the appointment letter.
9. A representation of Ms Anita Yash, Sister Gd. II, AIIMS was received alleging harassment. The matter is Under Consideration.
10. A representation of Sh M.A. Laviraj, Medical Physicist, IRCH, AIIMS, was received from National Commission for Scheduled Castes regarding harassment by Dr V. Subramani, Sr. Medical Physicist, AIIMS. The matter was examined by the Competent Authority and also directions of the Vice Chairman, National Commission for Scheduled Castes action was taken in the matter.
11. A representation was received from Dr V. Subramani, Sr. Medical Physicist, Radiation Safety Officer IRCH, AIIMS through National Commission for Scheduled Castes regarding Harassment. The matter was examined by the Competent Authority and found that there has never been bias, prejudice or discrimination against Dr V. Subramani from anybody in the department at any stage. He was trying to use pressure tactics to divert the attention of the authorities regarding the complaints against him by his own colleagues and to get decision in his favour. The allegations made in his representation were totally false and baseless.

6. Main Hospital

Medical Superintendent

D.K. Sharma

Professor

Siddhartha Satpathy

Additional Professor

I.B. Singh

Sanjay Arya

Beds	Numbers
Main hospital and private wards	1045
Bassinets	25
C. N. Centre	411

Hospital performance indices	2010–11		2009–10		Comments
	Main Hospital	CNC	Main Hospital	CNC	
Average length of stay (days)	5.3	7.3	5.5	7.3	Effective utilization of beds.
Average bed occupancy rate (%)	80.9	77.6	80.7	79.9	Fair occupancy
Net death rate (%)	2.6	4.1	2.7	4.4	Low mortality rate despite a large number of critically ill patients being admitted
Combined crude infection rate (%)	8.1	—	8.69	—	

Please see Tables I and II for details.

Medical Record Services (Hospital)

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

N. K. Sharma

EDUCATION

The following groups of students visited the Medical Record Section (Main Hospital) and Out Patient Department

1. Bachelor of Medical Record Science Course, Christian Medical College, Vellore, Tamil Nadu, 7 April 2010.
2. Medical Record Technician Course from St. Stephens Hospital, New Delhi, 30 April 2010.
3. 18 MSc (PC) and a group of BSc (PC) Nursing students of College of Nursing, AIIMS, visited the Medical Record Section (Main Hospital). Shri N. K. Sharma delivered a brief talk on Medical Record Management on 21 April 2010 and 6 August 2010.

Dr V. C. Agarwal, CMO, Medical Record Department, Safdarjung Hospital, visited the Medical Record Section (Main Hospital) and was informed about the functioning of the section.

COURT ATTENDANCE

A total of 1149 summons/notices (average 4 summons per day) were received in the Medical Record Section (Main Hospital) from various courts of Delhi and outside.

COMPUTERIZATION OF MEDICAL RECORDS

The Central Admission Office and Hospital Enquiry of Main Hospital have been computerized. The computerization of Medical Record Section (Hospital) is under progress and it will be connected with the Central Admission Office and Hospital Enquiry very soon.

IN-PATIENT SERVICES

The hospital has maintained its tradition of services and quality of patient care, in spite of ever increasing number of patients that come from all over the country as well as from abroad. A total of 89,298 patients were admitted during the year in the various clinical units of the Main Hospital and Cardiothoracic and Neurosciences Centre (Table I). The department, state and gender-wise admissions are given in Tables II to IV. The surgical procedures (numbers) done during 2010–11 are given in Table V.

The medical records of indoor patients are systematically classified and categorized for easy retrievals. These records are stored in compactors. All the in-patient records of C. N. Centre are also 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 the Enquiry Counter. All enquiries regarding patients, departments, doctors and centres are provided from this office.

This office functions round the clock, i.e. 365 days×24 hours. Therefore, the staff works in shifts. This office is manned by receptionists, medical record technicians and other ministerial and hospital staff.

OUTPATIENT DEPARTMENT AND SPECIALTY CLINICS

A total of 1,465,058 patients attended the general outpatient department and Specialty Clinics of the Main Hospital. The details of the outpatient load profile are given in Table VI.

TABLE I. Yearly statistical health bulletin (2010–11)

S. No.	Detail	Main Hospital	CN Centre	Total
1.	Total patients admitted	72148	17150	89298
	a. Adults and children	69878	–	–
	b. Newborn infants	2270	–	–
2.	Total patients discharged	63510	15781	79291
	a. Adults and children	61442	–	–
	b. Newborn infants	2068	–	–
3.	Total days of care	337861	114753	452614
	a. Adults and children	322427	–	–
	b. Newborn infants	15434	–	–
4.	Average length of stay (ALS)	5.3	7.3	5.7
	a. Adults and children	5.2	–	–
	b. Newborn infants	7.5	–	–
5.	Total number of patients in hospital (as per daily census)	315950	116415	432365
	a. Adults and children	312270	–	–
	b. Newborn infants	3680	–	–
6.	Daily average number of patients (as per daily census)	866	319	1185
	a. Adults and children	856	–	–
	b. Newborn infants	10	–	–
7.	Average bed occupancy (%)	80.9	77.6	80.0
	a. Adults and children	81.9	–	–
	b. Newborn infants	40.0	–	–
8.	Births in hospital	2270	–	2270
	a. Male	1214	–	1214
	b. Female	1056	–	1056
	c. Inter sex	–	–	–
9.	Total deaths (including newborn)	2586	853	3439
	a. Death under 48 hours	963	216	1179
	b. Death over 48 hours	1623	637	2260
	c. Gross death rate (%)	4.1	5.4	4.3
	d. Net death rate (%)	2.6	4.1	2.9
10.	Attendance in casualty	104084	–	104084
	Deaths in casualty	738	–	738
	Brought dead in casualty	553	–	553

TABLE II. Department-wise admission, discharges and death rates (Main hospital + CN centre)

Department	Admission	Discharges	Days of care	Average length of stay	Deaths			Death rate (%)	
					Total	Under 48 hours	Over 48 hours	Gross	Net
Medicine I	1548	1382	11705	8.5	352	167	185	25.5	15.2
Medicine II	1328	1200	9950	8.3	330	144	186	27.5	17.6
Medicine III	1447	1332	11553	8.7	370	166	204	27.8	17.5
Surgery I	1359	1208	8475	7.0	25	3	22	2.1	1.8
Surgery II	2285	1822	13009	7.1	36	3	33	2.0	1.8
Surgery III	968	858	8676	10.1	29	8	21	3.4	2.5
Surgery IV	1622	1398	9656	6.9	23	7	16	1.6	1.1
Orthopaedics I	1990	1690	13436	7.9	03	–	03	0.2	0.2
Orthopaedics II	2084	1728	15594	9.0	06	–	06	0.3	0.3
Obstetrics and Gynaecology I	3974	3519	17086	4.8	09	01	08	0.2	0.2
Obstetrics and Gynaecology II	3159	2774	13909	5.0	04	01	03	0.1	0.1
Obstetrics and Gynaecology III	3147	2802	14731	5.2	14	03	11	0.5	0.4
Nephrology	5122	4432	16248	3.7	171	43	128	3.8	2.9
Endocrinology	498	475	7832	16.5	09	01	08	1.9	1.7
Gastroenterology	2464	2248	17868	7.9	432	172	260	19.2	12.5
Haematology	9428	8562	22469	2.6	244	79	165	2.8	1.9
Psychiatry	326	223	6132	27.5	02	01	01	0.9	0.4
Urology	5282	3665	14938	4.1	14	05	09	0.4	0.2
Otolaryngology I	1476	1352	4967	3.7	05	01	04	0.4	0.3
Otolaryngology II	1339	1231	4846	3.9	04	01	03	0.3	0.2
Otolaryngology III	1469	1337	6188	4.6	02	01	01	0.1	0.1
Dermatology	4114	3871	11520	3.0	12	–	12	0.3	0.3
Newborns	2270	2068	15434	7.5	24	13	11	1.2	0.5
Neonatal ICU	133	137	1324	9.7	21	03	18	15.3	13.4
Kangaroo Mother Care Ward	56	49	484	9.9	–	–	–	–	–
Paediatric I	2411	2221	8165	3.7	71	16	55	3.2	2.5
Paediatric II	1775	1596	7497	4.7	57	15	42	3.6	2.6
Paediatric III	4133	3721	9627	2.6	80	20	60	2.1	1.6

Paediatric Surgery	2493	2243	16144	7.2	72	08	64	3.2	2.9
Radiotherapy	46	40	71	1.8	20	17	03	50.0	13.0
Dental Surgery	169	141	1253	8.9	–	–	–	–	–
Nuclear Medicine	627	648	1288	2.0	01	–	01	0.1	0.1
Gastrointestinal Surgery and Liver Transplantation	819	818	12065	14.7	58	07	51	7.1	6.3
Physical Medicine and Rehabilitation	28	29	1723	59.4	–	–	–	–	–
Institute Rotary Cancer Hospital	366	362	1656	4.6	86	57	29	23.7	9.5
Anaesthesiology	393	328	342	1.0	–	–	–	–	–
Total (Main)	72148	63510	337861	5.3	2586	963	1623	4.1	2.6
Cardiology	7339	7069	27913	3.9	219	98	121	3.1	1.7
Cardiothoracic and vascular surgery	3565	3285	31133	9.5	266	23	243	8.1	7.4
Neurology I	1216	1160	8017	6.9	77	24	53	6.6	4.7
Neurology II	1273	1117	7785	7.0	83	24	59	7.4	5.4
Neurosurgery I	1698	1401	19275	13.7	113	24	89	8.1	6.5
Neurosurgery II	2059	1749	20630	11.8	95	23	72	5.4	4.2
Total (CNC)	17150	15781	114753	7.3	853	216	637	5.4	4.1
Grand Total (Main+CNC)	89298	79291	452614	5.7	3439	1179	2260	4.3	2.9

TABLE III. State-wise distribution of in-patients

State	Main Hospital	CNC	Total
Delhi	37041	5480	42521
Uttar Pradesh	14657	3813	18470
Haryana	7301	1740	9041
Bihar	6711	3128	9839
Rajasthan	957	574	1531
Punjab	216	203	419
Other states	5183	2181	7364
Other countries	82	31	113
Total	72148	17150	89298

TABLE IV. Gender-wise distribution of in-patients (Main Hospital+CN Centre)

Site	Male	Female	Male child	Female child	Total
Main Hospital	27663	26607	12618	5260	72148
CN Centre	8657	4194	2987	1312	17150
Total	36320	30801	15605	6572	89298

TABLE V. Surgical procedures

Department	Major	Minor procedures		
		Indoor	Outdoor	Total
Surgery I	715	230	2463	3408
Surgery II	1198	564	2430	4192
Surgery III	528	149	2267	2944
Surgery IV	900	174	2298	3372
Gastrointestinal Surgery and Liver Transplantation	618	06	–	624
Urology	1373	233	9733	11339
Obstetrics	1017	351	–	1368
Gynaecology	2291	1450	–	3741
Otorhinolaryngology	2148	1854	30083	34085
Orthopaedics I	1325	529	–	1854
Orthopaedics II	1047	756	–	1803
Paediatric Surgery	1789	80	–	1869
Dental Surgery	109	03	–	112
Casualty	–	183	–	183
Total (Main)	15058	6562	49274	70894
Cardiothoracic and vascular Surgery	3976	–	–	3976
Neurosurgery I	1181	140	–	1321
Neurosurgery II	1472	113	–	1585
Total (CNC)	6629	253	–	6882
Grand Total (Main + CNC)	21687	6815	49274	77776

TABLE VI. Attendance in OPDs and speciality clinics

Medical disciplines	New cases	Old cases	Total
Medicine			
1. General OPD	62103	61750	123853
2. Specialty clinics			

(i) Chest	2134	4618	6752
(ii) Rheumatology	39	7018	7057
(iii) Geriatric	2441	2741	5182
(iv) Sleep related breathing disorder	208	130	338
(v) Nuclear medicine	1238	5807	7045
(vi) Endocrinology	9409	26784	36193
(vii) Renal	6506	24619	31125
(viii) Renal transplant	81	5436	5517
(ix) RTCC	406	964	1370
Haematology	3064	22038	25102
Gastroenterology	16550	39333	55883
Paediatrics			
1. General OPD	30939	42034	72973
2. Specialty clinics			
(i) Well Baby	247	492	739
(ii) Follow up T.B.	347	1655	2002
(iii) Renal	569	4363	4932
(iv) Paediatric neurology	754	2115	2869
(v) Paediatric chest	557	2916	3473
(vi) High risk neonatal	426	2154	2580
(vii) Genetic and birth defect	2562	1192	3754
(viii) Oncology	220	1709	1929
(ix) Child development	207	306	513
(x) Endocrinology	429	1168	1597
(xi) Neurocysticercosis	266	1050	1316
(xii) PCSC	72	505	577
(xiii) Rheumatology	132	1469	1601
(xiv) Myopathy	294	602	896
Dermatology			
1. General O.P.D.	29430	33203	62633
2. Specialty clinics			
(i) Sexually transmitted diseases	647	677	1324
(ii) Allergy	394	1166	1560
(iii) Leprosy	371	2478	2849
(iv) Pigmentation	462	2248	2710
(v) Derma-surgery	396	878	1274

Psychiatry			
1. General OPD	1818	–	1818
2. Specialty clinics			
(i) Walk-in-clinic	12061	29683	41744
(ii) Child guidance	518	569	1087
Surgical disciplines	New cases	Old cases	Total
Surgical discipline			
General OPD	37354	29028	66382
Urology	12775	29126	41901
G.I. Surgery	1999	5124	7123
Paediatric Surgery			
1. General OPD	5727	12440	18167
2. Specialty clinic			
(i) Hydrocephalus	07	157	164
(ii) Intersex	27	268	295
(iii) Paediatric urology	355	2729	3084
(iv) Craniosynostosis	02	19	21
Anaesthesia			
1. Pain	758	2030	2788
2. Pre-anaesthesia	7307	1195	8502
Orthopaedics			
1. General OPD	42588	41444	84032
2. Specialty clinics			
(i) Physiotherapy	15426	33803	49229
(ii) Occupational therapy	1170	6903	8073
(iii) Hydrotherapy	907	8110	9017
(iv) Follow up	–	9232	9232
(v) Tuberculosis	153	922	1075
(vi) Scoliosis	477	1357	1834
(vii) Hand	806	1271	2077
(viii) CTEV	123	1361	1484
(ix) Sports	92	50	142

Otorhinolaryngology including RUAS			
1. General OPD	36648	39037	75685
2. Speciality Clinic			
(i) Audiology	143	65	208
(ii) Speech	1217	1407	2624
(iii) Hearing	1091	1337	2428
(iv) Voice	748	863	1611
(v) Vertigo	110	74	184
(vi) Rhinology	94	57	151
Obstetrics and Gynaecology			
1. General OPD	29015	51833	80848
2. Specialty Clinics			
(i) Post Natal	21	01	22
(ii) IVF	452	1686	2138
(iii) Family welfare	7963	3261	11224
(iv) Antenatal	560	3537	4097
(v) Endo-Gynaecology	57	71	128
(vi) High Risk Pregnancy	2130	12819	14949
(vii) Postoperative (Gynaecology)	338	20	358
Radiotherapy	503	39978	40481
Others			
1. Casualty	104084	–	104084
2. Employees Health Scheme	104896	69930	174826
3. Nutrition	1902	754	2656
4. Physical Medicine and Rehabilitation	19081	84869	103950
5. Sex and Marriage Counselling	1783	1834	3617
Total	629186	835872	1465058

6.1 Division of Emergency Medicine

Professor In-charge

Praveen Aggarwal

Professor

L. R. Murmu

EDUCATION

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

The department imparted short term training to 13 undergraduate students from Europe, Australia and USA. A few residents from the Department of Community Medicine were also provided training in Emergency.

CONTINUING MEDICAL EDUCATION

Division of Emergency Medicine, AIIMS was one of the collaborating partners for the 'Indo-US Emergency Medicine Summit-2010', Vadodara, 6-10 October 2010. The other collaborating partners were University of South Florida, USA and State University of New York, Downstate Medical Center, USA.

Conferences/seminars/workshops organized:

1. Emergency Medicine Practices and Advanced Clinical Therapeutics, 17-20 June 2010
2. International Patient Safety Conference, 1-3 October 2010

Lectures delivered

Praveen Aggarwal: 2

L. R. Murmu: 3

PUBLICATIONS

Journals: 2

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Praveen Aggarwal continues to be Chief Editor of *Journal of Emergencies, Trauma and Shock*; Member, Committee constituted by the Indian Pharmacopoeia Commission to revise National Drug Formulary of India; Ethics Committee, AIIMS; Member, Board of Specialty in Emergency Medicine of the Medical Council of India; Member, Sub-Group of Experts constituted by the Ministry of Health and Family Welfare, Department of Health and Family Welfare, for the development of Standard Treatment Guidelines on Infectious Diseases.

L.R. Murmu continues to be Chief Editor of *Journal of Emergencies, Trauma and Shock*; Member, Board of Specialty in Emergency Medicine of the Medical Council of India.

PATIENT CARE

Average number of patients: 8,700/month 1,04,084/year

6.2 Hospital Dietetics Services

Alka Mohan Chutani (On Leave)	Chief Dietician	Parmeet Kaur (Acting)
	Dietician Swapna Chaturvedi	
Gurdeep Kaur Vasundhara Singh	Assistant Dietician Monita Gahlot	Richa Jaiswal Anjali Bhola

Number of indoor patients served different diets

Total number of diets	6,50,765
Normal diet	3,36,534
Semisolid	34,854
Therapeutic diets	1,44,224
Kitchen-based enteral feeds	32,784
Private ward diet	1,02,369

Nutrition clinic

Old OPD patients	739
Male	463
Female	276
New OPD patients	1881
Male	962
Female	919

6.3 Welfare Unit

Welfare Officer

Preeti Ahluwalia

PATIENTS WELFARE

Patient care: '62,46,000 (approx.) raised as donation.

Purpose	Donation	Donor
For treatment and surgery of poor and needy patients who are undergoing treatment in the main hospital and centres	₹ 3,40,000	Shri Sai Bhakta Samaj (Regd.)
	₹ 1,60,000	Jawahar Bhawan Trust
	₹ 2,61,400	Sahu Jain Trust
	₹ 2,60,000	Indo Global Social Service Society
	₹ 1,14,750	Chetnalya
	₹ 26,160	Lal Devi Charitable Trust
	₹ 39,000	Times Eye Research Foundation
	₹ 14,000	Vijay Gujral Foundation
AIIMS Poor Fund Account	₹ 36,155	Other Donors
	₹ 1,00,000	Mrs. Dwarka Prasad Trust
	₹ 52,600	Other Donors
Anti-cancer drugs provided free to cancer patients	₹ 36,67,328	Gopal Foundation
A Evita-4 ICU Ventilator received as donation for the casualty	₹ 11,75,000	Dr Swarn Kapur

In addition to above, poor patients are being guided and assisted to avail of financial assistance for their treatment from Rashtriya Arogya Nidhi, PM National Relief Fund, Health Minister's Discretionary Grant and other governmental and non-governmental agencies.

Assistance is given to poor patients from the Hospital Poor Patient Fund and they are also guided and helped for admission, exemption of levy charges, 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 19,900 patients and their attendants who were undergoing treatment at AIIMS and its centres. In special cases, food was arranged through donors for poor and needy inmates of the Vishram Sadans.

Sapna (NGO) distributed dry ration once a week to the inmates of Rajgarhia Vishram Sadan who were below the poverty line. In addition, half a litre milk was also distributed every day to the patients staying at Rajgarhia Vishram Sadan. Cancer Patients Aid Association celebrated Diwali and Holi with the inmates of the Sadans.

Employees Welfare

Appointment on compassionate grounds

Cases for appointments on compassionate grounds were dealt with. Counselling services and moral support was provided to the family members so as to assist them to accept/overcome the great loss they had suffered and thereby enable them to shoulder their responsibilities. As need be, assistance for funeral expenses was provided to the relatives of the deceased employees. Assistance was also arranged for school fees for 7 children for a period of six months.

Counselling services

These 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.

Sports activities

Facilitating participation of AIIMS employees in Inter-Ministry tournaments. Twelve members of AIIMS football team which played under the banner of Ministry of Health and Family Welfare football team won the Inter-Ministry football tournament 2010–11 which was organized by the Central Civil Services Cultural and Sports Board.

Diwali celebration

Mr Sunil Bhutani celebrated Diwali with the children of our employees studying in the Nursery and Primary School being run by Medical Institute Residents Welfare Association (MIRWA). Gifts and sweets were distributed on this occasion.

Free Hearse Van facility

Free Hearse Van facility has been organized through Shri Sai Bhakta Samaj (Regd) to enable easy transportation of the dead body by the distressed relatives to their homes/crematorium in Delhi.



Dr. D.K. Sharma, Medical Superintendent being presented the AEvita-4 ICU ventilator by the family members of Late Dr Swarn Kapur. Also seen in the picture are Professors Praveen Aggarwal (Emergency services) and Randeep Guleria (Medicine), Mrs Preeti Ahluwalia, Welfare Officer and Mr N.K. Sharma, Chief Medical Record Officer (Hospital).

6.4 Hospital Billing Section

The details of the donations received and expenditure incurred/payments made to the patients during 2010–11 are as follows.

Donations received from donors ₹ 14,67,164
(Bank interest+donations+poor fund boxes)

Payment made to 202 patients: ₹ 97,930

(The amount disbursed to poor patients is from the donations received from donors during the year as well as from the previous balance in the “AIIMS POOR FUND ACCOUNT”).

6.5 Medical Social Welfare Unit

Medical social welfare unit acts as a central social welfare unit under the direct supervision of the Medical Superintendent and Officer Incharge, MSSO. This unit has 9 Medical Social Service Officers (MSSOs) including one Chief Medical Social Service Officer, one Supervising Medical Social Service Officers, four Medical Social Service Officers Grade I and three Medical Social Service Officers Grade II.

The unit plays a very vital role between the Hospital Administration, AIIMS Faculty, staff and patients. The following services were rendered by the unit during the year under review.

- 1. Private referral:** In the Preview of PIL and judgment of Honorable Delhi High Court, it is compulsory on the part of private hospitals to provide necessary free treatment to patients from Economically Weaker Sections (EWS) who are referred by government hospitals to a private hospital. As per the direction of the Directorate of Health Services, Government of Delhi, the Unit identified 29 patients from the EWS category, motivated them and after completing paper work with the co-ordination of Nodal Officer, AIIMS and other private hospital and referred these patients to identified private hospitals for free treatment and further management. This effort was appreciated in the meeting of Directorate of Health Services on 7 April 2011.
- 2. Rehabilitation:** Medical social welfare unit had structured interviews and discussions with patients, relatives, employees, police personals and other government and non-government agencies and was successfully able to rehabilitate 70 destitute/unknown/without attendant patients in different agencies.
- 3. Counselling:** A Medical Social Service Officer is a technical person who understands psycho social problems due to psycho somatic illness caused by constant social and emotional stress, in this regard about 50,000 patients were given counselling in the terms of long procedures and complicated investigations about the diagnosis and sickness, prognosis and treatment importance of the follow up. Apart from this health education was also given to the family, as to how to maintain healthy life.
- 4. Financial Assistance:** In preview of the National Health Programme and as per the guideline of National Illness Assistance Fund application of 302 patients were scrutinized properly, assessed and presented in the NIAF Sub-committee, and a sum of ₹ 20,526,208 was sanctioned to these patients, who are receiving treatment for life threatening diseases in AIIMS.
- 5. Disbursement of poor fund:** A sum of ₹ 27,000 was disbursed among 140 poor patients who needed immediate financial assistance for the treatment and other needs.
- 6. Welfare and administrative activities**
 - A)** Approximately 8357 patients were provided medicinal and other help through different NGOs worth ₹ 7,00,000. These patients were helped for medicines, blankets, catheters and other equipment.

- B) Diwali celebration was organized in the children ward. Fruits, toys, sweets were distributed among the children to make them feel at home and a puja was also performed in the presence of the Honorable Director, Medical Superintendent, Head of Departments and other staff.
7. **Railway concession facilities:** About 15,000 patients were provided railway concession forms; suffering from different diseases and they were educated about the importance of the follow up at AIIMS. This facility is useful for outstation patients.
 8. **Accommodation:** Nearly 2260 patients with their relatives were provided shelters in different dharamsalas near the hospital.
 9. **Exemption of levy charges:** Over 3097 patients belonging to Economically Weaker Section (EWS) were considered for the different exemptions like x-rays, blood, CT scan, MRI, etc. after proper verification of below-poverty-line (BPL) cards and other certificates. In some cases MSSO took their own initiative with the patients who were not having any documentary evidence but seemed genuinely poor for payment of different types of investigations and admission charges.
 10. **Consultations and requisitions from wards:** 450 consultations were received from different wards for socio economic assessment to provide medicinal, surgical and other equipment. Apart from this, private attendants were provided to unknown and without attendant patients.
 11. **Referral:** During dengue epidemic MSSO played a very important role in scrutinizing the sick patients who were able to refer to other hospitals with the consultation of the treating doctor. About 8000 patients were counselled and motivated to go voluntarily to other hospitals. This effort was appreciated by the hospital authorities.
 12. **Health education:** Activities were conducted in children's surgical and gynecological 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.
 13. **Training and teaching:** 13 MSW students from the following universities were given training:
 - Annamalai University
 - IGNOU
 - Marian College of Kuttikkanam
 - BCM College, Kottayam, Kerala
 - Bhagat Phool Singh Mahila Vishwavidyalaya, Sonapat, Haryana.
 - Kashi vidyapeeth, U.P.
 - Banaras Hindu University
 - Bundelkhand University, Jhansi
 - MJPR University, Bareilly
 - Bhopal School of Social Sciences, M.P.
 - Delhi School of Social Work, University of Delhi
 - Institute of Home Economics, University of Delhi
 14. **Renal authorization for renal transplant:** Chief Medical Social Service Officer was given the responsibility of Coordinator and Nodal Officer for renal authorization committee AIIMS. With the coordination of Mr. Anil Mali, Medical Social Service Officer, 15 cases of unrelated kidney transplant were assessed properly, meeting was organized. Cases were briefed in the meeting and after the audio-video recording and approval of the committee minutes were distributed and file was sent to the M.S office for the record. This effort was appreciated by the chairman and committee members.

15. **Guidance:** To provide proper information about the hospital procedure and services, 20 Hospital Social Guides with proper training were posted at different counters of the hospital/Casualty. Maximum patients were given needful information.

Special Features

1. On request from Rockland Hospital, Mr R. C. Mishra was nominated as a member of Renal Authorization Committee of Rockland Hospital; he participated in various meetings of the Rockland Hospital as active member of that committee.
2. Institute of Home Economics, University of Delhi honored Mr R.C. Mishra as chief guest for the convocation function of the Institute. A lecture on “Concept and importance of social work at hospital setting” was delivered by Mr R.C. Mishra to the students on this occasion.
3. Mr R. C. Mishra was invited to the Nursing Training Programme organized by the Hospital Administration; a lecture on “Role of Medical Social Service Officer in Hospital” was delivered by him.

6.6. Blood Bank (Hospital)

Work Load of the Blood Bank (H) AIIMS

I. Donor Room

1.	Donors — patients relatives	15753
2.	Donors — voluntary	23189
	From Donation camps	7914
	From AIIMS Blood Bank	15275
3.	Single Donor Platelet	298
4.	Collected from	
	CNC	1002
	IRCS	1070
	Others	1252
	JPNA Trauma Centre	490
	Total collection	43054
	Total camps organized	91

II. Routine Laboratory

1.	Total patients	48725
2.	ABO grouping	134833
3.	OPD grouping and Rh 3791	
4.	Cross-match (Emergency/Routine)	65445
6.	Donor grouping	86108
7.	Indirect Coomb test	984
	Indirect Coomb test positive	219
8.	Total titre	127
9.	Total A/B	44934
10.	Direct Coomb test	650
	Direct Coomb test positive	108
11.	Blood issued	36767
12.	Received back	773

13.	Small units	1034
14.	Blood discarded	2887
15.	Blood issued but not transfused	Nil
16.	Blood issued to private wards	2833
17.	Components issued to private wards	3740
18.	Blood issued to outside hospitals	641
19.	Components issued to outside hospitals	83
20.	Cross-match done but not transfused	11429
21.	Blood issued to	
	IRCH	5149
	IRCS	05
	CNC	154
	Total	546909

III. Special Procedure Laboratory

1.	Minor grouping	205
2.	Platelet antibody	56
3.	Reagent cell thawing	600
4.	DAT 120	
5.	Cross matching discrepancy	482
6.	General discrepancy	51
7.	AB screening	64
8.	Component QC	332
9.	EQAS	04
10.	Antibody identification	36
	Total	1950

IV. Component Laboratory

1.	Platelet rich concentrate	33105
2.	Fresh frozen plasma	20372
3.	Liquid plasma	14174
4.	Cryoprecipitate	303
5.	Red blood cells	38942
	Total units of components prepared	106530

V. Infection Laboratory

1.	HIV test	42631
2.	HBV test	42667
3.	Anti HBc test (till 4.09.2010)	19045
4.	HCV test	43203
5.	VDRL	39439
	Total	187012

7. College of Nursing

Principal

Manju Vatsa

Lecturers

Meena Agarwal
Ashia Qureshi

Sandhya Gupta (on Deputation)
Deepika C. Khakha

Rachel Andrews
Kamlesh Sharma

Senior Nursing Tutor

Geeta Razdan

Nursing Tutor

Kiran Singh Simak
Sucheta
Philomina Thomas

Gayatri Batra (on study leave)
Shashi Mawar

Poonam Joshi
Babita Sahoo
Meena Ara

EDUCATION

Undergraduate

B.Sc. (Hons.) Nursing: 47 students graduated from the 4-year course.

B.Sc. Nursing (Post-Certificate): 25 students graduated from the 2-year course.

Postgraduate

M. Sc. Nursing: 18 students graduated from the 2-year course.

Nineteen students have joined the programme this year in the following specialties:

1. Paediatric nursing
2. Psychiatric nursing
3. Cardiology/CTVS nursing
4. Neurosciences nursing

Continuing Nursing Education

Organized the following short term courses, symposia and workshops.

1. Critical Care Nursing Update, 5–6 April 2010, Coordinator: Ashia Qureshi. Nurses from AIIMS hospital participated.
2. Neuro Nursing Update on Neuro-emergencies, 12–13 April 2010, Coordinator: Meena Agarwal. 28 nurses from AIIMS hospital participated.
3. TOT workshop on 'Facility Based Newborn Care' in collaboration with IANN-NNF-UNICEF at Kalawati Saran Children Hospital, 17–21 August 2010. Coordinator: Manju Vatsa. 40 nurse teachers and clinical nurses from various institutions all over the country participated.
4. TOT workshop for Nursing teachers in Bihar in collaboration with UNICEF-Patna Bihar. Coordinator: Manju Vatsa. 30 nurse teachers from ANM/GNM schools participated.

5. Workshop on Neonatal Resuscitation Programme for Nurses, National Neonatology Forum convention, Jaipur, 7 October 2010. Course Director: Manju Vatsa. 60 nurses from Rajasthan and other states participated.
6. Clinical Nursing Update, 18–24 October 2010. Coordinator: Deepika C. Khakha.
7. Symposium on Evidence Based Nursing Practice, Annual Day, College of Nursing. Over 300 nurses and students from AIIMS and other Delhi hospitals participated.
8. Workshop on Effective Training Learning and Assessment Strategies, 24–30 November 2010. Coordinator: Meena Agarwal and Kamlesh Sharma. 27 nurses from various hospitals participated.
9. Critical Care Nursing Update, 15–21 February 2011. Coordinator: Rachel Andrews. 29 nurses from various hospitals participated.
10. Workshop on Management Techniques and Human Relations in Nursing, 15–22 March 2011. Coordinator: Ashia Qureshi. 39 nurses from various hospitals participated.
11. Second Annual conference of the Indian Association of Neonatal Nurses on the theme LBW Baby Safe in Nurses' Hands, 19–21 November 2010. Chairperson: Manju Vatsa. 260 nurses participated.
12. A Training programme for 14 adhoc and contractual nurses in AIIMS was organized by the college for 30 hours during March–April 2011. Dr Manju Vatsa and Ms A. Qureshi coordinated the sessions.

Conducted orientation/briefing sessions for a group of visitors from abroad and 7 groups of visitors from various educational institutions from India.

Faculty members of the college attended 20 workshops/conferences and delivered 37 lectures for continuing nursing/medical education programmes and workshops held during the year.

CLINICAL AND COMMUNITY SERVICES

The faculty and students

1. participated in outdoor and indoor patient care activities of all clinical departments of AIIMS.
2. participated in 2 rounds of Pulse Polio programme at 6 centres of South Delhi, organized by Government of Delhi. Ms Kiran Singh coordinated and supervised the program.
3. organized and conducted 62 health education sessions in rural areas and over 118 in urban slums and OPDs of AIIMS on various health issues such as hypertension, immunization, newborn care, PNC care, etc.
4. organized 18 exhibitions and 18 role plays on various health prevention and promotion related topics for urban slums, on all health-related days such as TB day, Leprosy day, No tobacco day, cancer HIV/AIDS, etc.
5. conducted 9 surveys in various blocks of Ambedkar Nagar, identified the problems existing in those blocks and implemented necessary interventions.

PUBLICATIONS

Journals: 4

Abstracts: 4

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Dr Manju Vatsa was nominated Member, Faculty of Nursing and Dean, Baba Farid University of Health Sciences (BFUHS), Faridkot, Punjab; UGC review committee BFUHS; Board of studies, Banaras Hindu University, Varanasi and Sanjay Gandhi Postgraduate Institute of Medical Sciences, Lucknow; International Advisory Board, *Journal of Neonatal Nursing*; National Editorial Advisory Board, *Journal of Nursing Practice and Research*; ISJBT; Prism's Nursing Practice. Journal of clinical nursing—education, training and career development, *International Journal of Nursing Education*; Member, Core group, PhD consortium, Indian Nursing Council (INC); Member, Executive and Education committees, INC; Steering committee member, INC, GFATM project for training 90000 nurses in HIV/

AIDS; Expert, Strengthening nursing education in Bihar, UNICEF, Patna; Member, Core group, Indian Institute of Advance Nursing, INC and Clinton Foundation; Founder President, Indian Association of Neonatal Nurses (IANN), and Member, Executive Committee, IANN; Chairperson, Second Annual Conference, IANN and Coordinator, Pre-conference workshop on CPAP; Center of excellence in Midwifery SBA–INC JHPIEGO; Teaching sessions for PhD scholars through Video conferencing; Guide, 6 PhD students, Consortium for PhD in Nursing, INC and Rajiv Gandhi University for Health Sciences; Member, Committee for complaints regarding sexual harassment of women at workplace, AIIMS; Resource person, 19 sessions for various workshops and conferences; Expert member for (i) Consultation on nursing, Ministry of Health and Family Welfare, (ii) Institute of Liver and Biliary Sciences, New Delhi, (iii) Adjunct faculty, KL Wig Centre for Medical Education and Technology, AIIMS.

Meena Agarwal, contributed to editing of 8 chapters of course book on ‘Critical Care Nursing’ of Indira Gandhi National Open University (IGNOU); Core committee member for Critical care nursing course material for IGNOU; Took 2 sessions on Educational Objectives at Trained Nurses Association of India (TNAI) and Management of patients with head injury, Clinical Nursing Update, AIIMS; Speaker, 3rd International Trauma Conference on Organ donation.

Rachel Andrews was Resource Person, 6 session on Oncological Nursing, Cardiology, Nursing education and management at AIIMS, Dharamshila Hospital, TNAI, UNICEF sponsored workshop at Patna, Bihar; Counselor for IGNOU Post basic BSc Nursing, 2nd year, Medical Surgical Nursing course; External paper setter, Baba Farid University, Gujrat University, Kurukshetra University, Jamia Hamdard and Punjab University; Adhoc inspector Indian Nursing Council (INC) and Delhi Nursing Council (DNC) to inspect Colleges/Schools of Nursing 2011.

Ashia Qureshi chaired 2 sessions and guest speaker, Trauma critical care nursing, International Trauma 2010 conference.

Deepika Khakha delivered talk on Ethical issues in Nursing and chaired session on ‘Community Health care: Experiences in Nursing’ at 10th Asian CICIAMS, Singapore, 4 September 2010; Guest Speaker ‘Disaster Nursing—A new concept in Emergency Care’, Third Annual International Conference on TRAUMA, 26–28 November 2010, New Delhi; Resource person for 12 sessions on HIV/AIDS, Research Methodology, Nursing education and Mental Health at Jamia Milia Islamia, AIIMS, TNAI, Ruifadia College of Nursing and University of Delhi; Resource person, Teleconferencing on Research Methodology, IGNOU; Counselling Supervisor, ICTC, PPCTC, ART; Expert and Master Trainer for GFATM R-7 Project responsible for training Counsellors in HIV/AIDS care and counsellor, district of Delhi under GFATM R-7; Examiner, Baba Farid University of Health Sciences, Punjab, Rajasthan University, AIIMS, PGIMER, Chhatrapati Shahuji Maharaj Medical University, UP; Adjudicator, MSc Nursing Thesis, B.P. Koirala Institute of Health Sciences, Nepal.

Kamlesh Sharma was Resource Person for 6 sessions in Obstetrics, Pediatrics and Oncological Nursing for nurses at AIIMS, Dharamshila Hospital, TNAI, UNICEF sponsored workshop at Patna, Bihar; Chaired Panel Discussion, Care of LBW Babies and KMC, 2nd Annual Conference Indian Association of Neonatal Nurses 2010, 19–21 November 2010; Adhoc inspector, Indian nursing council (INC) and Delhi nursing council (DNC) to inspect colleges/schools of nursing in 2010–11; Guest speaker, Evidence on ‘Role of Nurse Practitioners in Maternal and Newborn Health’, Symposium on ‘Evidence for action’ for reducing Maternal and Newborn Mortality and Morbidity, WHO collaborative centre for Human Reproduction, Department of Obstetrics and Gynecology, AIIMS, New Delhi, December 2010.

Philomina Thomas presented two papers at Indira Gandhi National Open University on Evaluation in Nursing Education and Research Methodology; participated in two International teleconferences as part of the Canadian Institutes of Health Research (CIHR) sponsored project on Source Country Perspectives on the Migration of Health workers.

Shashi Mawar was Resource Person, ‘Improving quality of life for hemodialysis patient’, Fourth Congress of International Society for Hemodialysis Conference, New Delhi; Resource person for 3 sessions for Workshops on Nursing education and Management

8. Research Section

As per the mandate given to the All India Institute of Medical Sciences (AIIMS), research forms as important component. AIIMS has been at the forefront of conducting high quality research, both in the fields of basic and applied sciences. During the year under review, the faculty drew extramural grants for various research projects from national and international agencies amounting to nearly Rs 73 crores. At present, 622 extramurally funded projects are being conducted at AIIMS.

The research section deals with the administration of all extramural research done at AIIMS. The Research Advisory Councils constituted by the Director are as follows.

Research Advisory Council (Basic Medical/Allied Sciences)

1. Professor R. C. Deka, Director, AIIMS	Chairman
2. Professor Krishna N. Ganesh, Director Indian Institute of Science and Research, Pune	Member
3. Dr C.R. Bhatia, Director, Bio-Medical Group Bhabha Atomic Research Centre, Mumbai	Member
4. Professor N. R. Jagannathan, Head, NMR Facility, AIIMS	Member
5. Professor S. P. Thiagarajan, Director and Chief Advisor, Sri Ramachandran University, Porur, Chennai	Member
6. Professor Balram Bhargava, Department of Cardiology/ Stanford India Bio-design, AIIMS	Member
7. Professor Anand Mohan, Professor of Electronics Institute of Technology, BHU, Varanasi	Member
8. Professor Madhu Khullar, Department of Experimental Medicine, PGIMER, Chandigarh	Member
9. Professor A. B. Dey, Dean, Research Section, AIIMS	Member–Secretary

Research Advisory Council (Clinical)

1. Professor R. C. Deka, Director, AIIMS	Chairman
2. Professor T. M. Mohapatra, Director, IMS-BHU Varanasi	Member
3. Professor S. K. Shankar, Director, NIMHANS, Bangalore	Member
4. Professor M. M. Kapoor, Former Professor of Surgery AIIMS	Member
5. Professor S. K. Panda, Head, Department of Pathology, AIIMS	Member
6. Professor Narendra K. Arora, Executive Director Inclen Trust India, New Delhi	Member
7. Professor K. M. Shyam Prasad, Chancellor Martin L. Christian University, Shillong, Meghalaya	Member
8. Professor Neeraj K. Seth, Senior Advisor (Health) Planning Commission, New Delhi	Member
9. Professor A. B. Dey, Dean, Research Section, AIIMS	Member–Secretary

The information related to ongoing and completed research projects are listed in the principal investigators department/centre.

9.1 Anaesthesiology

Professor and Head

Chandralekha

Professors

M.K. Arora
S. Rajeshwari
L. Kashyap

D.K. Pawar
Anjan Trikha
Dilip Shende

Ravinder Kumar Batra
Maya Dehran

Additional Professors

Virender K. Mohan

Vimi Rewari
Rani Sunder

Vanlal M. Darlong

Associate Professors

A.P. Bhalla

R. Pandey
Jyotsna Punj

Anjolie Chhabra

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

T. K. Das

Rima Dada

Arundhati Sharma

(Electron Microscopy)

(Genetics)

Renu Dhingra

Associate Professors

T. C. Nag

Ritu Sehgal

(Electron Microscopy)

EDUCATION

Undergraduate

The department is involved in MBBS, BSc (Hons.) Nursing, Post certificate Nursing, Ophthalmic, Radiographic techniques and speech therapy training. Several MBBS students undertook the summer training fellowship program under the Kishore Vagyanik Puraskar Yojana (KVPY) and one student was awarded the fellowship.

Postgraduate

Besides training MD, MSc and PhD anatomy students, the department conducted the Human Genetics course for postgraduate students of Department of Biotechnology, AIIMS. The faculty delivered series of lectures to MSc students in neurosciences, human molecular genetics and embryology in Jiwaji University Gwalior. The faculty also delivered lectures on anatomy for postgraduates during teleconference (held at IGNOU on Gyan Darshan) organized by National Board of Examination during April 2010.

Short and long term training

One PhD student from Department of Molecular Biology and Neurochemistry, Leibniz Institute for Neurobiology, Germany took short term training in the area of Neuroanatomy. Two university students under IASc-INSA-NASI fellowship programme, received training in cryosectioning, immuno-histochemistry, Western blot, etc. and also worked on a small research project during this period. Besides this, seven BTech (Biotechnology) students from Amity University worked for summer training in basic cytogenetics and molecular techniques in ophthalmic, neuropsychiatric, infertility and ocular disorders. Two scientists from Myanmar were trained in plastination, genetics and neuroanatomical techniques. e-Learning facility has been upgraded in the department, and provides facilities to manage the undergraduate and postgraduate courses and coordinate the departmental activities such as Journal Club presentations and seminars. The postgraduate and PhD students are also using the e-Learning facility for scientific literature search and activities related to their theses and research.

Continuing Medical Education

The department facilitated the conduct of six cadaveric dissection workshops for the departments of Neurosurgery and Orthopaedics.

Lectures delivered in CME/ National and International conferences: 32

RESEARCH

Funded Projects

Ongoing

1. Molecular studies of the excitatory and inhibitory synapses of the auditory cortex in developing chick (*Gallus domesticus*) exposed to prenatal chronic noise. S Wadhwa, 2011-2013, CSIR , 6.6 lakhs.
2. Influence of prenatal chronic noise exposure on brain stem auditory nuclei, hippocampus and spatial memory in chicks. S Wadhwa, DBT, 2008-2011, 65.49 lakhs.
3. Studies on ovariectomy induced anatomico-chemical changes in rat cerebellum and their response to estradiol and tamoxifen therapies. R D Mehra, ICMR, 2008-2011, 5.64 lakhs,
4. A stereological study of age related morphological and neurochemical changes in the human cochlear nucleus. T. S. Roy, ICMR, 2010-2013, 29.28 lakhs.
5. To study the effects of antioxidant supplementation on neuronal populations of rat hippocampus following sodium arsenite exposure during early postnatal period IRG, P Dhar, 2009-2011. 1.7 lakhs.
6. A Study on the Novel Analgesic Effect of Intraspinal Loperamide in a murine model of postsurgical pain. S.B.Ray, ICMR, 2008-2011, 30.2 lakhs.
7. Genetic and DNA fragmentation study in infertile couples opting for ART and couples experiencing recurrent IVF/ICSI failure. R. Dada, ICMR, 2008-11, 5.0 lakh.,
8. Role of sperm Factor (oxidative stress, DNA damage) in RSA. R.Dada, DBT, 2010-13, 15 lakhs.
9. To evaluate possible presence of mutations in VSX1 gene in Keratoconus, with Rajendra Prasad Centre for Ophthalmic Sciences A.Sharma, AIIMS, 2008-2010, 2.0 lakhs.

Completed

1. Prenatal Development and Maturation of Human Inferior Colliculus T S Roy, DST, 2007-2010, 23.88 lakhs.
2. Effect of sodium arsenite exposure during early postnatal period on rat liver P Dhar, 2010
3. Analysis of Mitochondrial DNA Mutations in pathogenesis of spermatogenetic arrest Rima Dada,. ICMR, 2007-10, 4.34 lakhs.
4. Mutation analysis in congenital and developmental glaucoma and development in North Indian Population. Rima Dada, DBT, 2007-10, 11.69 lakhs.
5. Role of circulating angiogenic factors in the pathogenesis of preeclampsia. R. Dhingra, AIIMS, 2008-2010, 1.5 lakhs.
6. Cellular localization of markers of oxidative stress in aging human retina. TC Nag, AIIMS, 2010–2011, Rs 1 lakh.

Collaborative

Ongoing

1. Role of TNF- α in the pathogenesis of experimental acute pancreatitis and the effect of anti-TNF- α therapy in attenuating the severity of pancreatitis and in the subsequent regeneration of the pancreas (with Gastroenterology).
2. Comparison of administration of bone marrow mononuclear (BMMNCs) in combination with melatonin versus BMMNCs alone in middle cerebral artery occlusion model of stroke in rats. (with Neurology).
3. Phase III clinical trial with intravasal injectable Male contraceptive RISUG. (Biochemistry).
4. Clinical, pathological and Genetic profile in epilepsy (Neurosurgery).

5. Molecular analysis in congenital cataract (RP centre).
6. Congenital Adrenal hyperplasia – genotype phenotype correlation (Endocrinology and Metabolism).
7. Genetic Parameters of Neuroblastoma: A study on Fine Needle Aspiration Cultures (Pediatric Surgery).
8. A study on the molecular etiology underlying skeletal dysplasia (Endocrinology and Metabolism).
9. Modulation of genes to understand the biology of program in CML patients (Haematology).
10. A study on the association of Monoaminergic pathway gene polymorphisms and Alcohol dependence (NDDTC).
11. Feasibility study of a novel intraosseous access device for emergency vascular access (Cardiac Radiology supported by Stanford India Biodesign).
12. Cytogenetic and Molecular study in Coloboma (RP Centre)
13. Genetic Studies in Myelodysplastic syndrome (with Haematology)
14. Clinical, radiological and genetic study in Blepharophimosis (with RP Centre)
15. Investigation of genetic variations in CH13L1 and effect of YKL-40 production in Indian Asthmatic patients (with Biophysics)
16. Genotype, phenotype studies in disorders of sexual differentiation (Endocrinology and Metabolism)
17. Evaluation of reflexology as an adjunctive therapy in patients with Lennox Gastaut Syndrome, Mutation screening of GPR-65 in LGS (Biophysics)
18. Mutational analysis of endothelial dystrophies (with RP Centre)
19. A study on the genetic and molecular analysis of Wilm's tumour (with Pediatric Surgery)
20. Cytogenetic analysis of effect of radiations on cardiac patients (with Cardiology)
21. Oxidative stress in Müller cells of aging human retina (with RP Centre)

Departmental Research

Ongoing

1. Expression of calcium binding protein - calbindin in the chick hippocampus following prenatal excessive sound stimulation.
2. Effects of prenatal chronic noise exposure on the morphology of auditory cortex in chick.
3. Expression of Na⁺/K⁺ ATPase and glutamine synthetase in posthatch day 1 chick hippocampus and auditory nuclei following prenatal patterned and unpatterned sound stimulation.
4. Hippocampal regulation of immune mechanism.
5. Brain aging and neurodegeneration: Neuroprotective and biomodulatory roles of estrogens and glucocorticoids.
6. Development of the human auditory system
7. Age changes in the human trochlear, abducent and cochlear nerve
8. Morphology of the fetal and adult human pancreatic duct system
9. Effects of Lipoic acid as an antioxidant supplement on arsenic induced toxicity in developing rat hippocampus
10. Effect of antioxidants on sodium arsenite induced neurotoxicity in the developing rat cerebellum
11. Effect of arsenic exposure during early postnatal period on rat kidney
12. Effect of estrogen & estrogen like compounds on cerebellum of adult female rat; A histochemical and molecular study

13. Mutation analysis in connexins in congenital cataract.
14. DNA integrity analysis in germ cells.
15. Mutational Analysis of growth hormone deficiency in North Indian Children.

PUBLICATIONS

Journals: 33

Abstracts in journals: 25

Abstracts/Posters presented at conferences: 33

Chapters in Books: 4

PATIENT CARE

1. Genetic Diagnosis Tests	Nos	Nos
Cytogenetic analysis	580 Yq microdeletion analysis by PCR	61
Seminal ROS estimation	182 DNA integrity analysis by SCSA	75
Chromosome analysis Tests:		
Karyotyping Tests	501 Amniotic fluid/ cord blood	24
CML cases	60 Cardiac cases	28
2. Embalming Services		
Embalming of dead bodies for;		
i) Transportation	759 ii) Teaching/research	9
3. Fluorosis Laboratory: Fluoride estimation tests		
Urine samples	50 Blood/serum	44
Drinking water	51	

AWARDS, HONOURS AND SIGNIFICANT EVENTS

1. Mr Mukesh Kumar Varshney, Ph.D. student was awarded IBRO School of Neuroscience Fellowship for participation in IBRO School of Neuroscience-Hong Kong and Joint Scientific Meeting of The Hong Kong Society of Neurosciences and the Biophysical Society of Hong Kong: May 31st – June 11th, 2010.
2. Dr. Sonali Kataria was awarded ‘Tulsabai Somani Educational Trust Award’ of IAN in the 5th Congress of Federation of Asian-Oceanian Neuroscience Societies (FAONS) Lucknow, Nov., 2010.
3. Mr. Mukesh Kumar Varshney received ‘Best Poster Presentation Award’ in the International Symposium on “Brain Aging and Dementia: Basic and Translational Aspects” (a satellite of 5th Congress of FAONS and 28th Annual Meeting of IAN) BHU, Varanasi, Nov., 2010.
4. Dr. Tony George Jacob was awarded Sandwich Doctoral Fellowship 2010 from the Government of France (Science and Technology Division of the Embassy of France in India) and worked at INSERM Unit 624, Marseille, France, June 28 to December 28, 2010.
5. Dr Rima Dada was felicitated in student trainee session and received Lalor Foundation award on the poster Mt Dysfunction in Male Infertility at 35th annual Meeting of American Congress of Andrology, April 1-2nd 2010 Boston, USA
6. Mrs Betsy Varughese received first prize in the Annual biotechnology conference for students (ABCS-2010) for paper entitled “Role of sflt-1 in the pathogenesis of pre-eclampsia”, held in International institute of information technology, Pune, 2010

Professor Rani Kumar as Dean took delegation from AIIMS to visit Bangabandhu Sheik Mujib Medical University (BSMMU) for implementation of MoU on academic cooperation between AIIMS and BSMMU; Chairperson for scientific session at the 58th National Conference of Anatomical Society of India, Pune; Appointed as external expert for the postgraduate Board of studies in anatomy department of Pt B D Sharma University of health sciences, Rohtak.

Professor Shashi Wadhwa served as expert member for assessment committee for regularization of scientists on 9 April 2010, 29 May 2010 and 25 Feb 2011 at National Brain Research Centre at Manesar, Haryana; Paper setter for the integrated PhD course run by the NBRC, Manesar; Moderator and onsite assessor for DNBE in Anatomy at the NBE, Dwarka, New Delhi; Attended task force meeting of the DBT Expert group on Neuroscience on 11 May 2010 at NII, New Delhi; External examiner for viva voce of M Phil student in Life Sciences on 23 June 2010 at JNU, New Delhi, 3 MD theses from Rajkot and 1 PhD thesis from BHU, Varanasi; Participated in workshop on “Women in Science” organised by Environment, Science and Technology Office, US. Embassy, New Delhi on August 26, 2010 at Constitution Club, New Delhi; Appointed Estate Officer (Public Premises) and Central Public Information Officer (CPIO) for disclosure under RTI for Anatomy Department; Member of the Prize award committee of National Research Development Corporation (NRDC), enterprise of DSIR under Ministry of Science and Technology, Govt of India and attended its various meetings held in 2010; Member of selection committee for faculty positions at School of Medical Sciences, Hyderabad University and J&K Public Service Commission, Jammu and technical Staff at CDRI, Lucknow; Member, National Advisory Committee of 5th Congress of Federation of Asian Oceanian Neuroscience Societies (FAONS); Member, National Apex Committee for Stem Cell Research and Therapy; Inspector for MCI; Chairperson of research subcommittee and teaching schedule committee; as member of Deans’ committee, Institutional committee for stem cell research and therapy; Reviewed Neuroscience research projects and annual project reports for ICMR, DST and DBT; Member, Editorial board, J. Anatomical Society of India; Reviewed research papers submitted to IJMR, NAMS J, J. Anatomical Society of India, Developmental Neuroscience, Brain Research Bulletin and Neuroscience Letters.

Professor Raj Mehra was Member, Selection Committee of P.S.C. (UP) for selection of faculty in Anatomy, April, 2010, ESI Dental College, Delhi, Jan., Feb., 2011; Member, Expert Committee for site visit at NIREH, (ICMR) Bhopal, Feb. 2011; 5th Congress of Federation of Asian and Oceanian Neuroscience Societies (FAONS-2010), Lucknow, Nov. 2010 chaired two sessions and judged a poster session in the conference; Participated in the International Congress on Steroid Research, March, 2011 and presented a paper entitled “Neuromodulatory effects of estrogen and SERMs in age related cognitive decline: A proteomic and neurobehavioral approach”; Co-ordinator for MCI inspections; Carried out assessment of the physical and other teaching facilities for starting M.D. (Anatomy) in a number of Medical colleges and institutions; Reviewed neuroscience research projects for ICMR, DBT, DST, CSIR and manuscripts for publication in Brain Research, Neurosciences Letters, International journal of Sciences and Life Science; Chairperson, Window AC Committee; Member of Research Committee and Animal Ethics Committee of AIIMS; Member, Chronic Disease Biology (Neuroscience, biomarkers and neuroengineering) Task Force of DBT and participate in their meetings at Delhi (May, Aug., 2010) and Bangalore (Dec.2010); Guest of Honour in FAONS Satellite Symposium on “Glial Cells in Health and Disease”, Gwalior Dec. 2010.

Professor T.S. Roy continued to be Member, Editorial board, Pancreas; Chaired a session on “Acute Pancreatitis: The early events” in PANCREAS 2010-symposium organized by Department of Gastroenterology, AIIMS, April 10, 2010; Reviewed manuscripts for Clinical Anatomy, Pancreas, National Medical Journal of India, Brain Research and Neuroscience Letter; Coordinator and member of the Medical Council of India expert committee for evaluation of medical colleges in India; Reviewed projects on Neurosciences for various research organizations.

Dr Pushpa Dhar continues to be Member, Teaching Schedule Committee for MBBS, Phase-1; Reviewed scientific papers submitted to Toxicology Mechanisms and Methods; Appointed external expert for faculty selection in Anatomy at LHMC (DU); Completed tenure as Visiting Consultant at College of Medicine, Dept. of Human & Clinical Anatomy (Sultan Qaboos University, Muscat, Oman)

Dr S. B. Ray was External Examiner in Anatomy for Delhi University for both Regular and Supplementary Ist Prof. MBBS Examinations; Participated and presented papers at 58th Annual Conference of the Anatomical Society of India at Pune in December 2010 and the 43rd Annual Conference of the Indian Pharmacological Society at Hyderabad in December 2010.

Dr Rima Dada was jury member for Medical Research Council fellowships, Edinburgh and also jury member for Royan International research awards in Reproductive Biomedicine and Stem cells, Iran; Nominated as member of American Society of Andrology and ARVO; Member of ICMR task force on male Infertility; Evaluated three MD and 2 PhD theses in Genetics; External examiner for advanced genetics course in GNDU, Nov 2010; Member, Core committee for AIIMS convocation, AIIMS institute day exhibition and cultural evening, and anti-ragging committee; Member, Institute Biosafety committee on Recombinant DNA research; Member, Institute committee to look at improvement of standard of research activities in autonomous institutions; Reviewed articles submitted to Journal of Reproduction and Contraception, Indian Journal of Medical Research, Andrologia, Fertility and Sterility, Mitochondria, BMJ case report, Andrologia, J of Paediatric Neurology and J of Paediatric Biochemistry, Indian Journal of Urology Genetics and Molecular Research, Current Paediatric Research, Human Reproduction Expert Reviews in Gynaecology and Obstetrics, Asian J of Andrology, Indian J of Urology, Indian J of Biochemistry and Biophysics, Breast cancer Research and Treatment; Reviewed projects submitted to DBT, ICMR, Indo US technology Forum and Wellcome Trust; Member, Editorial board, J of Paediatric Neurology and J of Paediatric Biochemistry, The open Andrology Journal, and International J of Medicine; Chaired a session at CME at NIHF CME and Androcon 2011 at Dayanand Medical College Ludhiana, Feb 2011; Appeared on TV for Star Plus, and India TV on show to increase public awareness about Role of Genetic factors and lifestyle on male reproductive health.

Dr Arundhati Sharma was Member of the core committee formulating the syllabus for DM course in medical genetics to be started in various medical colleges in India; Member involved in devising the curriculum for Genetics at postgraduate level in India; Reviewed manuscripts for various journals; Evaluated two PhD and three MD theses; Reviewed projects submitted to funding agencies like DBT, CSIR etc.; Expert for the appointment of faculty in Genetics; Visiting faculty for Human Genetics at the Department of Human Molecular Genetics, Jiwaji University, Gwalior; Participated in First Indo US symposium on Skeletal Dysplasia. February 12-13, SGPGIMS, Lucknow.

Dr Renu Dhingra was Member, Editorial board of International Society of Plastination; Member, International Society of Plastination; Executive member of DASMOS; Member, Teaching schedule committee of AIIMS, Committee for rules for student conduct; Reviewed research papers submitted to International journal of Plastination and research projects submitted to ICMR; Evaluated one MD thesis.

Dr T. C. Nag was Supervisor and Co-supervisor for several Ph D and MD students; Reviewer for Diabetes, Obesity and Metabolism.

9.3 Biochemistry

Professor and Head

Neeta Singh

Professors

Subrata Sinha
(On deputation)
S S Chauhan

D N Rao

Nibhriti Das

M R Rajeswari

Additional Professors

P P Chattopadhyay
Alpana Sharma

Kalpana Luthra
Kunzang Chosdol

Assistant Professor

N C. Chandra (Adhoc)

EDUCATION

Undergraduate

The department continues with its UG teaching programmes that include MBBS (two semesters), Nursing (one semester) and BSc (Hons) Nursing (one semester). The innovation in the UG teaching and learning of biochemistry is based on problem-based learning, and question answer sessions during the tutorial and practical hours. New problem-based modules had been incorporated for small group discussions to facilitate self directed and contextual learning of biochemical concepts. UG students now perform selected basic immunological and molecular biology techniques such as serum electrophoresis, DNA isolation and agarose gel electrophoresis, at bench level.

Postgraduate

These include ten MSc. and eleven MD students. The department also has 35 PhD students.

Short-term training

Summer training in research was provided to MBBS students from AIIMS. Twelve MBBS (1st year) students have done summer research projects. Seven have been awarded the fellowship under KVPY Scheme of the DST. Ten PG/UG students from all over India received short-term training. The department also imparted short-term training (one month) to two MSc students from BPKIHS, Dharan, Nepal.

Lectures delivered in CME/ National and International conferences: 29

RESEARCH

Funded projects

Completed

1. 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 (2007–2010). Funds: Rs 22.24 lakhs.
2. Genetic characteristics of HIV-1 subtype C envelopes inducing V3 antibodies. Kalpana Luthra. Funded by AIIMS (2008–2-10). Funds 2 lakhs.
3. 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 (2006–2010). Funds Rs 18 lakhs.

4. Studies on SREBP-mediated regulation of low-density lipoprotein receptor (LDLR), low-density lipoprotein receptor-related protein (LRP) and receptor-associated protein (RAP). NC Chandra. Funded by DST (2006–2010). Funds Rs 23.29 lakhs.
5. A comparative study on expression and/or transcription between LDL receptor (LDLR) and tumor suppressor proteins (P53, pRB) in presence of insulin, thyroxin and benzo-(á)-pyrene. NC Chandra. Funded by AIIMS (2008–2010). Funds Rs 2 lakhs.

Ongoing

1. To study the immune response of T cell dominant synthetic peptides derived from HPV-16 using different adjuvants in a mouse model of cervical cancer. Neeta Singh. Funded by DBT (2008–2011). Funds: Rs 25.27 lakhs.
2. Effect of non-ionizing Electro Magnetic Fields (EMF) on human health. Neeta Singh. Funded by ICMR (2010–2015). Funds: Rs. 91.73 lakhs.
3. Development of HPV18 chimaeric vaccine candidate. Neeta Singh. Funded by DBT (2011–2013). Funds: Rs 23.85 lakhs
4. Effect of non-ionizing electromagnetic field (EMF) on human health. DN Rao. Funded by ICMR (2010–2015). Funds: Rs 91.54 lakhs.
5. Multiple antigen peptide approach (MAP) incorporating B-T constructs of F1 and V antigens of *Y. pestis* in nanoparticles of plague vaccines. DN Rao. Funded by DBT (2008–2012) Funds: Rs 60 lakhs.
6. Estimation of oxidative stress in pregnant women on daily verses weekly iron supplementation. DN Rao. Funded by ICMR (2011–2013). Funds: Rs 27 lakhs.
7. Role of immune clinical and cytokine gene polymorphism correlation with recovery in patients with post traumatic shock. DN Rao. Funded by ICMR (2010–2013). Funds: Rs 43 lakhs.
8. Development of IgM based diagnosis for Chikungunia virus infection D.N. Rao. Funded by CSIR (2010–2012). Funds: Rs 12 lakhs.
9. YscF protein as a vaccine candidate for plague DN Rao. Funded by ICMR (2010–2012) Funds: Rs 13 lakhs.
10. A study to assess the effects of long term obstruction of epididymus on the morphology, functional and chromatin status of epididymal spermatozoa in men: comparison with ejaculated sperm from men of proven fertility. DN Rao. Funded by ICMR (2008–2011) Funds: Rs 18 lakhs.
11. Phase III clinical trial with an intranasal injectible male contraceptive RISUG. DN Rao. Funded by ICMR (2008–2012). Funds: Rs 9.11 lakhs.
12. Complement Receptor-1, TNF- α , Nitric Oxide and the respective gene polymorphisms in relation to the pathophysiology and susceptibility to severe malaria. Nibhriti Das. Funded by ICMR (2009–2012). Funds: Rs 29.95 lakhs.
13. Mechanism(s) of Regulation of Human Dipeptidyl Peptidase III Expression in Tumor Cell Lines. SS Chauhan. Funded by Defence Research and Development Organization, Government of India (2008–2011). Funds: Rs 50.86 lakhs.
14. Translating Head and Neck Cancer Markers into Diagnostic Assays. SS Chauhan. Funded by DBT (Indo–Canada) (2010–2013). Funds: Rs. 78.51 lakhs.
15. Anti-gene strategy of gene regulation: Formation and stability of DNA triplexes and their anticancer activity on HMGAI expression in cell lines. MR Rajeswari. Funded by DST (2010–2013). Funds: Rs 53 lakhs.
16. Studies on the effect of DNA-Binding ligands on the expression of C-Met, a receptor tyrosine kinase in hepatoma using Rat Model System. MR Rajeswari. Funded by DST (2010–2013). Funds: Rs. 37.60 lakhs.

17. Characterization of circulating cell-free mRNA species of differentially expressed protein in plasma and to correlate with molecular pathogenesis of Friedreich's Ataxia. MR Rajeswari. Funded by ICMR (2010–2013). Funds: Rs 28.80 lakhs.
18. Identification and characterization of the prevalence of *B-lactamase* in carbapenem-resistant strains of *Acinetobacter baumannii*. MR Rajeswari. Funded by ICMR (2010–2013). Funds: Rs 27.14 lakhs.
19. Therapy of infectious and chronic diseases: Targeted gene delivery and long-term specific modulation of gene expression. P Chattopadhyay. Funded by DBT (2006–2011). Funds: Rs 54.38 lakhs.
20. Hypoxia and p54-HIC1 axis in stemness of glial tumors and cell lines. P Chattopadhyay. Funded by DBT (2009–2012). Funds: Rs 51.50 lakhs.
21. Promoter mediated tumor cell targeting by siRNA mediated gene silencing. P Chattopadhyay. Funded by DBT (2011–2013). Funds: Rs 38.74 lakhs.
22. Characterization of HIV-1 subtypes in Indian subjects, a nested part of RO1 project. Kalpana Luthra. Funded by NIH, USA Design and use of HIV V3 mimetic immunogens. (2005–2010). Funds: Rs 39 lakhs.
23. Production and Characterization of Site-selected Human Monoclonal Antibodies against the Envelope Glycoprotein of HIV-1 (Clade-C). Kalpana Luthra. Funded by DBT (2009–2012). Funds: Rs 55 lakhs.
24. Characterization of HIV-1 envelope in natural infection: immunofocusing vaccine development. Kalpana Luthra. Funded by ICMR (2010–2012). Funds: Rs 27 lakhs.
25. Drug selected mutations in the reverse transcriptase and protease genes of HIV-1 viruses from proviral DNA of HIV-1 infected pediatric patients—A pilot study. Kalpana Luthra. Funded by AIIMS (2010–11). Funds: 1 lakh.
26. Telomerase activity and telomere length in T-cells in patients of Parthenium induced contact dermatitis and its correlation with disease severity. Alpana Sharma. Funded by DBT (2008–2011) Funds : Rs 31 lakhs.
27. Role of angiogenic factors and cyclooxygenase in multiple myeloma. Alpana Sharma. Funded by ICMR (2009–2012). Funds: Rs 22 lakhs.
28. Study of T cells and its Scavenger Receptor (SCART) in the pathogenesis of autoimmune skin disorder: Pemphigus Vulgaris. Alpana Sharma. Funded by DBT (2011–2014). Funds: Rs 42.56 lakhs.
29. Study of Th-1 and Th-2 type cytokine gene polymorphism and their association with Parthenium induced contact dermatitis. Alpana Sharma. Funded by ICMR (2010–2013). Funds: Rs 21.13 lakhs.
30. Study of extracellular matrix proteins in multiple myeloma. Alpana Sharma. Funded by AIIMS (2009-2011). Funds: Rs 2 lakhs.
31. An in-vitro study of the role of FAT, a Drosophila tumor suppressor gene homologue, in human glial tumorigenesis. Kunzang Chosdol. Funded by DRDO (2008–2011). Funds: Rs 46.41 lakhs.
32. To analyse the link between cancer and inflammation by studying the interaction between *FAT1* and Cyclooxygenase 2 (*COX2*) at the level of signal transduction, cell growth properties and expression of inflammatory modulators. Kunzang Chosdol. Funded by DST (2011–2014). Funds: Rs 20.24 lakhs.
33. Hypoxia and Notch signaling in Glioblastoma: Implications for an adverse phenotype. Kunzang Chosdol. Funded by DBT (2011–2014). Funds: Rs 47.81 lakhs.
34. A case-control study of the genetic polymorphism (SNP) of folate metabolizing enzymes and their association with Meningioma and Glioma in Indian population. Kunzang Chosdol. Funded by AIIMS (2009-2011) Funds: Rs. 2 lakhs.
35. A comparison of gene expression in glioblastoma cell lines under short and long term exposure to hypoxia with reference to the key cellular regulatory and adaptive pathways. Kunzang Chosdol. Funded by ICMR (2009 – 2012). Funds: Rs 25 lakhs.

36. An *in vitro* silencing of endogenous oxidized-LDL-receptor (LOX) gene by siRNA: Study of NF-kB activated expression of proinflammatory cytokines and related atherogenic proteins—its evaluation against anti-inflammatory cytokines mediated responses. NC Chandra. Funded by DBT (2007–2010). Funds: Rs 33.75 lakhs.
37. Intracellular cholesterol homeostasis and cell proliferation. NC Chandra. Funded by Department of Atomic Energy, Board of Research in Nuclear Sciences (2009–2012). Funds: Rs 15 lakhs.
38. Studies on nuclear cholesterol and expression of cell cycle proteins in normal and tumor cell lines. NC Chandra. Funded by ICMR (2010–2013). Funds: Rs 30.48 lakhs.
39. Evaluation of curcumin in the management of advanced cancer cervix. Neeta Singh (Co PI), Funded by DBT (2007–2011). Funds: Rs 59 lakhs.
40. Investigations of genetic basis, and gene-lifestyle interactions in generalized and regional obesity, insulin resistance and diabetes in Asian Indians. Kalpana Luthra (Co PI), Funded by DBT (2006–2010). Funds: Rs 46.79 lakhs.
41. Comparison of efficacy of transplantation of basal cell layer enriched epidermal suspension in patients with stable vitiligo vulgaris and segmental vitiligo. Alpana Sharma (Co PI), Funded by ICMR (2010–2013). Funds: Rs 18 lakhs.

Departmental projects

Completed

1. Development of HPV-16 candidate vaccine prototype.
2. A pilot study to evaluate the inter-relationship of insulin, insulin receptor and LDL receptor in patients of Type 1 diabetes mellitus.
3. Role of Leptin in the regulation of LDL- and oxidized LDL- receptors in cultured cells.

Ongoing

1. Insights into the role of one carbon metabolism in the progression of cervical carcinogenesis.
2. Role of mitochondria in epithelial ovarian cancer – an *in vivo* and *in vitro* study.
3. Analysis and correlation of molecular markers with treatment outcome in epithelial ovarian cancer.
4. Targeting apoptotic pathways for the treatment of primary epithelial ovarian cancer.
5. Development of HPV18 candidate vaccine prototype.
6. Insights into molecular mechanism of action of *Morinda citrifolia* in cervical cancer cells.
7. Endothelial nitric oxide synthase gene polymorphism and Rheumatoid arthritis.
8. Levels of complement receptor 1 and 2 (CR1 and CR2) in the blood cells in relation to Rheumatoid Arthritis.
9. Relationship between apo-A4 gene polymorphisms (Thr347Ser and Gln360His) and coronary artery disease in Northern Indian subjects.
10. Expression and modulation of leukocyte Complement Receptor 1 and CD59 (Protectin) in relation to rheumatoid arthritis.
11. Interaction of *Mycobacterium tuberculosis* secretory antigens ESAT-6 and CEP-10 with complement receptors, calcium signaling and antimicrobial functions of macrophages.
12. Expression and modulation of complement regulatory proteins DAF (CD55) and MCP (CD46) in relation to the patho-physiology and clinical disease activity of rheumatoid arthritis.
13. Study of EMPRIN, CD147 and BIGH3 in urinary bladder cancer.
14. Th1 and Th2 Cytokine gene polymorphism in parthenium induced contact dermatitis.

15. Study of cytokines, transcription factors chemokine receptors and their ligands of Th17 and T reg cells in pemphigus vulgaris.
16. Effect of differentiation Inducing Factor-1 on proliferation and VEGF expression in multiple myeloma cells.
17. Expression of cytokines and transcription factor of Th17 cells in patients of transitional cell carcinoma of the bladder.
18. Leptin and associated plasma risk factors in human obesity.
19. Modulation of oxidized-LDL-receptor and its effect on pro- and anti-inflammatory cytokines.
20. Cholesterol homeostasis and expression of cell cycle proteins (cyclin E and CDK2) in normal prostate, benign prostatic hyperplasia and carcinoma prostate cases: A pilot study.
21. Insights of cholesterol homeostasis in lymphocyte of normal and chronic lymphocytic leukemia subjects: A case control pilot study.
22. Study of feedback regulation of intracellular cholesterol and immunogenic response by T cells using immunogen, mitogen and chemical carcinogen in mice model.
23. Cholesterol homeostasis and immunogenic responses on B cell proliferation in mice model by immunogen , mitogen, and carcinogen.
24. Studies on intracellular cholesterol homeostasis and cell-cycle proteins.

Collaborative projects

Completed

1. Computational studies and structure based rational drug design for Flaviral envelope proteins (School of Bioinformatics, JNU).
2. MRI studies on murine skin tumors (NMR Dept, AIIMS).
3. Histopathological investigations on murine skin tumors (Histopathology Dept, AIIMS).

Ongoing

1. Evaluation of circulating tumor DNA in serum of breast cancer patients.(IRCH, AIIMS).
2. Clinical Proteomics, CAN and other biochemical parameters of Neurological disorders Freidreich's ataxia and spiniocerebellar ataxia, 2, 3 ,12 (Department of Neurology) .
3. Proteomic analysis of host parasite interactive proteins of Cryptosporidim (Department of Microbiology).
4. Characterization of Salmonella Enterica Serotype Typhi strains from North India (Department of Microbiology).
5. Biophysical studies on interactions of membrane proteins of *Acinetobacter baumannii* and its resistant strains with various antibiotics (Department of Microbiology).
6. Role of cobalt chloride induced hypoxia on MA10 cells (Department of Reproductive Biology).
7. Isolation and analysis of the outer membrane proteins, beta lactamases of *Acinatobacter Baumanii* (Department of Microbiology).
8. Role of T helper cytokines in skin autoimmune disorder Pemphigus vulgaris. (Department of Dermatology and Venereology).
9. Study of catecholamines in melanocyte transplanted patients of vitiligo (Department of Dermatology and Venereology).
10. A comparative evaluation of levels of interleukin-1- α in GCF during canine distraction and canine refraction (Department of Dental Surgery).

11. Study of gliomagenesis: Possible involvement of CNS developmental pathway (Department of Pathology).
12. To evaluate the endometrial and sub endometrial blood flows in the prediction of pregnancy during In-Vitro Fertilization Treatment (Department of Obstetrics and Gynecology).
13. Immunohistochemical and molecular studies on Wnt/ β -catenin signaling pathway in sebaceous cell carcinoma of the eye lid (RP Centre, AIIMS).

PUBLICATIONS

Journals: 51

Abstracts: 6

Chapters in Books: 3

PATIENT CARE

Cancer markers

PSA	85 sample	CA 19.9	125 samples
CEA	150 samples	AFP	15 samples

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Professor Neeta Singh was awarded Fellowship of National Academy of Medical Sciences 2010; Executive committee member of Indian Association for Cancer Research and Editorial Board member of IACR Newsletter, Indian Journal of Clinical Biochemistry.

Secretary (Delhi Chapter) of Indian Association for Cancer Research; Member of International Union Against Cancer (UICC), American Association for Cancer Research (AACR), Indian Society of Cell Biologists, Indian Women Scientists Association, Indian Society of Lung Cancer and Indian Society for Free Radicals Research in India, IACR, ACBI; Subject expert/Committee Member for Life Sciences Committee of Women Scientists Scheme of DST, Member of B. B. Dixit Library Committee, AIIMS; Kar R awarded Scholar in training award of American Association for Cancer Research to present paper entitled 'Treatment with Survivin siRNA augments cytotoxicity of paclitaxel in primary ovarian cancer cells', at the 101 AACR meeting held at Washington DC, USA from 17-21st April 2010; Chairperson for a session at RGCON-2011, CME on 'Molecular Biology of Cancer: recent trends', New Delhi, 4 February 2011; invited Faculty for Indo-US workshop on 'Translational, cancer prevention and biomarker workshop' 1st Indo-US Initiative, Bangalore, 13 – 17 February 2011; Member Project Review of DBT, DST, ICMR, CSIR, Indo-US Science and Technology Forum, Council for Science and Technology, UP; Reviewer for Mol. and Cellular Biology, Intl. J. Gynecol. Cancer, Indian Journal of Clinical Biochemistry, Thomson Reuters Drugs Profiles, Toxicol. Environ. Chemistry, National Medical Journal of India, J. Biosciences; Member of Ethical Committee, J.N.U.; External examiner for Delhi Univ., Jamia Milia Univ., DNB, Jiwaji Univ, PGI Chandigarh.

Professor Subrata Sinha was Member of following committees: Scientific Advisory Committee (SAC) of Rajiv Gandhi Centre of Biotechnology, Thiruvananthapuram; SAC of Institute of Pathology, New Delhi; SAC of School of Medical Sciences, University of Hyderabad; SAC of Bose Institute, Kolkata; Review Committee for Biology Projects, Indian Statistical Institute; Chairman, Project Review Committee (PRC), Cancer, Dept of Biotechnology (DBT); Member PRC Neurosciences DBT; PRC, Cell and Molecular Biology, ICMR; PRC Cancer Biology (ICMR); Special Technical Committee, ICMR; Special Committee, Centre for Molecular Medicine, JNU; Special Committee, Centre for Biotechnology, JNU; Member of the Institutional Biosafety Committee and Ethical Committee of the National Institute of Immunology; Institutional Ethics and Biosafety Committee of the Jawaharlal Nehru University; Working Committee, National Medical Journal of India; Research review Committee, PGI Chandigarh

Professor D.N. Rao was FIMSA Council Member; General Secretary of Indian Immunology Society; Recipient of SAB grand Gold Medal by Society of Applied Biotechnology; SAC member, project review member of various extramural funding agencies; Selection Committee member in various medical colleges & universities

Professor Nibhriti Das was Treasurer, Indian Immunology Society; Professional member of the American Heart Association.

Professor Shyam S. Chauhan was Member of following Institutional Committee: Central Recruitment Committee of Research Staff, Annual Report Editing Committee, Apex Condemnation Committee, Institute day celebration Committee, Biotechnology Teaching Advisory Committee.

Dr M R Rajeswari was Expert Member of Standing Committee on NMEICT of MHRD, Project Review Committee (Neurochemistry) ICMR and CSIR–NET Evaluation Committee (Life sciences) and a number of Committees of UGC; Associate Editor of ‘Journal of integrated Omics’ and Member of the Reviewer Board of International Journal of Paed. Biochem; Reviewed a number of research papers which include International journals (J. Mol. Structure, J. Phys. Chem, Molecular Biosystems., Am chem. Soc., DNA & Cell Biology) and Indian journals (Ind.J Biochem.Biophys., Ind. J Clin. Biochem.); Reviewed research proposals submitted for funding to the ICMR, DST; External examiner of Ph.D. & M. Tech. thesis at Delhi University and JNU New Delhi;

Dr. Kalpana Luthra was Member of the following committees: Cultural program committee of Institute Day 2010, Stores Negotiation Committee, AIIMS, Sub-ethics committee, AIIMS, Academic Advisory panel for Virtual Teaching at AIIMS, External reviewer for DBT projects in Neurosciences and Brain Research, Condemnation committee.

Dr Alpana Sharma was awarded Membership of National Academy of Medical Sciences 2010; Awarded travel fellowship from IGCS to attend and present the paper at IGCS meeting at Prague 22-24 Oct 2010; Khan R awarded the Travel grant to present the research paper at 14th International Congress of Immunology, Kobe, Japan held from 22-27 August, 2010; Member American Association for Cancer Research (AACR); Member Int Gyne Cancer Society; Reviewer for Int J Gynecological Cancer, Immunol. Investigation, Oral Oncology, Biomarkers.

VISITING SCIENTISTS

1. Dr Heather Cubie, Director, Scottish HPV reference lab, UK, on ‘Cervical cancer prevention strategy in Scotland,’ on 18th May 2010.
2. Prof Srinivas N. Pentyala, Director, Translational Research, Stony Brook Medical Centre, NY, USA, on ‘From bench to bedside: Translational research to develop health care products,’ on 14th Aug 2010
3. Dr Harish Pant, NIH, USA, on ‘Molecular basis of neuronal cytoskeleton regulation: Role of a novel kinase, CDK-5 in nervous system, function and degeneration,’ on 14th Jan 2011.
4. Dr Vishakha Bhave, Pittsburg Medical School, Pittsburg, USA, on ‘Genes inducing iPS phenotype play a role in hepatocyte survival and growth in vitro and in liver regeneration in vivo,’ on 21st Feb 2011.

9.4 Biomedical Engineering

Professor and Head

Alok R. Ray

Professors

Dinesh Mohan

Sneh Anand

Harpal Singh

Associate Professor

Veena Koul

Assistant Professor

Ashutosh Mishra

Principal Scientific Officer-I

Nivendita K. Gohil

Senior Design Engineer

S.M.K.Rahman

Scientist

J.C. Bhardwaj

EDUCATION

Lectures delivered in CME/ National and International Conferences: 8

RESEARCH

Funded projects

1. Development of low cost Rapid Biosensor for Identification of Pathogenic Bacteria, Harpal Singh, DBT, up to 2010, Rs 39 lakhs.
2. Development of Biodegradable polymeric dendrimers/nanoparticles for cancer diagnostics and treatment. Harpal Singh, Lockheed Martin, USA, 2008-2011, Rs.40 lakhs.
3. Development of polymeric Dendrimers /nanoparticles for detection of pathogenic bacteria. Harpal Singh, Lockheed Martin, USA, 2008 – 2011, Rs. 20 lakhs.
4. Development of Functionalized Polymeric materials for the Rapid detection of Food-born Pathogens. Harpal Singh, DRDO, 2011-2014, Rs.26.2 lakhs.
5. Stanford- India Biodesign Program. A.R. RAY, DBT, 2007-2012. Rs. 1 cr.
6. Development of Implant and Medical Devices, A.R. RAY, DBT, 2007-2010, Rs.22.2 lakhs.
7. Development of Biodegradable Scaffold for Tissue Engineering of Blood Vessels. A.R. RAY, DBT, 2007-2010, Rs.26.86 lakhs.
8. Scaffold-based control of Chondrocyte phenotype: Towards Engineering of In vertebral Disk Tissue. A.R. RAY, Indo-Swiss joint Research project DST, 2009-2012, Rs.27.54 lakhs.
9. Development of Nanosilver Nanohydrogels for Biomedical Applications, A.R. RAY, DBT, 2009-2012, Rs. 83.11 lakhs.
10. 3D-expansion and differentiation of Mesenchymal Stem Cell into Osteoblast for Bone Tissue Engineering on Biocomposite scaffold. A.R. RAY, 2010-2013, Rs. 20.12 lakhs.

11. Reversibility of injectable intravasal contraceptive for male technology development and multicentric non-human primates study. J.C. Bhardwaj, MOH & FW, 2008-2011, Rs.6.27 lakhs.
12. Injection of polymer assembly as an implant in vasdeferens lumen for prostate cancer prevention and contraceptive efficacy. J.C. Bhardwaj, I.I.T. Kharagpur, Rs.1.09 lakhs.
13. Evaluation of vaginal microbial flora and sperms after Styrene Maleic Anhydride (SMA) application. J.C. Bhardwaj, I.I.T. Kharagpur, 2009-2011, Rs.2.4 lakhs.
14. Effects of RISUG injection in the Epididymis and Testes of Rats. J.C. Bhardwaj, I.I.T. Kharagpur, 2011-2012, Rs. 3.06 Lakhs.
15. Interaction of endothelial cells with advanced glycation end products. N.K. Gohil, CSIR, 2009-2011, Rs.10.2 Lakhs.
16. Clinical Trial of Hb-AGE as a novel long term glycemic index using its autofluorescence. N.K. Gohil, DBT, 2007-2010, Rs.36.62 lakhs.
17. A Pilot Study for Efficacy Of Arnica Montana in Muscle Fatigue using Electrophysiological Markers: A Randomized, Double Blind, and Cross over Trial. Sneha Anand, CCRH, 2011-2012, Rs. 25 lakhs.

Inter Departmental Co-ordination for research projects :

1. Department of Microbiology: Dr Arti Kapil, Co-investigator research project on rats
2. Department of Pathology: Dr Vashali Suri, Co-investigator research project on rabbits
3. Central Animal Facility: Dr P.K. Yadav, Co-investigator project on monkeys
4. Department of Lab. Medicine: Dr AK Srivastav, For Biochemical parameters
5. Department of Anatomy: Dr TK Das, Co-investigator research project on rats.
6. Department of Reproductive Biology: Dr PK Chaturvedi

Technology transfer and Patents

1. Sneha Anand, Manoj Soni, S. Maij, A Pneumatic Damper Controlled AK Prosthesis (886/DEL/2009).
2. Sneha Anand, Abhinav, Meghna, Zig-G, A Wireless ECG system (683/DEL/2009).
3. Nivedita K. Gohil, A test kit and method for measurement of metals in biological fluids (PCT/IN2009/000696).

Major facilities/equipment commissioned

Ultracentrifuge, Mammalian tissue lab and Gel permeation chromatography.

PUBLICATIONS

Journals: 37

AWARDS, HONOURS AND SIGNIFICANT ACHIEVEMENTS

Professor D. Mohan attended the International Workshop of the project Safer Brain, at Rome, Italy Dr D Mohan

Professor S. Anand attended Conference on Biomedical Instrumentation at CSIO, Chandigarh in May 2010

Professor Harpal Singh attended International Conference INCST-2010 at CSIO, Chandigarh, 28-29 October, 2010

Dr Veena Koul won the 2010 Best poster paper award for 'Semi-IPNS hydrogel for wound dressing application; influence of gelatin and polyacrylamide' *International Conference on Frontiers of Polymers and Advanced Materials, MACRO 2010, New Delhi, 14-17 December 2010*; 2010: Best poster award for 'Polymer SPION hybrid systems for combined cancer targeting and imaging', at I2Tech 2010, IIT Delhi, India; attended Macro and nanogels for biomedical applications, Sep 23 2010, at Aizant Drug Research Solutions Private Limited

Dr J.C. Bhardwaj

- (i) PhD Thesis viva voce examination – Two
- (ii) PhD Thesis evaluation – Two

Discussion with Dr Bhawana Sirohi, Head of Medical Oncology, AACIN, Gurgaon, on 'Design and Develop a cheaper device to detect cervical cancer using Electromagnetic waves in cervix to screen mass', available European device is costlier. Polymer coated disposable probes may be developed indigenously on 22-06-2010 in the Department of Biomedical Engineering, AIIMS; attended International Symposium: Cross-talk / conversations on Human Reproduction, Fertility and \Sexuality: Evolution and Science, Philosophy, Art, Myths and Literature', February 12-14, 2011. Organized by Dept. of Reproductive Biology, AIIMS.

9.5 Biophysics

Distinguished Biotechnology Research Professor

T.P. Singh

Additional Professor and Head

Punit Kaur

Additional Professors

Savita Yadav

Sujata Sharma

Associate Professors

Krishna Dalal

A. Srinivasan

Scientists

Sharmishtha Dey

S. Baskar Singh

Asha Bhushan

EDUCATION

Postgraduate

The faculty and scientists are actively involved in teaching and guiding students for PhD degree, MSc (Biophysics) and MD (Biophysics).

Short and long term training

Summer training in research was provided to MBBS students from AIIMS. Five MBBS (1st year) students conducted projects work for the *Kishore Vagyanik Puruskar Yojna* (KVPY) Scheme of the DST in different laboratories of the department and four students have been awarded the fellowships. The Department also imparted long- and short-term training to MSc and MTech students from different institutes and universities.

Lectures delivered in CME/ National and International conferences: 12

RESEARCH

Funded projects

Ongoing

1. Protein structure determination and drug design, Dr T.P.Singh, DBT, 2009–2014, Rs 55 lakhs.
2. Biomedical Informatics Centres of ICMR, Dr Punit Kaur, ICMR, 2006–2011, Rs 80 lakhs.
3. Structural and Functional Studies of Peptidoglycan recognition Proteins, Dr Punit Kaur, DST, 2006–2011, Rs 32.5 lakhs.
4. Isolation, purification and structural and functional characterization of new proteins from seminal plasma, Dr Savita Yadav, DST, 2008–2011, Rs 22 lakhs
5. Purification, biochemical and functional characterization of heparin binding proteins in human seminal plasma, Dr Savita Yadav, DBT, 2008–2011, Rs 27 lakhs.
6. Structural and Functional Studies of Lactoperoxidase, Dr Sujata Sharma, DST, 2008–2011, Rs 19.9 lakhs.

7. Structure and function of C-terminal half (C-lobe) of lactoferrin and its application as an agent to reduce NSAID-induced gastropathy, Dr Sujata Sharma, DBT, 2011–2014, Rs 41 lakhs.
8. In search of anti-allergenic drugs: Determination of molecular structure-function interrelationships of plant allergens and structure-based design of anti-allergenic ligands, Dr Sujata Sharma, ICMR, 2011–2014, Rs 29.3 lakhs.
9. Development of Synthetic Alternatives to Currently available Microbicidal Agents, Sharmistha Dey, ICMR, 2008–2011, Rs 20 lakhs.
10. Design and evaluation of novel peptide inhibitor as an anti-breast cancer agent against COX-2/LOX, Sharmistha Dey, CSIR, 2010–2013, Rs 15 lakhs.

Departmental projects

1. Structural and functional studies of Phospholipase A2 enzymes.
2. Structure based drug design against Inflammatory disorders.
3. Structural studies of Lactoferrin and its fragments and ligand design.
4. Structural and functional studies of Venom and plant allergens.
5. Biochemical and structural studies of ZAG-PIP complex, PSA and other heparin. binding proteins from human body fluids.
6. Structure-Function relationships of Alzheimer related proteins.
7. Proteomic studies of human salivary proteins and amniotic fluid.
8. Molecular modelling and ligand design.

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: 24

Protein data bank entries

The total number of protein coordinate sets submitted to Protein Data Bank (PDB) during the year: 66. Following are the PDB IDs of structures of proteins and their complexes submitted to the Protein Data Bank: 3R5Q, 3QV4, 3QSO, 3QJI, 3Q9K, 3QL6, 3QJ1, 3Q4Y, 3Q4P, 3PUO, 3PY4, 3P2J, 3PUL, 3KK0, 3OLK, 3PUE, 3PUD, 3PTL, 3OSH, 3OIH, 3OGX, 3OGW, 3O9N, 3O4K, 3NYH, 3NX9, 3NW3, 3NOE, 3NNO, 3NKW, 3NJU, 3NJS, 3NIU, 3NG4, 3NFM, 3N8F, 3N5D, 3NAK, 3N3X, 3N31, 3N2D, 3N1N, 3N1D, 3MY6, 3MWN, 3MU9, 3MU7, 3MRY, 3MRW, 3MJN, 3M7S, 3KRQ, 3KJZ, 3KJ7, 3K0V, 3JTI, 3JQL, 3JQ5, 3IB2, 3IB1, 3IB0, 3IAZ, 3HU7, 3H1X, 3GCL, 3GCK, 3GCJ.

PATIENT CARE

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

1. Protein N-terminal sequencing
2. Receptor-ligand binding studies-Biacore
3. Peptide synthesis
4. X-ray intensity data collection for small molecules
5. X-ray intensity data collection for macromolecules

CENTRAL FACILITIES

Infrastructure Facility for Clinical Proteomics (DBT supported).

Bioinformatics Centre for Drug Designing (ICMR supported).

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Professor T.P. Singh was awarded the Goyal Prize in Life Sciences, for the year 2009 in a ceremony at Kurukshetra University, 19 April 2010; awarded the Annual Award of the Instrumentation Society of India, 7 January 2011; appointed the Editor-in-Chief of the INSA Proceedings, January 2011; elected the President of Indian Crystallographic Association, Jammu, 27 October 2010; awarded the Jawaharlal Nehru Birth Centenary Lecture of INSA, New Delhi, 4 October 2010; awarded, CSIR Foundation Day Award, Institute of Microbial Technology, Chandigarh, 26 September 2010; awarded, Degree of Doctor of Science (*hc*), conferred by the Karnataka State Open University, Annual Convocation, Mysore, 14 April 2010; elected member of the Scientific Advisory Committee for the Chief Minister of Jammu and Kashmir constituted, 2010–2012; elected member of the Research Council of the Institute of Microbial Technology, Chandigarh, 2010–2012; Chairman of the DST Committee for the Development of Science Infrastructure in the North-East, 2009–2014; Member of the Board of Governors of Indian Institute of Technology, Kharagpur, 2005–2011.

Dr Punit Kaur organized two workshops titled, 'Introduction to Bio-Medical Informatics', 21–23 April 2010, and 'Informatics in Medicine', 25–26 May 2010; Presented papers, 39th National Seminar on Crystallography, Jammu University, 25–27 October 2010; Presented papers, 7th Asian Biophysics Association (ABA) Symposium and Annual Meeting of the Indian Biophysical Society (IBS), New Delhi, 30 January–2 February 2011.

Dr Sujata Sharma organized a one-day conference titled 'Current Trends in Structural Biology 2011'; 30 March 2011.

Dr Savita Yadav presented papers, 7th Asian Biophysics Association (ABA) Symposium and Annual Meeting of the Indian Biophysical Society (IBS), New Delhi, 30 January–2 February 2011; Presented papers, International Conference on Frontiers in Reproductive Biotechnology, National Dairy Research Institute, Karnal, 9–11 February 2011).

Dr A. Srinivasan presented papers, 7th Asian Biophysics Association (ABA) Symposium and Annual Meeting of the Indian Biophysical Society (IBS), New Delhi 30 January–2 February 2011).

Ms Asha Bhushan attended 7th Asian Biophysics Association (ABA) Symposium and Annual Meeting of the Indian Biophysical Society (IBS), New Delhi, 30 January–2 February 2011; Attended workshop on 'Currents trends in Structural Biology' organised by Structural Biology Lab, Department of Biophysics, AIIMS on 30th March 2011; Attended the International webinar series on information about X-ray radiation safety titled 'X-ray radiation safety – What everyone should know' by Angela R. Criswell, PhD VP, Life Sciences Rigaku Americas Corporation.

VISITING SCIENTISTS

Following noted scientists and eminent academicians visited the department for presenting lectures and scientific cooperation during the year: Professor Ch. Betzel, Germany; Professor R.N. Kini, Singapore ; Professor Faizan Ahmad, New Delhi; Dr Pushkar Sharma, New Delhi; Dr Ajay K. Saxena, New Delhi; Dr M.N. Gupta, New Delhi ; Dr N.K Gupta, New Delhi; Professor M. Vijayan, Bangalore; Professor B.B. Chatto, Vadodara; Professor Ada Yonath, Nobel Laureate, Israel; Dr Krishan Lal, New Delhi; Dr D.M. Salunke, New Delhi; Professor D. Velmurugan, Chennai; Professor S. Krishnaswamy, Madurai; Dr A.M. Shaikh, Mumbai; Professor K. S. Rangappa, Mysore; Professor K.L. Khanduja, Chandigarh; Dr V. Kishore, Chandigarh; Dr A. Arora, Lucknow; Professor B.P. Chatterji, Kolkata; Professor C.K. Dasgupta, Kolkata; Professor Anil Kumar, Bangalore; Professor Pradip Sinha, Kanpur; Professor D. Acharya, Kharagpur; Professor S.K. Guha, Kharagpur; Dr Sher Ali, New Delhi; Professor Renu Khanna-Chopra, New Delhi; Professor S. H. Savithri, Bangalore; Professor R.S. Sirohi, Jaipur.

9.6 Biostatistics

Professor and Head

R.M. Pandey

Professor

S.N. Dwivedi
(on long leave)

Additional Professor

V. Sreenivas

Scientists

R.K. Ahuja

Guresh Kumar

M. Kalaivani

Statistician

Ombir Singh

Statistical Assistants

Bhupender Kumar
(On Lien)

Ashish Datt Upadhyay

EDUCATION

The department continued teaching 'Biostatistics and Essentials of Research Methods' for the undergraduate, paramedical and postgraduate courses, viz. MBBS, BSc (Hons) in Medical Technology in Radiology, MBiotech, BSc. and MSc. Nursing, and MD Community Medicine. As in past, series of fourteen evening classes on 'Essentials of Biostatistical Methods and Research Methodology' was organized for residents, PhD students and other research staff in the Institute. On request faculty members delivered series of lectures for the residents, PhD students in several departments in the Institute. Also, departmental faculty and scientists delivered invited talks outside the institute throughout the country. On request, faculty and scientists participated in departmental scientific presentations in most of the departments in the Institute. Besides guiding PhD students in the department, faculty members and scientists contributed in the academic activities of other departments in the Institute as Co-guides, DC Members of PhD students, MD/MS, DM, MCH students. With an objective to build capacity of data management and statistical analysis, a series of four workshops on 'Hands on Training in using STATA' was organised for 3–6 days duration for PhD students, MD students in community medicine, and DM oncology students of the Institute.

Lectures delivered in CME/ National and International conferences: 15

RESEARCH

Funded projects

Ongoing

1. Task Force on Inborn Metabolic Disorders: Newborn Screening for Congenital hypothyroidism and Congenital Adrenal Hyperplasia: ICMR Multicentric Study. Investigator for Data Coordination Centre: Dr R. M. Pandey, funding agency: ICMR, 2009–12, Rs 14 lakhs.
2. Multicentric Randomized Controlled Trial of Adefovir, Adefovir + Lamivudine and combination of Adefovir and Glycyrrhizin in HBV related decompensated Cirrhosis. Investigator for National coordination: Dr V. Sreenivas, funding agency: ICMR, 2007–2011. Rs 18.0 lakhs.

3. Hepatitis C – The Indian Face (Investigator for National coordination: Dr. V. Sreenivas, funding agency: Bristol Myers Squibb Foundation, 2009–2011, Rs. 12.0 lakhs).

Departmental projects

Ongoing

1. Trends, differential and determinants of neonatal, infant and under five mortality in Empowered Action Group States.
2. A study on appropriate statistical models to determine quality of life and in-hospital mortality in head injured trauma patients.

Collaborative projects

Ongoing

1. Determination of efficacy of reflexology in the adjunctive treatment of intractable seizures in children and genetic screening for GPR56 gene mutations in the subset with Lennox Gastaut syndrome (Department of Biophysics).
2. Comparative study of anterior support ankle foot orthotic and posterior ankle foot orthosis in foot drop patients. (Department of PMR).
3. Development and validations of an instrument to evaluate quality of life in Parkinson's disease (Department of Neurology).
4. Effect of malnutrition and HIV-TB co-infection on pharmacokinetics of anti tuberculosis drugs in children (Department of Medicine).
5. Molecular epidemiology of extensively drug resistance TB and development of a rapid diagnostic technique (Department of Medicine).
6. Assessment of magnitude and prognosis of myopia in Indian school children (Dr R.P.Centre of Ophthalmic Sciences).
7. Evaluation of Chikunguniya in Children and Adults in India (Department of Paediatrics).
8. H1N1 in Indian Scenario (Department of Microbiology).
9. Comparison of clinical efficacy and safety of PUVA sol and Unani formulation UNIM-401 (IF) oral and UNIM-403 (oil) and UVA in the treatment of chronic plaque psoriasis (Department of Skin and Venereal Diseases).
10. HCV – The Indian face – funded by Bristol Myer's Squibb foundation, South Africa (www.liver-foundation.in) (Department of Gastroenterology).

PUBLICATIONS

Journals: 66

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Professor R.M. Pandey continues to be Fellow of the Royal Statistical Society, UK; Fellow of the Indian Society for Medical Statistics; Examiner Ph.D. thesis from Universities within and outside the country; INCLLEN liaison person to develop joint academic and research activities with the International Epidemiological Association (IEA) under the INCLLEN-IEA MOU; Reviewer of manuscripts submitted to almost all major medical journals in India; Member, Award nomination committee of the Indian Society for Medical Statistics (ISMS); Coordinator of a symposium during 10th South East Asia Regional Scientific Meeting of International Epidemiology Association, 23—26 May 2010, Colombo, Sri Lanka; Member, Research Committee, AIIMS; Member, AIIMS Hindi Committee; Member of several Data Safety Monitoring Boards, Task Force, and Proposal/Project Review committees of the Department of Biotechnology (DBT), Department of Science and Technology (DST), INCLLEN and the ICMR; Member, Research

Committee, National Institute of Health and Family Welfare (NIHFW); Member, Ethics Committee of Indian Institute of Public Health, Delhi; Member, Operations Research Group on RNTCP, Tuberculosis Control Program, Govt. of India; Member, DSMB of UMPIRE drug trial in India and Europe coordinated by University of Cambridge and CCDC (PHFI); Member, CARRS Translational Trial; Member, Technical Advisory Group (TAG) of the DBT-ICMR joint group on Severely Acute Malnourished (SAM) Children in India; Member, Institutional Review Board of PHFI; Member, of both DSMB and Technical Advisory Group (TAG) of the Chlorohexadine chord care in newborns, a hospital and community based trial being conducted by The School of Public Health, Johns Hopkins University, USA, at Tanzania and Zambia and attended its Technical Advisory Group and Data Safety Monitoring Board Meeting in Zanzibar, Tanzania, 1–3 December 2010.

Dr V. Sreenivas continues to be Fellow of the Royal Statistical Society, UK; Life member, Indian Society for Medical Statistics and Member, International Clinical Epidemiology Network (INCLIN); Reviewer for Indian Journal of Medical Research and Indian Journal of Paediatrics; Advisor (Biostatistics) to the Journal of Neonatology, India and Statistical Consultant to the Journal of Indian Association for Child and Adolescent Mental Health (JIACAM); Member, Expert Group on seroprevalence study to determine the impact of Hepatitis B vaccination, ICMR, Dept. of Health Research, Govt. of India; Member Secretary, Data and Safety Monitoring Board (DSMB) for three research projects sponsored by Department of Biotechnology, Govt. of India; Member, Expert Group on Immuno-modulation, Department of Biotechnology, Govt. of India; Member, Task Force group, Division of Reproduction & Child Nutrition, ICMR, Dept. of Health Research, Govt. of India and Chairman/ Member of the Screening/ Selection Committee, ICMR, New Delhi

Dr Guresh Kumar was reviewer of Indian Journal of Medical & Paediatric Oncology and Indian Journal of Medical Research

M. Kalaivani, on request from the ICMR, provided assistance to the National Institute of Medical Statistics (ICMR) in data cleaning and preparation of a field study on Home based new born care, conducted in five states in India.

9.7 Biotechnology

Professor and Head

Y.D. Sharma

Professors

J.S. Tyagi

H.K. Prasad

S.N. Das

Assistant Professor

Anushree Gupta

EDUCATION

Postgraduate teaching

The department continues with its 2 year postgraduate programme in Medical Biotechnology leading to MBiotech degree. The teaching programme includes theory and practical classes, seminar presentations and research project (dissertation) on frontier area of medical research. Students are given individual attention and hands on experience in practical classes. 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, and so on. The department continues conducting PhD programme in the area of Medical Biotechnology.

Short-term training

The faculty of the department provided short term training to 30 students from different universities/institutions of the country.

Lectures delivered in CME/ National and International conferences: 15

RESEARCH

Funded projects

Ongoing

1. Molecular studies on *Plasmodium vivax* tryptophan-rich proteins. Dr Y.D. Sharma. Funded by DBT for 3 years (2010–2013). Funds: Rs 20.40 lakhs.
2. Postgraduate Training Programme in Biotechnology with special application to Biomedicine. Y.D. Sharma. Funded by DBT for 5 years (2009–2014). Funds: Rs 22.58 lakhs per year.
3. Biotechnology Informatics System. Dr Y.D. Sharma. Funded by DBT for 5 years (2008–2013). Funds: Rs75 lakhs.
4. Reconstructing Cellular Networks: Two-Component Regulatory Systems. Dr J.S. Tyagi. Funded by DBT (2007–2011). Funds: Rs 363 lakhs.
5. Computational design and development of inhibitors for the treatment of tuberculosis. Dr J.S. Tyagi, DBT SBIRI project, 2008–2011, Rs 21.98 lakhs.
6. Comprehensive proteomics profiling of CSF proteins from patients of different meningitis infections for biomarker discovery. Dr J.S. Tyagi, DBT, 2008–2011, Rs 64.31 lakhs.
7. Deciphering the transcriptional profile of dormant and replicating tubercle bacilli within THP-1 human macrophages. Dr J.S. Tyagi, Tata Innovation Fellowship Research Grant, DBT, 2009–2012, Rs 22.20 lakhs.

8. Development and clinical validation of methods for the diagnosis of tuberculosis and bacterial drug resistance by smear microscopy, culture and polymerase chain reaction using processed clinical samples and kit thereof (Phase I). Co-investigators Dr J.S. Tyagi, Dr H.K. Prasad, DBT SBIRI project, 2009–2011, Rs 7.06 lakhs.
9. Development of vaccine for control of bovine tuberculosis. Dr H.K. Prasad. Funded by DBT (2007–2011). Funds: Rs 22.04 lakhs.
10. Functional Characterization of Rv2986c, a DNA Binding Protein of *M. tuberculosis*. Dr H.K. Prasad. Funded by DST (2007–2011). Funds: Rs 23 lakhs.
11. Analysis of genomic variants of mycobacterial tuberculosis complex isolates using large scale parallel sequencing: preliminary studies. Dr H.K. Prasad. Funded by DBT for 1 year (2009–2010) extended for two years. Funds: Rs 11.56 lakhs.
12. Development and characterization of autologous NKT cell-based dendritic cell vaccine for oral squamous cell carcinoma. Dr Satya N. Das. Funded by DBT for 3 years (2008–2011). Funds: Rs 23.0 lakhs.
13. Studies on FAS (CD95) and FAS L (CD95L) gene polymorphism and their association with tobacco related oral carcinomas. Dr Satya N. Das. Funded by ICMR for 3 years (2008–2011). Funds: Rs 6.0 lakhs.

Completed

1. Malaria vaccine related field studies in Jabalpur. Dr Y.D. Sharma. Funded by ICMR (2005–2010). Funds: Rs 77 lakhs.
2. Molecular switch in Th1-Th2 response by SMAR1: Its implications in *Mycobacterium tuberculosis* infection. Co-Investigator: Dr H.K. Prasad. Funded by DBT for 3 years (2007–2010). Funds Rs 19.50 lakhs.
3. Detection of Mycobacterial pathogens in patients with Crohn's disease. Co-Investigator: Dr H.K. Prasad. Funded by DBT for 3 years (2007–2010). Funds Rs 3 lakhs.
4. Comprehensive Proteomics profiling of CSF proteins from patients of different meningitis infections for biomarker discovery. Co-Investigator: Dr H.K. Prasad. Funded by DBT for 3 years (2008–2011) Funds Rs 4.50 lakhs.
5. Polymorphisms in genes of the Endothelin system in patients undergoing coronary artery bypass grafting surgery and having a concomitant diagnosis for diabetes.

Dr Anushree Gupta. Funded by ICMR for 3 years (2008–2010). Funds: Rs 24.12 lakhs.

Departmental projects

Ongoing

1. Innate immunity to *Mycobacterium tuberculosis*.
2. Human immune response to *Mycobacterium tuberculosis*.
3. Diagnosis of tuberculosis in humans and cattle.
4. Studies on Beclin1, mTOR signaling and autophagy in oral cancer.
5. Functional and Phenotypic characterization of Natural Killer T cells and Dendritic cells in Oral cancer.
6. Studies on Phosphoinositide 3-kinase signaling and antitumour activities of its natural inhibitors in oral cancer.
7. Phenotypic and functional characterization of TH 17 cells in patients with oral squamous cell carcinoma.
8. Phenotypic and functional characterization of CD4+CD25+Foxp3+ regulatory T cells (TReg) cells in patients with oral squamous cell carcinoma.

Completed

1. Regulatory T-cells (CD4+, CD25+, Foxp3+) dynamics in patients with oral cancer.
2. Functional and phenotypic characterization of Th17 cells in oral cancer patients.

Collaborative projects

Ongoing

1. Evaluation of nanolevel expression of p38 α MAP kinase, a cell signaling protein in oral cancer and design of structure based peptide inhibitors against the same (Department of Biophysics).
2. Clinical correlation of ER, PR, HER2, neu expression and BRCA1 gene mutations in Indian Breast cancer patients (BRA-IRCH).
3. Podoplanin expression in patients of oral cavity carcinoma and its clinical significance (Department of Otorhinolaryngology).
4. Osteopontin a mediator of systemic inflammatory response in high risk cardiac surgical patients (Department of Cardiac Anaesthesia).

PUBLICATIONS

Journals: 15

AWARDS, HONOURS AND SIGNIFICANT EVENTS

The following posters were presented by research students at various conferences

1. Defective Hypoxic Adaptation and Virulence Attenuation of *Mycobacterium tuberculosis* Is Associated with Co-Expression of DevR and DevRN-Aph Proteins. Shyamasree De Majumdar, Deepak Sharma, Atul Vashist, Kohinoor Kaur, Neetu Kumra Taneja, Santosh Chauhan, Vijay K. Challu, V. D. Ramanathan, V. Balasangameshwara, Prahlad Kumar, Jaya Sivaswami Tyagi, International Symposium on TB Diagnostics: Innovating to make and impact. ICGEB, New Delhi, 16–17 December 2010.
2. 'Quantitation of *Mycobacterium tuberculosis* antigens or DNA facilitates rapid and efficient diagnosis of childhood tuberculous meningitis', Sagarika Haldar, Naveen Sankhyan, Neera Sharma, Anjali Bansal, Vitul Jain, V.K. Gupta, Monica Juneja, Devendra Mishra, Arti Kapil, Urvashi B. Singh, H K Prasad, Sheffali Gulati, Veena Kalra, Jaya S. Tyagi, International Symposium on TB Diagnostics: Innovating to make and impact. ICGEB, New Delhi, 16–17 December 2010.

Professor Y.D. Sharma is Fellow of all three National Science Academies; Member, Project Advisory Committee, CSIR for Biotechnology; Member, DBT Task Force Sub-committee on Human Resources Development; Member, Tata Innovation Fellowship and Ramalingaswami Fellowship Committee of DBT; Member, DBT–JRF examination committee; Research Advisory Committee on Parasite Biology of NIMR, Delhi; Member, Board of Research Studies of NICD-IP University; Academic Committee, Guru Nanak Dev University, Amritsar; Member, Board of Studies of Biotechnology at Jawaharlal Nehru University, New Delhi; UGC-Science Advisory Panel for Centre for Molecular Medicine at JNU, 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; Expert Member, Teaching Advisory Committee of Banaras Hindu University, Varanasi; Member, Himachal University, Shimla; Member, Board of Studies, University of Delhi at South Campus, Delhi; Member, Board of Studies, Manipal Sikkim Institute of Medical Sciences, Gangtok; Member, Board of Studies, Neurosciences at Jiwaji University, Gwalior; Expert, Doctoral Committee of Faculty of Engineering and Interdisciplinary Sciences, Jamia Hamdard University, New Delhi; Member, Editorial Board of 'J. Vect Borne Dis.'; Member, International Reviewer Panel of 'Medical Science Monitor'; Member, Editorial Board of 'Biotechnology'; Member, NML Book Selection Committee; Member, Research Committees of AIIMS; Member, Store Purchase Committee of AIIMS; Chairman, Negotiation Committee of AIIMS; Member, Committee for Continuing Medical Education and Technology at AIIMS; Chairman, Patent Cell of AIIMS; Chairman, Central Recruitment Committee of Research staff in projects in AIIMS; Member, Facility for Nanotechnology at AIIMS; Member, Committee for publicity events; Member, Computerization of AIIMS Committee; Member, DPC for Scientists at AIIMS; Group Chairman,

AIIMS Nursing Selection Committee; Chairman AIIMS Committee for International travel grants for conferences in Basic Sciences; Member, Selection Committee for faculty positions at Southasean University, New Delhi, faculty positions at University of Calicut, Kearala, faculty positions at PGI, Chandigarh; Expert member of Biosafety Committee of University College of Medical Sciences (UCMS), Delhi; Chaired a session on 'Malaria' during International Conference held at ICGEB, New Delhi, December 2010; Chaired a special lecture on Infectious Diseases during Annual Meeting of Indian Academy of Sciences, Goa, November 2010; Chaired a session on 'Progress report of MSc. biotechnology teaching programmes', DBT co-ordinators committee meeting, Bhimtal, July 2010; Chaired a session on Medical Biotechnology, Medical Biotechnology Vision 2020, M.D. University, Rohtak, April 2010.

Professor J.S. Tyagi was designated Central Public Information Officer (CPIO) to look after the work under the RTI Act 2005 in the Department of Biotechnology; Member of RAP-SAC National Institute of Immunology, New Delhi; RAP-SAC Bose Institute, Kolkata; SAC, TRC, Chennai; AIIMS Patent Committee; AIIMS Research Committee; Selection Committee, NASI-SCOPUS Young Scientist Award 2010.

Professor H.K. Prasad, Member, Expert Group of the Technical Committee of ICMR and National JALMA Institute for Leprosy and Other Mycobacterial Diseases, Agra; Expert Member, Selection Committee of ICMR; Member, Medical Biotechnology Sectional Committee (MHD-20), Bureau of Indian Standards; Member, Editorial Board of Indian Journal of Leprosy; Member, Project Monitoring Committee (PMC), SBIRI, Department of Biotechnology, Ministry of Science and Technology; Member, Board of Studies in Biotechnology, Jiwaji University, Gwalior; Member, Purchase Committee, School of Environmental Sciences, JNU; and Co-chairman of Apex Condemnation Board, AIIMS.

Dr S.N. Das was elected Fellow of the National Academy of Medical Sciences; Continues to be Fellow, International Academy of Biological Therapy; Member, American Association for Cancer Research, USA; Member, DKFZ Alumni Association, Heidelberg, Germany; Member, Technical Committee, Institute of Pathology (ICMR) New Delhi; Member, Bioethics Committee for Recombinant DNA research, AIIMS; Member, Negotiation Committee, AIIMS; Member, Selection Committee for posts' - under sponsored projects, AIIMS; Nominated 'Regular Member of the Doctoral Committee for the Department of Medical Elementology and Toxicology, Jamia Hamdard University, New Delhi; Editorial Board: Open Journal of Toxicology, International Journal of Osteoporosis and Metabolic Disorders.

VISITING SCIENTIST

Dr Sundeep Duagar, President, CEO and Founder, Sphaera Pharma Pte. Ltd., Singapore (Co-inventor of ZETIA and VYTORIN) visited the department on May 18, 2011 and delivered a lecture on 'Drug Discovery and Development – A Translational Science'.

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 neighbouring institutes.

9.8 Centre for Community Medicine

Professor and Head

C. S. Pandav

Professors

Bir Singh

Shashi Kant

Sanjeev Gupta

Additional Professors

Kiran Goswami

K. Anand

Baridalyne Nongkynrih

Associate Professors

Sanjay K. Rai

Puneet Misra

Y. S. Kusuma Kumari

EDUCATION

Undergraduate

Rural posting: The duration of the programme remains five weeks in the VII Semester. It is a residential posting and the focus is on learning practical skills for working as a doctor at primary and secondary level of healthcare. The activities include orienting undergraduates to community health (OUCH), health system visits, epidemiological exercises and clinical sessions. Teaching techniques like small group studies, case studies, video films, problem based learning are used. The feedback of the students has been very positive.

Interns

The interns are posted for 6 weeks at Ballabgarh hospital and 6 weeks at either Primary Health Centre, Dayalpur or Chhainsa.

Postgraduates

The postgraduates of the department community medicine are posted in the rural areas for 18 months. This gives them adequate time to gain experience both at the referral hospital and at the primary health centres. They are encouraged to take active participation in decision making. With the advent of computer facility, postgraduate students are encouraged to use computers for their analysis of the data collected for the thesis. Besides this, they also do different field based exercises during postings. The regular teaching exercises include seminars, family and case presentations, etc.

Short term training in community medicine is provided to various foreign undergraduate students.

Continuing Medical Education

The Centre for Community Medicine organizes guest lectures of public health relevance and importance. During 2010–11 the department organized the following guest lectures.

1. Dr Krishna Kant Shukla, Physicist turned musician, scientist, writer, poet and philosopher, Science, Spirituality and the Environment, Idaho, USA and BHU, Varanasi, 15 April 2010.
2. Dr Tord Kjellstrom, Climate change, heat exposure and impacts on working people—a threat to public health and the economy in tropical countries, Centre for Global Health Research, Umea University, Sweden, 20 July 2010.
3. Shri Swadeep Srivastava CEO, Via Media & Communications, Principal Consultant, HEAL Foundation, Healthcare Communication—drawing synergies, bridging divides 22 July 2010.
4. Dr Kraissid Tontisirin, Emeritus Professor of Paediatrics, University of Thailand, Nutrition and Food Security, 31 August 2010.

5. Dr Sajal Sen, Behavioural Sciences for Public Health, 12 October 2010.
6. Dr Gopal Basisht, Internal Medicine and Rheumatology Practitioner, Symbiohealth: Symbiotic relationship between modern medicine and ayurveda, Orlando Regional Medical Center, Florida Hospital, Orlando, Florida, 1 November 2010.

Lectures delivered in CME/ National and International conferences: 13

RESEARCH

Funded projects

Ongoing

1. Assessment of Community Care Centres under National AIDS Control Organization (NACO). Dr Shashi Kant, Funding agency NACO, Rs 2 lakhs.
2. Antenatal care: utilization, perceptions and expectations of migrant women in Delhi – a mixed methods study. Dr Y. S. Kusuma. AIIMS Research Grant. (2008–2010). Rs 99,950.
3. Development of a model for strengthening of existing health system to address non communicable diseases in India – Phase II . K Anand, ICMR, 2010–2012, Rs 60.54.lakhs.
4. Prevalence of Coronary Heart Disease and its Risk Factors in Residents of Urban and Rural Areas of NCR – A Repeat Survey. K Anand, ICMR, 2009–2011, Rs 75 lakhs.
5. Preparation of a programme managers kit for monitoring and evaluation of National Programme for diabetes CVD's and stroke. K Anand, WHO India, 2010–2011, Rs 4.33 lakhs.
6. Health insurance for the poor: a study to assess willingness to pay for health insurance among socioeconomically disadvantaged migrants in Delhi, India. Dr Y. S. Kusuma, ICMR, 2010–2013. Rs 22,08,053.
7. Development of a model for strengthening of existing health system to address non communicable diseases in India – Phase I . K Anand, ICMR, 2010–2012 Rs 25 lakhs.

Completed

1. Epidemiological profiling of HIV/AIDS situation at district and sub-district levels using data triangulation for Uttarakhand. Dr Shashi Kant, AIDS Prevention and Control Project (APAC), 2010, Rs 15,95,265.
2. 'Concurrent evaluation of Mukhya Mantri Janani Shishu Swasthya Abhiyan (MJSSA)' – Janani Suraksha Yojana (JSY) in Jharkhand, funded by INCLEN (2009–2010).

Departmental projects

Ongoing

1. Study of selected chronic conditions among elderly in an urban slum of Delhi.
2. Study of gender differentials in health among households of rural Ballabgarh by using life-course approach.
3. Study on oral health problems among elderly in an urban resettlement colony.
4. Prevalence of non-alcoholic fatty liver disease in an adult population living in a rural community of Haryana.
5. Implementing and monitoring healthy settings approach for prevention of non-communicable diseases in middle schools of rural Ballabgarh, Faridabad District, Haryana, India.
6. Implementing and monitoring healthy settings approach for prevention of non-communicable diseases in middle schools of rural Ballabgarh (block), District Faridabad, Haryana, India.
7. Assessment of neonatal care services in Ballabgarh, Block, Haryana.

8. Epidemiological study of injury cases coming at Apex Trauma Center in New Delhi.
9. Reproductive health issues among adolescent girls in rural Ballabgarh.
10. Anthropometric characteristics and under-nutrition among elderly in rural Ballabgarh, Haryana.

Completed

1. Association of blindness and hearing impairment with mortality in a cohort of elderly persons in a rural area.
2. Validation of available risk assessment scores for non communicable diseases in adults.
3. Expenditure on non-communicable diseases-related risk behaviour among adults in urban and rural India.

Collaborative projects

Ongoing

1. Evaluation of quality of life in patients with glaucoma. Dr R. P. Centre for Ophthalmic Sciences, AIIMS.
2. A study to assess knowledge about newborn danger signs among mothers of infants in rural and urban areas. College of Nursing, AIIMS.
3. Community-based epidemiological study on corneal disorders. Department of Community Ophthalmology, Dr R. P. Centre for Ophthalmic Sciences, AIIMS.
4. Addressing emerging infectious disease in the Republic of India: influenza disease burden in rural communities in India. Centre for Disease Control, USA (Department of Microbiology).
5. Indoor air pollutants and behaviour assessment of rural community to reduce health effects. Funded by TERI and UNICEF.
6. Innovative culturally appropriate intervention package to reduce low birth weight. Funded by DST, Government of India.
7. Causes and consequences of domestic violence: a study on sexual health among women in Andhra Pradesh. Dr J. M. Naidu, Department of Anthropology, Andhra University, Visakhapatnam Dr Y. S. Kusuma. Funded by University Grants Commission (UGC), New Delhi for 2009–12
8. Direct and indirect protection by influenza vaccine given to children in India. Centre for Disease Control, USA (Department of Microbiology).
9. Multisite influenza surveillance in India Phase II. Centre for Disease Control, USA (Department of Microbiology).
10. To study the prevalence of rheumatic heart disease among children of 5–15 years age group in Ballabhgarh block of Haryana using echocardiography with Doppler funded by ICMR

PUBLICATIONS

Journals: 29

Chapters in Books: 1

Articles for public education:

- Dr Bir Singh wrote a regular monthly column in 12 issues ‘*Vayktigat Samasyaein*’, a regular health column in a popular monthly magazine ‘SAKHI’ from April 2010 to March 2011 (12 issues).
- Dr Bir Singh did 21 live phone-in programmes on All India Radio from April 2010 to March 2011. These included (i) tuberculosis and its treatment, (ii) total care of health of women, (iii) measles and chicken pox: their prevention and treatment, (iv) personal hygiene: effective weapon for prevention of diseases, (v) common investigations and their interpretations, (vi) HIV/AIDS, (vii) organ donation—all aspects, (viii) snoring—take it

seriously, (ix) all aspects of children's health, (x) sports related injuries and their treatment, (xi) dengue, malaria and chikungunya fever, (xii) epilepsy, (xiii) prevention and treatment of dengue & malaria fever, (xiv) diseases due to contaminated food and water, (xv) population stabilization—key to the development, (xvi) HIV/AIDS, (xvii) liver diseases and their treatment, (xviii) smoking and its ill-effects on health, (xix) diseases of summer months including heat stroke, (xx) reproductive infections in women: prevention & treatment, (xxi) diseases due to urbanization and their solutions.

- Dr Bir Singh also participated as an expert in the following T.V. programmes: (i) Routine investigations in medical sciences (DD News), (ii) HIV/AIDS (Charcha Mein, DD News), (iii) HIV/AIDS (DD News), (iv) Dengue fever (Lok Sabha TV), (v) Dengue, malaria and chikungunya fever (News X Channel), (vi) Dengue fever (DD News), (vii) National Rural Health Mission (DD News).

PATIENT CARE

1. Comprehensive Rural Health Services Project Ballabgarh

(a) Referral Hospital Ballabgarh

(b) Community Health Services

Referral Hospital Ballabgarh

1. Outpatients

The following outpatient departments are run.

- General outpatients for adults
- Child Welfare Centre – for children
- Ophthalmology outpatients – Daily
- ENT twice a week
- Dental outpatients – Daily
- Obstetrics & Gynaecology OPD – daily
- Rehabilitation OPD – two days a week
- Psychiatric OPD once a week
- ANC Clinic thrice a week
- Pediatric Surgery OPD/surgery –weekly
- NCD clinic – once a week

New Patients	79 508
Old & New Patients	136 663
ANC Regn.	4872
Immunization	6367

2. Inpatients

The number of beds has remained unchanged at 50

- (i) Total number of admissions including hospital births 7228
- (ii) Number of hospital births 1859

(iii) Bed occupancy rate including newborns 50.9%
excluding newborns 40.7%

(iv) Average duration of stay 1.29 days

(v) Admissions

Via Emergency	4230
Via OPD	1139
Newborns	1859

3. Distribution of Inpatients by specialty

Specialty	Number
Medicine	1528
Surgery	229
Obstetrics and Gynecology	2723
Paediatrics	697
Ophthalmology	192
New Born	1859
Total	7228

4. Casualty

Number of patients registered	22 391
Number of medico-legal cases	3335

5. Diagnostic tests performed

(i) Lab investigations (Including malaria slides)	97662
(ii) X-ray (Total)	9290
(iii) Malaria slides	4294
Malaria cases	8
P. vivax	8
P. falciparum	Nil

6. Total number of surgical procedures done

Male	696
Female	1271
Total	1967

7. Revised National Tuberculosis Control Programme (RNTCP)

Ballabgarh hospital is a Treatment Unit under the Revised National Tuberculosis Control programme and has 4 microscopy centres under it. Total cases treated was 555.

Break-up of cases treated at Ballabgarh Microscopy Centre

Category I 359 Category II 114 Category III 82

Community Health Services

Intensive Field Practice Area (IFPA)

This comprises of 2 Primary Health Centres: Dayalpur and Chhainsa. Outpatient, domiciliary and referral services are provided.

(1) Indices

—Population	88 985	—Infant mortality rate/1000 live births	53.0
—Death rate/1000 population	7.0	—Neonatal mortality rate/1000 live births	26.27
—Birth rate/1000 population	23.96	—Maternal mortality rate/100,000 live births	140.71

(2) Load of OPD patients at various centres in IFPA

<u>Name of PHC</u>	<u>New cases</u>	<u>Repeat visits</u>	<u>Total</u>
Dayalpur	9811	8852	18663
Chhainsa	9945	7836	17781

Family Welfare and Maternal Child Health

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

— Total AN cases (new registration)	2386
— Pregnant women receiving AN care	100%
— Complete TT coverage of registered cases	92.2%
— Deliveries conducted by staff/hospital	528
— Eligible couple protection rate	64.28%
— Persons who accepted Family Planning methods in 2010	1641
— Tubectomy	221
— Vasectomy	6
— IUD	237
— CC users	878
— Oral pills	299

Expanded Programme on Immunization

Coverage of 12 to 23 month of age

BCG 96.59%	OPV (3 doses) 98.3%
DPT (3 doses) 98.3%	Measles 96.4%

National Programmes

I. Malaria

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

Total number of slides collected 12401

Total number of positive cases 3

Indices

- (i) Annual blood examination rate 13.94%
- (ii) Annual parasite incidence rate 0.03/1000
- (iii) Slide positivity rate 0.02%

2. 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 Field Practice Area is as follows.

Category I 61 Category II 28 Category III 33 Total 122

2. Urban health programme

Part A : Reproductive and child health

M1	Antenatal care services (ANC) number of times ANC seen in mobile van	1223
1	Total number of pregnant women Registered for ANC (New cases –1st visit Tab folic acid Given 7	66
1.1	<i>Of which Number registered within first trimester</i>	133
3	Number of pregnant women received 3 ANC check ups	402
4	Number of pregnant women given	
4.1	TT1	254
4.2	TT2 Booster	296
5	Total number of pregnant women given 100 IFA tablets	943
5.1	Total no. of Folifer/Syp. Iron to ANC patients (1223× 30) tab +Syp 275 Bottles	36690+275
6	Pregnant women with hypertension(BP>140/90)	6
6.1	New cases detected at mobile health clinic van	137
7	Pregnant women with anaemia	321
7.1	Number having Hb level <11(tested cases)	431
M2	Deliveries hospital deliveries	152
8	Delivered at Home	19
8.1	Number of Home Deliveries attended by	
(a)	Trained(Doctor/nurse/ANM)	31
(b)	NonSBA(TrainedTBA/Relatives/	15
	Total(a) to(b)	46
8.2	Number of new borns visited within 24 hours of home Delivery	11
M3	Pregnancy outcome and details of new---born	
10	Pregnancy Outcome(in numbers)	

10.1	Live birth	3,4,6 Blocks	1,2,14 Blocks	Address	
a	Male				116
b	Female				77
	Total a + b				193
10.2	Still Birth				2
10.3	Abortion (spontaneous/induced) MTP				23
11	Details of newborn children weighed				
11.1	Number of newborns weighed at birth				172
11.2	Number of newborns having weight less than 2.5 kg (Address :)				23
12	Number of newborns breast fed within 1 hour ()				47
M 4	Family Planning				
17	Number of oral pills cycles distributed				53
18	Number of condom pieces distributed				4280
	Motivated and refered for MTP				22
	Motivated for CuT incertion and refered				11
	Refered for MTP and CuT				12
	Motivated and refered for tubecetomy 18 ANCmotivated for T.L 82				100
	Patients reported after Tubectomy				17
	patient reported after MTP and CuT insertion				4
	Patient reported after MTP andTubal Ligation				9
M6	Child immunization				
22	Number of infants 0 to 11 months old received the following				
22.1	BCG				242
22.2	DPT1				494
22.3	DPT2				544
22.4	DPT3				522
22.5	OPV 0(birth dose)				96
22.6	OPV1				468
22.7	OPV2				559
22.8	OPV3				522
22.9	Hepatitis-B1				540
22.10	Hepatitis-B2				562
22.11	Hepatitis-B3				533
22.12	Measles				480

22.13	Total number of children aged between 9 and 11 months who have been fully immunized (BCG+DPT123+OPV123+MEASLES)	
	<i>Male</i>	863
	<i>Female</i>	817
	Total (a) + (b)	1680
23	Number of children more than 16 months who received the following	
23.1	DPT Booster	459
23.2	OPV Booster	459
23.3	M.M.R. VACCINE	520
24	Immunisation Status	
24.1	Total no. of children aged between 12 and 23 months who have been fully immunized (BCG+DPT123+OPV123+Measles) during the month	
(a)	<i>Male</i>	1400
(b)	<i>Female</i>	1269
	Total(a) + (b)	2669
	Children 2–5 years given DT 1/opv	111
	Children 2–5 years given DT 2/ opv	12
24.2	Children more than 5 years given DT5/opv	311
24.3	Children more than 10 yrs givenTT10	124
24.4	Children more than 16 yrs givenTT16	24
24.5	Adverse event Following Immunization	
(a)	<i>Abscess</i>	-
(b)	<i>Deaths</i>	-
(c)	<i>Others</i>	-
	Total a to c	-
25	No. of immunization sessions during the month	
25.1	Sessions planned	99
25.2	Sessions held	99
26.1	Number of children immunized with typhoid vaccine	600
26.2	Number of children given hep-b zero dose	2
27	Vit A administered between 9 months and 5 yrs	
27.1	Vit A 1 Dose – 1,2,3	728
27.2	Dose – 5	7
27.3	Dose – 9	6

M8	Number of cases of childhood diseases reported during the month (0–5years)	
28	Measles	-
29	Diarrhoea with and without dehydration/loose motions	235
30	Malaria	-
Part B Health Facility Services		
M9	Patient services Number of ANC seen	
32	Out patient	22297
32.1	OPD attendance all	23332
M10	Laboratory Testing	820
33	Lab Tests	
33.1	Number of Hb Test Conducted	720
33.2	Of which numbers having Hb<7mg, 1 Hb<11=	15
63(a)	Malaria test conducted	210
(b)	Positive plasmodium vivax	3
(c)	Plasmodium falciparum test positive	2
	Urine pregnancy test done	154
	Urine albumin and sugar tested	90
	OPD patients referred to 2nd and 3rd level hospitals	1085
	ANC referral for booking and investigation	522
	ANC booked	452
	Iron and folic acid Tab 41280/Syp distributed anaemic and ANC304 Bottles	41280+304
	PaedFolifer	13,000
	ORS distributed	1737

URBAN FIELD PRACTICE AREA**Centre for Community Medicine****(January – December 2010)**

POPULATION	: 21,399	No. of Houses	: 2904
Sex Ratio	: 935 / 1000 M		
No. of Families	: 4593	Average Family Size	: 4.66
No. of Birth	: 242	Sex Ratio	: 847 / 1000 M
		CBR	: 11.3 / 1000 Population
No. of Deaths	: 57	CDR	: 2.66 / 1000 Population
		IMR	: 20.66/1000 LB.
SB	: 2	Child MOrtality Rate	: 21 / 1000 LB
NND	: 3		
Under Five Population = 1249 (5.8%)		Sex Ratio = 872 / 1000 M	
Elderly = 4.7		Sex Ratio = 937 / 1000	
Immunisation : 12-23 months = 240			
BCG	: 100 %	DPT - OPV IIIrd dose	: 99%
HepB IIIrd dose	: 99%	Measles	: 98%
MMR	: 94 %	DPT-B	: 88%
Vit. A	: 76 %		
Nutritional Status Under 3 Children : 734			
Normal	: 61		
GR.I	: 35%		
CR.II	: 4%		
Eligible Couples	: 3684 (17.2%)		
Contraceptive Use	: 1389 (37.7%)		
CC	: 29%	OC	: 16%
TB	: 46%	Vs	: 0.5%
IUCD	: 8%		
Infertility	: 1.1%		
Registered ANC's	: 312		
Abortions	: 4		
TT2/B	: 307 (98%)		
IFA (100 Days)	: 303 (97%)		
Registered Deliveries	: 247		
Govt. Hospital	: 81%		
Pvt. Hospital	: 13%		
Home	: 6%		

Special activities

Health Education Activities: Dr Anil Goswami and field staff

Organizing events/exhibitions

S. No.	Name of the activity	Participants	Date
1.	Organized an Exhibition on “World Health Day” at AIIMS	1,000	07 April 2010
2.	Project Intervention on ‘Immunization’ at Dakshin Puri Extension, Dr Ambedkar Nagar, New Delhi	205	10 April 2010
3.	Posters on “Mother’s Day” displayed at 20 places in AIIMS Campus		08 May 2010
4.	Organized an health exhibition on ‘World No Tobacco Day’ at Dakshin Puri Extension, Dr Ambedkar Nagar, New Delhi	80	05 June 2010
5.	Organised a Health Exhibition on ‘Malnutrition, Breast Feeding and Weaning’ at Dakshin Puri Extension, Dr. Ambedkar Nagar	80	09 June 2010
6.	Project intervention on ‘Eye Care’ at Dakshin Puri Extension, Dr Ambedkar Nagar, New Delhi	200	19 July 2010
7.	Organized one role plays on ‘Tuberculosis’ under Family Health Intervention Programme at Dakshin Puri Extension, Dr Ambedkar Nagar, New Delhi	213	30 August 2010
8.	Organized Three Role Plays on ‘Epilepsy, alcohol and overcrowding’ under Family Health Intervention Programme at Dakshin Puri Extension, Dr Ambedkar Nagar, New Delhi	225	06 September 2010
9.	Participated in “Institute Day Health Exhibition” at AIIMS: (16 posters)	—	25-27 September 2010
10.	Participated and provided medical assistance in the ‘Walkathon’ on the eve of ‘International Day for Older Persons’ organized by HelpAge India at Raj Path, India Gate (with 2 PGs)	—	01 October 2010
11.	Organized ‘Global Hand Washing Day’ at Dakshin Puri Extension Dr Ambedkar Nagar, New Delhi	120	15 October 2010
12.	Organized an Health Exhibition on ‘HIV/AIDS’ in front of Foyer for AIIMS staff and students	—	1 December 2010
13.	Organized an exhibition on HIV/AIDS at Dakshin Puri Extn. Dr Ambedkar Nagar	—	2 December 2010
14.	Organized an exhibition on ‘HIV/AIDS’ on the occasion of ‘World AIDS Day’ at Raj Kumari Amrit Kaur OPD, AIIMS for OPD patients	7,000	2–7 December 2010
15.	Eight boxes of used clothes were sent to people living in ‘Delhi Rain Baseras’ (street/homeless people) in winter season for protection from cold	—	06 January 2011
16.	Organized an exhibition on ‘World Leprosy Day’ at Dakshin Puri Extension, Dr Ambedkar Nagar, New Delhi	90	28 January 2011
17.	Had project intervention on ‘Home Remedies’ at Dakshin Puri Extension, Dr Ambedkar Nagar, New Delhi	180	18 February 2011
18.	Organized an exhibition and a talk on ‘World T.B. Day’ at Dakshin Puri Extension, Dr Ambedkar Nagar, New Delhi	80	28 March 2011

Fifteen film shows were conducted under various teaching and training programmes. Three hundred and two teaching sessions were projected and four sessions were photographed. Public address system was used for 10 events.

Four role-plays by medical students and seven by nursing students were performed in the community on alcoholism, drug-addiction, family planning, polio, personal hygiene, obesity, mother and child health and female infanticide, accidents, healthy life style, gender bias, small family norms, eye donations, and swine flu.

National Service Scheme (NSS) Unit, AIIMS

The NSS Unit of AIIMS is located at Centre for Community Medicine. Dr Bir Singh continued to be its Programme Coordinator.

Sex and Marriage Counselling Clinic (SMCC), AIIMS Hospital: Room No. 38 in the main AIIMS Hospital, thrice weekly; Dr Bir Singh is Faculty Incharge.

New patients seen	1785	Old patients seen	1833
Total patients seen	3618		
Investigations carried out			
Blood sugar	93	Semen analysis	385
Urine R & M	40	Hormone analysis	483
VDRL/HIV/Urine & Semen C/S	41	Hemoglobin	08
USG/Doppler	216	FNAC	79

AIDS Education and Training Cell (AETC)

Dr Bir Singh is coordinator of this Cell. The following activities were organized by the Cell in 2010–11.

- The telephone helpline on HIV/AIDS, sex related issues and contraception ('Shubhchintak') continued to be operated with usual popularity, attracting a good number of calls daily.
- The Internet based helpline 'E-shubhchintak' on HIV/AIDS, sex related issues and contraception continued to be operated with usual popularity. On an average, 1–2 requisitions for IEC materials apart from queries on HIV/AIDS, sexual problems, STDs, contraception etc., were received on daily basis.
- The Cell produced and disseminated educational material on HIV/AIDS to general public in 2010–2011.
- About 77 new patients were given personal counseling on HIV/AIDS apart from the counseling to old patients.
- Organized a mini exhibition on HIV/AIDS at AIIMS on the World AIDS Day on 1 December 2010.

Health Promotion and Health Communication (HPHC) unit, CCM

Dr Bir Singh is Faculty Incharge of the unit. The unit carried out the following activities in the community as well as the AIIMS.

- Continued its series of the innovative programme 'Pre-marriage orientation and counselling for happy married life'.
- Continued series of regular, monthly lecture discussions on health topics for general public (HELPS) at AIIMS. These HELPS were well attended by a large audience.
- Continued to provide audio-visual and print support for various health education activities and programmes at AIIMS.
- Nineteen film shows were conducted under various teaching and training programmes.
- Five role-plays were performed in the community on diarrhoea and ORS; HIV/AIDS, alcoholism, drug-addiction, family planning, polio, personal hygiene, obesity and mother and child health.

Social Services (Dr Anil Goswami and Mrs Neena Chawla)

More than 4322 patients/clients were identified and provided Medical Social Services. This included a variety of services such as counselling, helping them to get medical and financial help and referral to various social welfare institutions/organizations.

	Dr Anil Goswami	Mrs Neena Chawla	Total
Patients identified for social services	1,422	3,000	4322
Financial help arranged for:	03		
Medicine	–	8	11
Education	–	04	04
Occupation		05	05
Charges exempted	05	08	13
Counselling provided :			
Individual	1154	2017	3171
Family	156	200	356
Group	48	170	218
Referral services to various social welfare organizations	32	54	86
Rehabilitation services			
Drug deaddiction	08	04	12
Jobs	02	04	06
Cancer patients	02	03	05
Handicapped	02	04	06
School drop out	–	01	01
Widows/deserted	02	06	08
Nutritional supplement	–	05	05
Arranged cataract			
Surgery	02	24	26
Vocational training	–	02	02
Physiotherapy	04	02	06
Free denture for poor patients	–	05	05
Help for widow daughters marriage	02		03
Counselling on helpline in the afternoons	–	300	

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Centre for Community Medicine was designated as WHO Collaborating Centre for Capacity Building and Research in Community Based Non-communicable Disease Prevention and Control.

Professor C.S. Pandav appointed Member, Strategy Committee for Comprehensive Nutrition Mission, Karnataka, by the Government of Karnataka; Elected President of The Indian Public Health Association of (IPHA) for 2010–2012; Conferred Dr Laxmi Kant Memorial Oration– Tracking Progress towards Sustainable Elimination of Iodine Deficiency Disorders in Bihar and India, Patna, Bihar; Appointed a member of the ‘Expert Committee’ on hypertension

constituted by the Director General of ICMR; Invited Member of the Board of Studies in the subject of Community Medicine of the KIIT University, Bhubaneswar, Invited by the National Book Trust as Member on the Advisory Panel for Popular Science Series of National Book Trust, India; Attended a meeting organized by Jan Swasthya Sahyog (JSS) to formalise the agenda for the collaboration between JSS and AIIMS on 12–13 April 2010 at Bilaspur, Chhattisgarh; Conducted MD (Community Medicine) Examination at the West Bengal University of Health Sciences, Kolkata as an external examiner from 20–21 May 2010; Attended the preliminary meeting of Advisory Committee of Community Oriented Programme for Control of Rheumatic Diseases (COPCORD) on 4–5 September 2010 at Pune, Maharashtra; Attended Government of Tamil Nadu – National Iodine Deficiency Disorders Control Programme (GOTN–NIDDCP) Workshop on Universal Salt Iodization (USI) Tamil Nadu, 2 September 2010; Attended IPHA KERALACON 2010 (First State Conference of IPHA, Kerala) at IMA House, Ernakulam, Kerala, 17–19 September 2010; Attended 55th Foundation Day Celebration and 156th Central Council Meeting of Indian Public Health Association (IPHA), Kolkata, 27 September 2010; Participated in the Board of Studies for the ICMR School of Public Health – Review meeting at National Institute of Epidemiology (NIE), Chennai, 14 October 2010; Conducted the viva voce examination for the MPH programme as an External Examiner at NIE Chennai, 8–10 November 2010; Attended the 55th Annual National Conference of Indian Public Health Association at the Department of Public Health, KLE Academy of Higher Education and Research, Belgaum, Karnataka, 28–30 January 2011; Attended the Joint Annual Conference of Indian Association of Public Health and Indian Association of Preventive and Social Medicine (Maharashtra Chapter), 11–12 February 2011, Sevagram, Wardha, Maharashtra; Attended 11th Annual Conference of Railway Chapter of the Indian Public Health Association, at Jaipur, 26th March 2011; Attended Development Cooperation Seminar on Iodine Deficiency Disorders: A Development Challenge for Thailand, 28–30 July 2010 in Bangkok, Thailand; Conducted MD (Community Medicine/Community Dentistry) Parts I and II Examination, 9–14 August 2010, Colombo, Sri Lanka; Attended 63rd Session of the Regional Committee of WHO–SEARO, Bangkok, Thailand, 6–10 September 2010; Attended the Workshop on Sustainable Elimination of Iodine Deficiency Disorders in Qatar, Oman from 8–9 December 2010.

Prof. Bir Singh was awarded the prestigious Honorary Fellowship of the Indian Public Health Association for the year 2010–2011; Nominated by National Academy of Medical Sciences as an Expert member of the Advisory Panel for Public Health and Health Education; Invited by Ministry of Health and Family Welfare, Government of India for a brainstorming session with the Hon'ble Minister of Health and Family Welfare Shri Gulam Nabi Azad. (28–29 September 2010); Continued to be a member of the Editorial Board of the Indian Journal of Paediatrics; Nominated by Directorate General of Health Services (Government of India) as a member of the committee to review the proposed National Epilepsy Control Programme (January 2011); Appointed a member of the Speciality Advisory Board for Family Medicine by the National Board of Examinations, New Delhi. (December 2010); Nominated by the Government of Delhi as a member of the Multi-disciplinary Task Force to Control “Dengue, Malaria and other Vector-borne diseases in NCR of Delhi (October 2010); Nominated a member of the ‘Scientific Advisory Committee’ of ICMR to set up a Centre to review the proposal ‘Applied Center for Research in MCH at Sewagram, Wardha. (October 2010); Nominated to the Post Graduate Board of Studies in Community Medicine, Pt. B.D. Sharma University of Health Sciences Rohtak (June 2010); Empanelled as an advisor by the Union Public Service Commission (UPSC), Government of India for interviews for medical posts conducted by the Commission; Examiner for MBBS Examination at Government Medical College, Srinagar, Jammu and Kashmir University, February 2011; Participated in the 55th Annual National Conference of Indian Public Health Association (IPHA) at Belgaum (Karnataka), January 2011; Appointed an examiner by University of Delhi for reviewing theses for MD Community Medicine (January 2011); Nominated a member of the sub-committee constituted by AIIMS for reviewing community studies (November 2010); Continued to be on the Doctoral Committee for PhD students in the Department of Bio-Statistics and one student in Reproductive Biology; Attended 19th Scientific Advisory Meeting of Desert Medicine and Research Centre (DMRC), Jodhpur, May 2010 as an Expert Member; Examiner for MD. Examination of the Jammu and Kashmir University, held at Government Medical College, Srinagar, May 2010; Participated as an expert in the Expert Committee Meeting for PG Diploma in HIV Medicine at Indira Gandhi National Open University (IGNOU), 27–28 April 2010; Organized the World Health Day 2010 Celebrations of Ministry of Health and Family Welfare, Government of India at All India

Institute of Medical Sciences on the theme 'Urban Health Matters!', 6 April 2010; Invited a Resource Person for Ministry of Health and Family Welfare, Government of India on developing a training programme for National Tobacco Control Programme; Institutional responsibilities at AIIMS: Co-Chairman, Gymkhana Committee; Member, Raj Bhasha Committee; Member, Students Welfare Committee; Member of the Research Sub-Committee of AIIMS to select Community Based Research Studies; Member, Selection Committees and DPCs; Research related: Member, Doctoral Committee of Dr Manish Jain, Reproductive Biology Department of AIIMS; Co-guide for a PhD student in the Department of Biostatistics, AIIMS; Member of the Research Sub-Committee of AIIMS to select Community Based Research Studies

Professor Shashi Kant participated in expert group meeting on HIV/AIDS epidemic, organized by Department of Hospital Administration, CSSM University, at Lucknow, 16–18 September 2010; Consultation on WHO Health Sector Strategy for HIV/AIDS 2011–2015 for India, New Delhi, 14–15 September 2010; Central Team of National Institute of Health and Family Welfare for annual sentinel surveillance for HIV infection – 2010. Regional Institute for HIV sentinel surveillance for 2010–2011 constituted by National AIDS Control Organization, Ministry of Health and Family Welfare, Government of India; Technical Resource Group (TRG) on HIV surveillance and estimation constituted by National AIDS Control Organization, Ministry of Health and Family Welfare, Government of India; Technical Resource Group (TRG) on Sexually Transmitted Infection Services, constituted by National AIDS Control Organization, Ministry of Health and Family Welfare, Government of India; Member of Selection Committee for recruitment of Programme Officer (Surveillance) and State Epidemiologists for National AIDS Control Organization, New Delhi; Project Review Committee of Indian Council of Medical Research (for ENT); Ethics Committee of National Institute of Medical Statistics, New Delhi; Institutional Review Boards member of IndiaCLEN. Member of Central Public Information Officer for Central Workshop of AIIMS; Faculty in-charge of Telemedicine facility at AIIMS; Faculty coordinator of Central Workshop of AIIMS; Member of Disease Prevention and Outbreak Response Cell of AIIMS; Member of 55th Institute Day Celebration sub-committee for arranging an exhibition on 'Frontiers in Health Care Practices'; Member of Dean's Committee of AIIMS. Member of Ethics sub-committee of AIIMS; Member of Selection Committee for the selection of Senior Residents; Training programme on HIV sentinel surveillance round 2010 organized by Andaman and Nicobar AIDS Control Society, Port Blair, 27–28 September 2010.

Resource person for Workshop on Research Ethics, organized by World Health Organization (SEARO), held at Thimpu, Bhutan, 10–13 May 2010; Resource person for Workshop on Operational Research in Reproductive Health, organized by World Health Organization (SEARO), Jogjakarta, Indonesia, 27 June–3 July 2010; Resource person for Workshop on Strengthening Reproductive Health Research Capacity, organized by World Health Organization (SEARO), Jogjakarta, Indonesia, 4–7 July 2010; Resource person for training programme for Medical Officers, organized by Bihar AIDS Control Society, Patna, 7–10 September 2010.

Professor Sanjeev Kumar Gupta was Member of the Stores Purchase Committee of the Centre for Dental Education and Research; Member of the Negotiation Committee of the AIIMS Hospital Stores; Member of the Core Committee of the AIIMS, under the Revised National Tuberculosis Control Programme; Reviewer for the Indian Journal of Community Medicine, and The National Medical Journal of India; Member of the Doctoral Committee in respect of two PhD Theses in the Department of Community Ophthalmology, Dr R. P. Centre, AIIMS; Member of the Technical Working Group for further strengthening the Institute's participation in the National Missions of Public Health; internal examiner in the Board of Examiners for MD (Community Medicine) examination of the AIIMS, May 2010; Member of the Board of Examiners for the PhD viva-voce examination of Ms Neena John, a PhD student in the Department of Community Ophthalmology, Dr R. P. Centre, AIIMS.

Dr Kiran Goswami was Member of the Central Coordinating team at INCLIN for studies 'Determinants of under nutrition in children and assessment of management at different levels of health care' and Concurrent evaluation of reach, effectiveness, and impact of the Mukhya Mantri Janani Shishu Swasthya Abhiyan (MMJSSA-JSY), Jharkhand – An IndiaCLEN and PFI collaboration Attended ISC, 3–7 January 2011, Chennai.

Dr Anand Krishnan was Head of the WHO Collaborating Centre for Capacity Building and Research in Community Based Noncommunicable Disease prevention and Control; Attended the National consultation on developing socio-medical tools for early identification of acute hunger and starvation for effective administrative action organized by Jawaharlal Nehru University; Was Temporary International Professional with World Health Organization, South-East Asia Office for three months from 1 August to 31 October 2010; Attended the WHO Regional Meeting on Health and

Developmental challenges of NCDs at Jakarta from 1–4 March 2011 and prepared the report of the meeting; Attended the Meeting of expert group for Estimation of GBD due to severe acute lower respiratory infections in children organized by University of Edinburgh on 30 and 31 August, 2010; Attended the 10th Annual General and Scientific Meeting at Accra, Ghana, 27–30 September 2010; Attended the Expert Group Meeting National Sentinel Surveillance Model for Vaccine Preventable Childhood Infectious Diseases organized by National Centre for Disease Control (NCDC), New Delhi, 28 June 2010; Attended the Project Review Committee Meetings on Cardiovascular diseases, neurological diseases of Indian Council of Medical Research.

Dr Baridalyne Nongkynrih participated in a symposium organized by the Australia India Institute; Attended a workshop in Health financing organized by National Health Systems Resource Centre, New Delhi; Participated in a meeting on the National Urban Health Mission; Attended a consultation workshop organized by Public Health Resource Network on 'Non-communicable disease and Mental Health' module; Attended the 38th Annual National Conference of Indian Association of Preventive and Social Medicine (IAPSM), MKGC Medical College Berhampur, Orissa, 22–24 February 2011; Joint Secretary of Indian Association of Preventive and Social Medicine for the 2nd term; Reviewer for the Indian Journal of Community Medicine.

Dr Sanjay Rai was Member Central Zone for HIV/AIDs sentinel surveillance in India, responsible for supporting HIV sentinel surveillance activity of five central zone states of India (Bihar, Delhi, Jharkhand, Uttarakhand and Uttar Pradesh) since 2006; elected 'Joint Secretary' (north zone) of Indian Public Health Association for the year 2010–2012. Member TB working group for INDEPTH Network and attended a working group meeting on 8 – 9 April 2010, Kisumu, Kenya organized by CDC; Member of the Sub-committee on 'Developing PG curriculum in community medicine' and 'Immunization' of Academy of Indian Public Health Association; Nominated as mentor for the district health official of Faridabad and Palwal by NHSRC for preparation of annual District Health Plan for the year 2009–2010 and 2010–2011 under NRHM; Chosen by NACO, MOHFW, GOI, as nodal person for providing technical support to HIV Sentinel Surveillance of five states (UP, Bihar, Jharkhand, Uttarakhand and Delhi) of north zone. Reviewer for various journals, like. Health and Population Perspective and Issues, Indian Journal of Public Health, Indian Journal of Community Medicine, etc. Nominated by Punjab University and University of Delhi, as a member of the Board of Examiners in community medicine for 2010–2011 and was external examiner for Final Professional MBBS part 1 examination (community medicine) at Government Medical College and Hospital Chandigarh and Maulana Azad Medical College, New Delhi, Organized Health Mela under NRHM in Banka District of Bihar from 2 February 2011–4 February 2011; Conducted several supervisory field visits of Bihar, Jharkhand, Delhi and UP to monitor HIV Sentinel Surveillance of India as a central team member.

Dr Y.S. Kusuma attended the meeting of principal investigators of the National Task Force Study on Migrants' Healthcare, organized by Indian Council of Medical Research (ICMR), at ICMR Headquarters, New Delhi, 17–18 February 2011; Editor for ICCIDD Newsletter—Jagriti; and selected as Editorial Board Member for Studies on Ethno-Medicine and Afro-Asian Journal of Anthropology and Social Policy; Serving as Reviewer to international and national professional journals such as Asia-Pacific Journal of Public Health, Annals of Human Biology, Asian Pacific Journal of Tropical Medicine, Journal of Public Health, Maternal and Child Health Journal, Indian Journal of Medical Research, Studies on Ethno-Medicine, Journal of Human Ecology, etc. Served as adjudicator of PhD/MD theses and reviewer for research proposals of ICMR.

Dr Anil Goswami participated in a 'Multi Disciplinary Task Force Meeting' on 'Vector Borne Diseases Control' at Delhi Secretariat I. P. Estate New Delhi. during Commonwealth Games 2010 on 23 September 2010; Delivered a lecture on 'Dengue' in MCD School of Dakshin Puri Extension, Dr Ambedkar Nagar, New Delhi, on 24 September 2010; Attended a workshop on 'Prevention and Control of Rabies' at Vardhman Medical College and Safdarjung Hospital, New Delhi, 29 October 2010; Participated in a All India Radio Programme on 'Vayaktigat Swasthya: Bimariyon Se Bhav ka Achuk Astra' 14 October 2010; Participated in Focus Group Discussion 'Dhat Syndrome' organized by Department of Psychiatry, AIIMS, 22 March 2011; Participated and co-ordinated with Dr Bir Singh, Course Director, 'Pre-Marriage Orientation Course for Happy Married Life' at AIIMS for the unmarried men and women from different parts of the country; Attended 38th Annual National Conference of 'Indian Association of Preventive and Social Medicine' 22 –24 February 2011, Department of Community Medicine, Maharaja Krushna Chandra Gajapati Medical College, Berhampur, Orissa; Treasurer of Indian Association of Preventive Medicine (IAPSM) (A National Body) 2010–2011 for a second consecutive term.

9.9 Dermatology and Venereology

Professor and Head

V.K. Sharma

Professors

Neena Khanna

K.K. Verma

M. Ramam

Additional Professors

Binod K Khaitan

Sujay Khandpur

G. Sethuraman

Associate Professor

Somesh Gupta

EDUCATION

Four candidates completed MD Dermatology and Venereology training and several national and international fellows underwent short term training.

Lectures delivered in CME/ National and International conferences: 35

RESEARCH

Funded projects

1. Evaluation of cyctophosphamide pulse therapy as adjuvant in the management of pemphigus. Dr Vinod K Sharma, ICMR, Rs 7 lakhs.
2. Genetic Analysis of Psoriasis and Arthritis in Indians. Dr Vinod K Sharma, National Institute of Health, USA, Rs 60 lakhs.
3. Programme support for skin pigmentation and melanocyte keratinocyte biology. Dr Vinod K Sharma , DBT, Rs 22 lakhs.
4. Randomized clinical trail of azathioprine weekly pulse versus daily azathioprine for the treatment of Parthenium dermatitis. Dr K.K. Verma, ICMR, 2006–2010, Rs 18.24 lakhs.
5. Randomized clinical trail of azathioprine versus methotrexate weekly pulse for the treatment of Chronic plaque psoriasis, Dr K.K. Verma, ICMR, 2010–2013 Rs 16.80 lakhs.
6. Prevalence of vitamin D deficiency rickets in children with congenital ichthyosis and keratinizing disorders. Dr G Sethuraman, ICMR, 2010–2013, Rs 14 lakhs.
7. A comparative study of effectiveness of Immunotherapy with intralesional injection of killed mycobacterium w vaccine and imiquimod cream in clinical resolution of external anogenital warts and reduction of viral load. Dr Somesh Gupta, DBT from 2008, Rs 36.5 lakhs.
8. Determination of plasma and urinary levels of catecholamines in patients with vitiligo and their correlation with disease stability and outcome of melanocyte transplantation. Dr Somesh Gupta, ICMR, from 2010, Rs 30 lakhs.

9. Comparison of hair follicle stem cells differentiation into melanocytes in grey hair and pigmented hair. Dr Somesh Gupta, IADVL, Rs 10 lakhs.

Departmental projects

1. Clinical profile of photodermatoses at AIIMS.
2. Evaluation of cyclophosphamide pulse in treatment of pemphigus.
3. Desmoglein 1 and 3 antibodies in pemphigus and correlation with activity of disease.
4. Development of photo-testing protocols.
5. Nd Yag laser in the treatment of Nevus of Ota and lentigines.
6. Effectiveness of 15 mg weekly methotrexate in inducing remission in chronic idiopathic urticaria resistant to antihistamines.
7. Pulse dye laser in portwine stain.
8. Evaluation of effectiveness and safety of oral acyclovir 1 gm twice a day for 3 days versus oral acyclovir 1 gm once a day for 5 days in genital herpes.
9. Combination regimen of topical PUVA and mometasone furoate in treatment of segmental vitiligo.
10. Urological evaluation of dermatological patients on chronic cyclophosphamide therapy.
11. Clinico-histological evaluation of erythematous tender nodules on extremities.
12. Comparison of clinical efficacy of PUVA versus PUVA sol therapy in generalized vitiligo.
13. Dexamethasone – cyclophosphamide pulse therapy in pemphigus.
14. 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.
15. A study of knowledge and attitude towards leprosy in people with and without leprosy and measurement of debilitation in leprosy patients.
16. A randomized controlled study to evaluate the efficacy of topical tacrolimus (0.1%) ointment vs clobetasol propionate (0.5%) ointment in patients with morphea and lichen sclerosis.

PUBLICATIONS

Journals: 34

Books: 1

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Professor V.K. Sharma was Congress President for World Congress of International Society of Dermatology, NCR, Delhi, 4–8 December 2013; Congress Co-Chair, World Congress of International Union against STI, New Delhi 3–5 November 2011; Member editorial board, ‘Dermatitis’ Journal of American Society of Contact Dermatitis; Member editorial board, ‘Contact dermatitis’ Journal of European Society of Contact Dermatitis; Delegate to International League and Dermatologic Societies (ILDS); Organizing Chairman, National CME Dermatology, AIIMS 10–11 April 2011.

Professor K.K. Verma was Professor In-charge (Examinations), AIIMS, June 2010; Hon. Secretary, International Union against Sexually Transmitted Diseases, Asia Pacific (IUSTI–AP), 2008–2010; Chairman, Scientific Committee, Asia Pacific Environmental and Occupational Dermatitis Symposium, (APEODS), Chandigarh, India, October 2011.

Professor M. Ramam received Dr B V SatyaNarayana Memorial Oration Award 2010; Member, Editorial Board, Journal of Cutaneous Pathology; Member, Editorial Board, International Journal of Dermatology.

Dr B.K. Khaitan was Member, Editorial Board, Indian Journal of Cutaneous and Aesthetic Surgery; Reviewer, several journals; Head of the jury for awards on best poster presentations at Dermacon 2011, Gurgaon 2–5 February; Chaired the session ‘Management of Vitiligo – What’s new?’, Aesthetics 2010– Joint Conference of Association of Plastic Surgeons of India (Delhi Chapter) and Association of Cutaneous Surgeons of India, Lady Harding Medical College, New Delhi, 28–29 August 2010; Chaired the session ‘Diagnosis of cicatricial alopecia’, National CME Dermatology AIIMS 2010 held on April 10–11 2010.

Dr Sujay Khandpur received Bishnupriya Devi Award for best paper published in *IJDVL*

Dr G. Sethuraman was Treasurer, World Congress of International Union against STI (November 2011); Reviewer for Archives of Dermatology, Indian Pediatrics, Indian J Pediatr.

Dr Somesh Gupta was Nominated as Editor-in-Chief of Journal of Cutaneous and Aesthetic Surgery – A PubMed, Indexed open access journal published quarterly; Nominated as Co-Chair of 12th IUSTI World Congress to be held at VigyanBhawan, New Delhi, India, 2–5 November 2011; Nominated as Congress President for Spring Meeting International Society for Dermatologic Surgery (ISDS) to be held from 5–8 April 2012, New Delhi, India; Continuing as Membership Secretary of International Union against Sexually Transmitted Infections (IUSTI–World); Nominated as Associated Editor of Sexual Health (Australia–impact factor 1.62)

9.10 Endocrinology and Metabolism

Professor and Head

A.C Ammini

Professor

N. Tandon

N. Gupta

Additional Professor

R. Goswami

Associate Professor

V.P. Jyotsna

R. Khadgawat

EDUCATION

Undergraduate, Postgraduate, Paramedical Training

The department was actively involved in teaching of undergraduate and nursing students while postgraduate student from Internal Medicine come for one month posting..

Short- and long-term training

Five candidates completed their DM and five new candidates joined the department for DM course, one student joined PhD (Endocrinology) and nine candidates completed short term training.

Lectures delivered in CME/ National and International conferences: 24

RESEARCH

Funded projects

1. β -cell dysfunction versus insulin resistance in polycystic ovary syndrome in Indian women. A.C Ammini, Funded by ICMR, 2008-2011.
2. Congenital adrenal hyperplasia: genotype phenotype correlation, A.C Ammini, funded by DBT, 2008-2011.
3. A phase III randomized, placebo-controlled clinical trial to assess the safety and efficacy of Odanoacatib (MK-0822) to reduce the risk of fracture in osteoporotic postmenopausal women treated with vitamin D and calcium, A.C Ammini, Funded by MERCK & Co. Inc. USA, 2009-2014.
4. Prevention of type 2 diabetes in women with gestational diabetes in urban India – a feasibility study, N. Tandon, Funded by International Diabetes Federation under the IDF-BriDGES.
5. To establish a Center of Excellence (COE) for Prevention and Control of Cardio-metabolic Diseases in South Asia for population-based applied research and training, N. Tandon. Funded by National Heart Lung and Blood Institute, NIH, USA.
6. Identifying causal variants for type 2 diabetes in major human populations, N. Tandon. Funded by National Institute of Diabetes and Digestive and Kidney Diseases, NIH, USA.
7. ADVANCE-ON. Follow up study involving the cohort of patients studied as part of ADVANCE, the largest trial in patients with type 2 diabetes, N. Tandon. Funded by Servier Industries, France and coordinated by George Institute for International Health, University of Sydney, Australia.
8. Diabetes mellitus- New drug discovery R & D, molecular mechanisms and genetic & epidemiological factors, N. Tandon, Funded by CSIR, 2008-2013.
9. Registry of people with diabetes in India with young age at onset, N. Tandon. Funded by ICMR, 2006-2011.

10. A randomized, double blind placebo controlled, parallel group, study to determine whether in patients with type 2 diabetes at high risk for cardiovascular and renal events, aliskerin on top of conventional treatment, reduces cardiovascular and renal morbidity and mortality Novartis, N. Tandon. 2007–2012.
11. Role of oral vitamin D as an adjunct therapy in category I pulmonary tuberculosis long with assessment of immunological parameters: Randomized double Blind Trial, R. Goswami, Funded by DBT, 5 years, Funds: Rs. 98 lakhs.
12. Prevalence and significance of celiac disease in patients with type-1 diabetes, R. Goswami, Funded by ICMR, Funds: Rs. 19.7 lakhs.
13. Th1 and Th2 expression pattern and HLA predisposition in patients with sporadic idiopathic hypoparathyroidism, R. Goswami, Funded by DBT, 3 years, Funds: Rs. 48 lakhs.
14. Pattern of Th1 and Th2 cytokines expression in Asian Indians with chronic hypovitaminosis D and its change after oral cholecalciferol supplementation, R. Goswami, Funded by ICMR, Funds: Rs. 32 Lakhs.
15. 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, V. Jyotsna, Funded by ICMR, 2009-2011, Funds: Rs. 2.5 lakhs.
16. 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, R. Khadgawat, Funded by LG life Science, 2007-2012, Funds: Rs. 40 lakhs.
17. Correlation between first trimester glucose screening & serum insulin levels with development of gestational diabetes mellitus in pregnancy, R. Khadgawat, Funded by ICMR, 2007-2010, Funds: Rs. 9 Lakhs.
18. A study on the molecular etiology underlying skeletal dysplasia, R. Khadgawat, Funded by AIIMS, 2010-2011, Funds: Rs. 1 Lakh.
19. A Randomized Double Blind Controlled Trial to Investigate the Effects of Vitamin D supplementation on Insulin Resistance and Beta cell function in obese Asian-Indian Subjects, aged 11-17 years, R. Khadgawat, Funded by ICMR, 2011-2014, Funds: Rs. 47 Lakhs.

PUBLICATIONS

Journals: 30

PATIENT CARE

Endocrine OPD

Month	New Cases	Old cases	Total
April 2010	709	1348	2057
May 2010	811	1365	2176
June 2010	769	1295	2064
July 2010	801	1354	2155
August 2010	781	1321	2102
September 2010	794	1301	2095
October 2010	814	1395	2209
November 2010	812	1364	2176
December 2010	790	1351	2141
January 2011	825	1348	2173
February 2011	869	1329	2198
March 2011	856	1367	2223
Total	9631	16138	25769

OPD activity

Department have 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).

Laboratory Investigations

The total number of hormone assays and biochemical test done during this period in the metabolic lab of the Dept is given below (**TOTAL=50,410**)

<u>No</u>	<u>Hormone</u>	<u>Tube assays done</u>
1	T4	9713
2	TSH	13,557
3	TPO	1670
4	LH	2082
5	FSH	1805
6	PRL	1890
7	Cortisol	3405
8	Testosterone	1703
9	DHEA	607
10	17 OHP	311
11	ACTH	1821
12	PTH	3709
13	Vitamin D	2057
14	Insulin	2483
15	C Peptide	1447
16	GH	464
17	GAD	341
18	F T4	492
19	IGF 1	16
20	Ferritin	756
21	1A2	80
22	T3	1

Biochemical investigations done in the Metabolic Laboratory for Patient care

<u>No</u>	<u>Investigations</u>	<u>Number of samples</u>
1	Blood sugar	10, 215
2	Glycated haemoglobin	9296
3	Urine pH	240
4	Osmolality	212

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Three research papers from the departmentone awards. These were:

1. Best oral paper “The Oslar Award” in 40th Annual Conference of the Endocrine Society of India, December 9-11, Vellore. Khandelwal D, Khadgawat R, Thomas T, Gahlot M, Tandon N, Gupta N. The Effect of Puberty on Interaction between Vitamin D Status and Insulin Resistance in Obese Asian Indian Children.
2. Won 2nd best oral paper in National Conference on Gynae Endocrinology, organized by Gynaecological Endocrine Society of India (GESI), 16-17 April, 2011, New Delhi. Menon R, Agarwal N, Kriplani A, Khadgawat R, Bhatla N, Kachhawa G. Comparison of pregnancy outcome in diabetes with pregnancy controlled on diet, glibenclamide and insulin.
3. Received Dr. JC Patel-Dr. BC Mehta JAPI Award -2010 for 2nd Best Original Article. Khadgawat R, Brar KS, Tandon N, Gahlot M, Yadav CS, Malhotra R, et al. High prevalence of vitamin D deficiency in elderly patients with non-traumatic hip fractures. J Assoc Physicians India 2010;58:539-542.

Professor N. Tandon was member of the Technical screening committee SIBIRI, DBT; Technical screening committee BIPT, DBT; Task for Chronic disease biology of the DBT; Task for Bioengineering, DBT

Dr R. Goswami was member Committee for selection for the Senior Research Fellow and Research Associates by the ICMR from 2007 to date; Selection committee for awarding MD, DM and M.Ch thesis financial grant by ICMR 2009 to date; Task For Chronic disease biology of the DBT 2007 to date; Steering Committee for ‘Drug from Sea’ from Ministry of Earth Science; Awarded Fellowship of the National Academy of Science, Allahabad, India; Received Prestigious Dr RV Rajam Oration of the NAMS Delhi; Invited as an external member of the committee for identification of courses and curriculum, Department Road map, finalization of the subject experts and examiner for faculty and PhD areas of high relevance to biomedical community by the first Board of studies meeting for the Department of Molecular Medicine and Biotechnology SGPGI, Lucknow. 4th March 2011.

9.11 Forensic Medicine

Professor and Head

TD Dogra

Additional Professors

OP Murty
S.K. Gupta

DN Bhardwaj
Millo Tabin

Associate Professors (Faculty at JPNATC)

Sanjeev Lalwani

Adarsh Kumar

Scientist-II

Anupama Raina

Chemist

AK Jaiswal

EDUCATION

The department is actively engaged in undergraduate and postgraduate teaching. Currently, nine postgraduate (MD) students and three PhD students are enrolled in the department. The department is also imparting training in DNA-Fingerprinting and Toxicology to BSc/MSc students of other Indian Universities from all over India.

CONTINUING MEDICAL EDUCATION

1. Indo Pacific Association of Law, Medicine and Science (INPALMS)- 2010 International Conference organized in collaboration with Amity University, AIIMS and PGIMER, 25–30 October 2010 (Prof TD Dogra was Organizing Chairman of the Conference).
2. 3rd AIIMS Cadaver Knee Arthroplasty Course, 26–27 March 2011 in collaboration with Department of Orthopedics.
3. AIIMS Operative workshop on Spinal Surgery and AOSpine Advances Cadaver Workshop, 12–14 November 2010 in collaboration with Department of Neurosurgery.
4. Cadaveric Course on Hip and Knee Arthroplasty 16–17 July 2010 in collaboration with Department of Orthopedics.
5. AIIMS Cadaver Knee Arthroscopy Workshop, 12 September 2010 in collaboration with Department of Orthopedics.

Lectures delivered in CME/ National and International conferences: 18

RESEARCH

Departmental Projects

1. Effect of acute and chronic exposure of combination of Triazophos and Butylatedhydroxyanisole on oxidative stress related parameters in Wistar Rats.
2. Influence of exposure to combination of pesticides cypermethrin and endosulfan on sub cellular changes in viscera's of Wistar Rats.
3. Identification of reliable source among forensic exhibits for individualization with STR markers in novel forensic situations.
4. Qualitative and quantitative assessment of Aluminum and Zinc in fatal poisoning cases, reported at AIIMS mortuary using trace metal analyser.

5. Qualitative and quantitative extraction of DNA from decomposed tissues.
6. Influence of exposure to combination of pesticide (Cypermethrin and Endosulfan) on subcellular changes in viscera of Wistar rats.
7. Estimation of lead level in blood among south Delhi Population – A Cross Sectional Autopsy Based Study.
8. Analysis of pattern of diatoms present in bone marrow and other body tissues of normal population.
9. Histological study of conduction system of heart in sudden natural death cases.
10. Prevalence of Coronary atherosclerosis in young Indian Population- An autopsy study at AIIMS.
11. A comparative study for determination of postmortem interval by analysis of CSF and Vitreous Humour in South Delhi region.

Collaborative Projects

Ongoing

1. Evaluation of vitreous humour as a biomatrix for the quantification of drugs and chemicals in postmortem forensic investigation. (Ocular Pharmacology, RPC)

Completed

1. Histopathological and morphometric evaluation of surgically excised specimen of aortic aneurysm. (Department of Pathology)

PUBLICATIONS

Journals: 19

PATIENT CARE

Casualty Services: The department continued to provide round the clock coverage to the casualty in medico-legal cases in 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: 1364+1138 JPNATC = 2502.

Doctors of the department also participated in board postmortems constituted by competent authorities including exhumation.

Court attendance by the members of the department: 928

Doctors of the department also attended court in CBI cases as an expert witness.

Clinical Forensic Medicine

The department examined cases of age estimation, medical examination, marriage disputes, potency, DNA fingerprinting, etc. referred by honourable courts, CBI and other investigating agencies. 50 such cases were dealt in 2010–11.

DNA Fingerprinting

The department provides training to the candidates of various universities. It is performing DNA Fingerprinting test in selected medico-legal cases. **30** such tests were done during 2010–11.

Medical Toxicology

Tests for various poisons, e.g., heavy metals, opiates, benzodiazepines and alcohol were done in toxicology laboratory. 262 samples were analysed during 2010–11.

Community services

The department participated in training programmes for CBI officials, police officers, medical officers, judges public prosecutors and Forensic Science experts from all over country.

FORENSIC PATHOLOGY

The department provides histopathology service for the samples of medico-legal autopsy cases in AIIMS and also for research purpose.

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Professor TD Dogra received Life Time Achievement Award by Society of Toxicology 2010 (STOX 2010), Award received from Hon'ble Union Minister for Health and Family Welfare, Shri GulamNabi Azad; Distinguished Services Award – Geriatric Society of India, November 2010.

Dr Sanjeev Lalwani received Distinguished Services Award – Geriatric Society of India, November 2010; Excellence Award from ICFMT on the 'In recognition of outstanding contribution in organization of Indo Pacific Association of Legal Medicine and Science 2010 (INPALMS 2010)'.

Dr Anupama Raina received Excellence Award from ICFMT 'In recognition of outstanding contribution in the field of DNA Fingerprinting Technology in India' October 2010, awarded on the occasion of Indo-Pacific Association of Legal Medicine and Science 2010 (INPALMS 2010).

Dr A.K. Jaiswal received Prof K A Thaker – Best paper award for topic "Determination of chlorpyrifos in viscera using HP TLC plate", published in Journal Institution of Chemists, vol. 81 (3): 73–76.

9.12 Gastroenterology and Human Nutrition

Professor and Head

S.K. Acharya

Professors

Y.K. Joshi

Umesh Kapil

Anoop Saraya

Additional Professors

Pramod Garg

Vineet Ahuja

Govind K. Makharia

EDUCATION

The faculty is involved in the didactic teaching programme for undergraduates, surgical postgraduates and postdoctoral trainees. The department offers 3 year super specialty training in Gastroenterology leading to an award of DM in Gastroenterology. The department also offers short term Observership for a period of one to three months.

Short- and long-term training

10 professionals underwent training during 2010–11 for a period of 3 to 6 months.

Continuing Medical Education

The department organized CME on “Current Perspectives in Liver Diseases- 2010 (CPLD-2010)” on 15–16 October 2010 at AIIMS, New Delhi

Lectures delivered in CME/ National and International conferences: 44

RESEARCH

Funded projects

Completed

- i) Advanced Centre for Liver Disease (different projects in liver diseases): ii) Acute Liver Failure in Pregnancy. Is the prognosis really worse? iii) Anti tuberculosis therapy induced acute liver failure, iv) Ammonia kinetics in acute liver failure, An insight into Pathogenesis of “Non-alcoholic fatty liver disease in Indian Patients” S.K Acharya, Funded by ICMR, 2005–2010, Funds: Rs 2 Crore.
- Is chronic pancreatitis a pre-malignant disease? Pramod Garg, Funded by ICMR, 2007–10, Funds: Rs. 14 Lakhs.
- A pilot study to estimate community prevalence of celiac disease, Govind K. Makharia, Funded by ICMR, 2008–10, Funds: Rs 17,11,988/-.
- Efficacy and safety of mesalamine delayed-Release Tablets (1.2g), Par Pharmaceutical (Test Drug) in the treatment of active mild to moderate ulcerative colitis: A Double Blinded, Double Dummy, Multicentre Randomized Phase III, Comparison with Placebo and Lialda (1.2g) Mesalamine Delayed – Release Tablets, Shire US Inc (Reference Drug) – 292–07, Govind K. Makharia, Funded by Par Pharmaceutical Companies, Inc., 2008–09, Funds: Rs. 4,35,699/-.
- A multicentre (Country wide) prospective data collection of patients with Inflammatory Bowel Disease under Indian Society of Gastroenterology Task force on Inflammatory Bowel Disease, Govind K. Makharia, Funded by Sun Pharmaceuticals, 2008-10, Funds: Rs. 1,69,724/-.
- A Phase2/3 multicentre, 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 K. Makharia, Funded by Centocor, 2008-11, Funds: Rs. 13,56,380/-.

Ongoing

1. Advanced Centre for Liver Disease (Institute and different projects in liver diseases) Hepatic venous – outflow tract obstruction: etiology and results of angioplasty, Probiotics for spontaneous Bacterial Peritonitis, Neutrophilic function studies in acute liver failure, Randomised control trial of percutaneous Acetic Acid and Radio frequency ablation in HCC, Sepsis in acute liver failure, Seizures in acute liver failure, S.K Acharya, Funded by ICMR (Advanced Centre; still continue; taken over by AIIMS), 2005–10, Funds: Rs 2 Crore.
2. Identification of biomarker (s) for differentiation of Crohn's disease from intestinal tuberculosis using proteomic, S.K Acharya, Funded by DBT, 2008-11, Funds: Rs 43 Lakhs.
3. An open level responses adaptive study of Telbivudine in adults with HBeAg compensated chronic hepatitis B, Funded by Novartis (2008-13). Fund: 11,11000; An open level responses adaptive study of Telbivudine in adults with HBeAg negative compensated chronic hepatitis B, S.K Acharya, Funded by: Novartis, 2008–11, Funds: Support of drugs and investigation.
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, 2007–12, Funds: Rs 18.47 Lakhs.
5. Natural Course of Immunotolerant Patients with chronic HBV infection, S.K Acharya, Funded by MSD (Fulford India), 2010–13, Funds: Rs 18,79,750/-.
6. Health related quality of life in patient with chronic liver disease and effect of probiotics in the treatment of MHE and health related quality of life, Y.K Joshi, Funded by ICMR, 2009–11, Funds: Rs 27 Lakhs.
7. Efficacy of daily iron folic acid supplementation in correction of iron deficiency anemia in children aged 3–5 years, Umesh Kapil, Funded by ICMR, 2009–11, Funds: Rs 14,46,263/-.
8. Resolution of Bitot's spots after Administration of Mega-dose of Vitamin A in a cohort of children in 1–5 years of age with Bitot's spot, Umesh Kapil, Funded by ICMR, 2010–12, Funds: Rs 16,58,381/-.
9. Validity of Spot Testing Kits in the Assessment of Iodine Content of Salt-A Multicentric Study, Umesh Kapil, Funded by MBI Kits, 2010-12, Funds: Rs 4,98,520/-.
10. A Study of Mutational and Histopathological risk factors for Gallbladder Cancer in Patients with Gallstones, Pramod Garg, Funded by DBT, 2008–11, Funds: Rs. 32 Lakhs/-.
11. Role of TNF- α in the pathogenesis of experimental acute pancreatitis and the effect of anti-TNF- α therapy in attenuating the severity of pancreatitis and in the subsequent regeneration of the pancreas, Pramod Garg, Funded by ICMR, 2009–12, Funds: Rs 29 lakhs.
12. Zoonotic potential of Mycobacterium avium paratuberculosis (MAP) in human Ulcero-constrictive Ileocaecal Disease, Vineet Ahuja, Funded by ICMR, 2011-14, Funds: Rs 57 Lakhs.
13. A Phase 3, Randomised, Placebo-controlled, Blinded, Multicentre Study of the Induction and Maintenance of Clinical Response and Remission by MLN0002 in Patients with Moderate to Severe Ulcerative Colitis, Vineet Ahuja, Funded by Millenium Pharma, Boston, MA., 2009-12, Funds: Rs 5 Lakhs.
14. A Phase 3, Randomized, Placebo Controlled, Blinded, Multicenter, Multiple Dose Study to Determine the Efficacy and Safety of MLN0002 for the Induction and Maintenance of Clinical Response and Remission in Patients with Active Crohn's Disease, Vineet Ahuja, Funded by Millenium Pharma, Boston, MA., 2009–12, Funds: Rs 5 Lakhs.
15. A multi-centric study on treatment of abdominal tuberculosis (intestinal or peritoneal): A randomized controlled trial to compare the 6 months of Cat-I treatment with 9 months of Cat-I treatment (extension for 3 months) in abdominal tuberculosis under the Revised National Tuberculosis Control Programme, Govind K. Makharia, Funded by Ministry of Health and Family Welfare, 2007-12, Funds: Rs 57,40,071/-.

16. Detection of Mycobacterial pathogens in patients with Crohn's Disease, Govind K. Makharia, Funded by DBT, 2007–11, Funds: Rs 35,26,000/-
17. Characterization of tight Junction proteins in patients with Crohn's Disease and Celiac Disease, Govind K. Makharia, Funded by DST, 2009–12, Funds: Rs 24,10,400/-
18. Protocol for Correlating Enteropathic Severity and Small Intestinal CYP3A4 Activity in Patients with Celiac Disease, Govind K. Makharia, Funded by Flamentera, AG (Switzerland), 2010–11, Funds: Rs 11,00,000/-.
19. Pathophysiology of paracellular permeability and tight junctions in the first degree relatives of patients with celiac disease, Govind K. Makharia, Funded by DBT, 2011–14, Funds: Rs 43,82,000/-.
20. Small intestinal and whole gut metagenome in patients with celiac disease, their first degree relatives and controls, Govind K. Makharia, Funded by: DBT, 2011–13, Funds: Rs 39,47,600/-.

Departmental Projects

Completed

1. Acute viral hepatitis in diabetics: Evaluation of natural course.
2. Three months treatment of chronic hepatitis – C with Interferon a 2b and ribavirin.
3. Hematological abnormalities in cirrhosis of liver.
4. Effect of addition of short course of prednisolone to gluten free diet and gluten free diet alone in the recovery of clinical, histological and immunological features in naive adult patients with celiac disease: A pilot randomized controlled trial.
5. Long-Term pain relief with optimized medical therapy including antioxidants in chronic pancreatitis.
6. Association of *SPINK1* gene mutation and *CFTR* gene polymorphisms in patients with pancreas divisum presenting with idiopathic pancreatitis.
7. Idiopathic chronic pancreatitis in India: Phenotypic characterization and strong genetic susceptibility due to *SPINK1* and *CFTR* gene.

Ongoing

1. HBeAg –ve chronic hepatitis B: Magnitude, viral and host characteristics.
2. Immunotolerant chronic HBV infection: Natural course.
3. Role of HVPG in portal hypertension.
4. Prevalence of celiac disease in irritable bowel syndrome and dyspepsia.
5. Plasma citrulline as a marker estimation of enterocytes mass in patients with celiac disease and other malabsorption syndromes.
6. Prevalence of celiac disease in first-degree relatives of patients with celiac disease.
7. Prevalence of celiac disease in patients with nutritional anemia.
8. Familial prevalence amongst first and second-degree relatives of patients with celiac disease.
9. Endoscopic biliary drainage versus conservative treatment for patients with inoperable cancer of the gallbladder with obstructive jaundice: A randomized controlled trial; Role of MRI in the evaluation of infected pancreatic necrosis for conservative treatment including non-surgical drainage.
10. Comparison of Phenotype and Genotype of Young Patients with Chronic Pancreatitis from Different Geographical and Ethnic Background of the World: Implications for etiopathogenesis.

11. Factors predictive of relapse in patients with ulcerative colitis in remission: A long term follow up study.
12. Differentiating intestinal tuberculosis from Crohn's Disease: biomarker search.
13. Mucosal healing in IBD: Is it a relevant end point?
14. Longitudinal cohort of Ulcerative colitis: Long term follow up.
15. Dynamics of differential T regulatory cell expression in inflammatory bowel disease and intestinal tuberculosis.

Collaborative Projects

Completed

1. Attitude towards colorectal cancer. (Asia Pacific colorectal Cancer Study Group)
2. Prevalence of celiac disease in autoimmune diseases (autoimmune thyroid diseases, rheumatoid arthritis, systemic lupus erythematosus, progressive systemic sclerosis, juvenile arthritis). (Department of Medicine and Endocrinology)
3. Effect of treatment (laparoscopic cardiomyotomy and pneumatic dilatation) on structural and functional abnormalities of the lungs in Achalasia. (Department of Surgery, MS thesis)
4. Genetic study of Giardia lamblia. (Department of Microbiology, MD thesis)
5. Prevalence and significance of celiac disease in patients with type-I diabetes. (Department of Endocrinology)
6. Expression of tight junction markers in colonic Crohn's disease, ulcerative colitis and intestinal tuberculosis. (Department of Pathology)
7. A multicenter (Country wide) prospective data collection of patients with inflammatory bowel disease under Indian Society of Gastroenterology Task Force on Inflammatory Bowel Disease. (Indian Society of Gastroenterology)
8. A comparison of colonoscopy and PET-CT colonography for evaluation of extent of disease in patients with Ulcerative Colitis: A pilot study. (Nuclear Medicine)
9. Evaluation of psychiatric and somatic co-morbidities in patients with irritable bowel syndrome. (Department of Psychiatry)
10. Comparative evaluation of PET CT scan and EUS in patients with suspected pancreatic malignancy. (Department of Nuclear Medicine)

Ongoing

1. Role of surface promoter mutations in hepatitis B surface antigen production and secretion in occult hepatitis B virus infection. (Department of Pathology)
2. HBV mutants among patients with acute and chronic liver disease. (Pathology)
3. Cellular and humoral immunity studies among patients with acute hepatitis E virus infection. (Department of Pathology)
4. HCV quantitation assay and HEV quantitation assay and HEV quantitation assay development and their relevance. (Department of Pathology)
5. A randomized trial of endoscopic versus laparoscopic removal of common bile duct stones in patients with gallstones and CBD stones. (Department of Surgery)
6. Randomised trial of endoscopic stenting versus cholecystojejunostomy in patients with peri-ampullary cancer with obstructive jaundice. (Department of GI Surgery)
7. Role of EUS in assessing resectability of periampullary tumors: comparison with diagnostic laparoscopy. (Department of Surgery)
8. A randomized trial of endoscopic versus laparoscopic drainage of pancreatic pseudocysts. (Department of Surgery)
9. TPMT polymorphisms in IBD.

10. Prevalence and clinicopathological correlation of chronic gastritis in a high altitude area in India. (Department of Pathology)
11. Response to antitubercular therapy in patients with Crohn's Disease: Predictive factors. (Departments of Pathology and Radiodiagnosis)
12. A study for the search of biomarker for celiac disease using proteomics. (Department of Biophysics)
13. Detection of metabolic signature of patients with celiac disease using in-vitro ¹H magnetic resonance spectroscopy. (Department of Nuclear Medicine and Resonance)
14. Detection, identification and molecular characterization of Intestinal coccidia and Microsporidia in patients with chronic diarrhea and malabsorption syndrome. (Department of Microbiology)
15. Effect of addition of short course of prednisolone to gluten free diet and gluten free diet alone in the recovery of clinical, histological and immunological features in naive adult patients with celiac disease: A pilot randomized controlled trial. (Department of Pathology)
16. Seroprevalence of celiac disease in healthy blood donors. (With Blood Bank)
17. Basic constitution (Prakriti) analysis of patients with various stages of Non alcoholic fatty liver disease (NAFLD), chronic hepatitis B (CHB) and Celiac disease. (Institute of Genomics and Integrative Biology)

PUBLICATIONS

Journals: 41

Chapters in books: 2

Books: 2

PATIENT CARE

Special clinics

Name of the clinic	New cases	Old cases
Liver Clinic	1224	10441
Pancreas clinic	481	1502
IBD and Ulcer Clinic	312	2306
Interventional Clinic	366	211

Routine clinic

New cases	16557
Old cases	28894

Procedures

Diagnostic and therapeutic endoscopies	13500
Diagnostic and therapeutic colonoscopies	1650
Diagnostic sigmoidoscopies	1720
EST and EVL	3000
Sideviewing endoscopy	340
Endoscopic retrograde cholangiopancreatography	1728
Endoscopic ultrasound (Diagnostic and therapeutic)	384

Tests done in the department

List of tests which were undertaken in the department

HBV (Real Time PCR)	3500	HBV Genotyping (PCR)	173
HBV Basal Core Promoter (PCR)	210	HBV Precore mutant (PCR)	246
HBV (PCR)	617	HBV DNA sequencing	48
HCV RNA Real time PCR	550	HCV RNA (PCR)	434
HCV Genotyping	32	HEV RNA (PCR)	148
Lipid peroxidation	200	Free radical Antioxidant potential	200
Vitamin C	200	Superoxide dismutase	200
Nitric Oxide	100	Neutrophil function tests	240
Plasma Renin Activity	200	Myeloperoxidase activity	315
Endotoxin assay	45	Serum Ceruloplasmin	556
Serum Copper	538	24 Hr Urinary Copper	560
Phagocyte function test (Flowcytometer)	14	Plasma Glutamine (HPLC)	150
Urinary Lactulose (HPLC)	350	Urinary Mannitol (HPLC)	350
Fox P3 (Flow cytometer)	83	CD25 (Flow cytometer)	83
CD4 (Flow cytometer)	83	Fox P3 (Real time PCR)	158
IL23r (Real time PCR)	158	IL6 (Real time PCR)	158
IL10 (Real time PCR)	158	IL17a (Real time PCR)	158
TGF- β (Real time PCR)	158	IFN- γ (Real time PCR)	158
ZO1 (Real time PCR)	64	HBsAg (ELISA)	192
HBsAg (ELISA)	192	HEV (ELISA)	192
HCV (ELISA)	192	Leptin (ELISA)	100
TtG-IGA (ELISA)	3200	Melatonin (ELISA)	120
TNF- α (ELISA)	250	I β -6 (ELISA)	250
IL-1 β (ELISA)	250	Adiponectin (ELISA)	100
Insulin (ELISA)	100	Endotoxin IgG (ELISA)	96
Endotoxin IgA (ELISA)	96	CRP (ELISA)	192
IL-1 α (ELISA)	250	IL-8 (ELISA)	250
IFN- γ (ELISA)	250	Matrix metalloproteinase-1 (ELISA)	192
Matrix Metalloproteinase-2 (ELISA)	258	Matrix Metalloproteinase-8 (ELISA)	192
Matrix Metalloproteinase-9 (ELISA)	192	L Cathepsin (ELISA)	96
Zonulin (ELISA)	96	Pre-albumin (ELISA)	96
Platelet derived growth factor (ELISA)	96	TGF- β (ELISA)	96
Fecal Elastase (ELISA)	96	IgG4	25

LOH (PCR)	40	FFPE tissue section DNA	200
D-Xylose	500	Fecal Chymotrypsin	162
Fecal Fat	36	Hydrogen Breath Test	109
Blood ammonia	325	Prothrombin time	3500
Tumor suppressor gene (Fragment analysis)	40	K ras sequencing	40
P53 sequencing	20	PRSS1 gene (Sequencing)	30
LOH (DNA Sequencer)	30	DNA Purity (Pico drop)	2000
DNA PCR product analysis (Bioanalyzer)	60	ZO1 (PCR)	89
Kras mutation (PCR)	150	p53 mutation (PCR)	40
GAPDH (PCR)	25		
Tight Junction Proteins (Western blot)			
Occludin	10	Claudin 2	10
Claudin 3	10	Junctional adhesion molecule	4
ZO1	6		

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Dr Umesh Kapil was Elected President of Indian Association of Preventive and Social Medicine, India, for the year 2011–12; Member Steering Committee constituted by ICMR to review the progress of project “Integrated Indian Food Composition Database” and a Task Force Project by Desert Medicine Research Centre; Member of Steering Committee, Alliance for development of regimen to rehabilitate children suffering from severe Acute malnutrition; External Expert for selection to the post of Assistant Professor; Member of the Committee to design a curriculum on Nutrition for School Children with Emphasis on Hands on Experience by Ministry of Women and Child Development, GOI; Expert speaker for the Round Table Discussion on “Reversing Nutrition Status Trends-Reaching the MDGs” by the Organizers of 10th South East Asia Regional Scientific Meeting of the International Epidemiological Association; Member of Expert Groups of Credential Committee for Selection of Candidate for Fellowship of National Academy of Medical Sciences; Expert member of the Working Groups of National Committee on Infant and Young Child Feeding (IYCF), Ministry of Women and Child Development, Government of India; Expert Member of the working group for Promotion of Breastfeeding, Ministry of Women and Child Development, Government of India; Expert Member of the working group for Breastfeeding Support, Ministry of Women and Child Development,; Expert Member of the working group for Promotion of IMS Act, Ministry of Women and Child Development, Government of India; Expert Group Meeting to Review functioning of CHEB, DGHS, Ministry of Health and Family Welfare, Expert for setting up a “Centre of Excellence” in Community Nutrition, Jammu by ICMR; Expert to World Food Programme, India to work as a Consultant in India to validate the results of Nutrition Evaluation survey undertaken and advise them on future course of action.

Dr Pramod Garg was Nominated as Member, Scientific Advisory Committee, National Institute of Biomedical Genomics, Kalyani, India; Awarded with Olympus J Mitra award for endoscopy research by Indian Society of Gastroenterology 2010; Nominated as an Associate Editor, International Journal “Pancreatology”, Nominated as Member; Editorial board of the international journal “Clinical Gastroenterology Hepatology”.

Dr Vineet Ahuja was nominated on the Editorial Board, Indian Journal of Gastroenterology and Contributing Associate Editors-in-Chief of the *World Journal of Gastroenterology*; Nominated as Course Coordinator to organize Gastroenterology Young Masters meeting in New Delhi,

Dr Govind Makharia was Awarded SR Naik Memorial Award by Indian Society of Gastroenterology, 2010 for Outstanding publication; nominated as a coordinator for organizing the Young Clinician Program and organized YCP 2010 in Bangalore on behalf of Indian Society of Gastroenterology; Nominated member of the ICMR Taskforce on celiac disease; Nominated as the Editorial board of Indian Society of Gastroenterology.

VISITING SCIENTISTS

1. Prof. Eamonn Quigley from Ireland visited the department of Gastroenterology on 31 July 2010.
2. Dr Mark Donowitz, Prof. of Medicine, Johns Hopkins University School of Medicine, USA visited the department on 26 October, 2010.
3. Prof. David Whitcomb from University of Pittsburg, USA and Prof. NaliniGuda from Univ. School of Medicine, USA visited the department on 19 November, 2011.
4. Dr Vijay Yajnik from Harvard Medical School, Boston, USA visited the department on 20 December, 2010.
5. Dr Shiladitya Sengupta, Co-Chair, Centre for Regenerative Medicine and Assistant Prof. of Medicine, Harvard Medical School, USA visited the department on 24 January 2011.
6. Prof. Miklos SahinToth and Prof. Craig Logsdon from MD Anderson Cancer Institute, USA visited the department on 14 February 2011.
7. Prof. K. Sriram, Chairman, Division of Surgical Critical Care and Director, University of Chicago, USA visited the department on 3rd March, 2011.
8. Dr Sandeep Gupta, Prof. of Clinical Pediatric and Medicine, Rily Hospital for Children, USA visited the department on 6 April, 2011.

9.13 Gastrointestinal Surgery

Professor and Head

Tushar K. Chattopadhyay

Professor

Peush Sahni

Associate Professors

Sujoy Pal

Nihar Ranjan Dash

EDUCATION

The faculty of the department is involved in the didactic teaching programme for undergraduates, surgical postgraduates and postdoctoral trainees. The department offers 3 year super specialty training leading to an award of MCh in Gastrointestinal Surgery. It also offers short term observership for a period of one to three months.

Lectures

The faculty of the department delivered 24 CME lectures at various medical fora of the country.

RESEARCH

Funded projects

Ongoing

1. Design development and commercialization of an indigenous syringe pump, Peush Sahni, Funded by Ministry of Information and Technology, 2009-2012 Funds: Rs 28 lakhs.
2. Comparison of resection versus bypass procedure in the management of corrosive stricture of esophagus: A randomized controlled pilot study, Nihar Ranjan Dash, Funded by AIIMS, 2009-2011, Funds: Rs 85,000.

Departmental projects

Completed

1. Long term functional outcome after ileal pouch anal anastomosis in patients with ulcerative colitis
2. Assessment of health related quality of life of patients with ulcerative colitis after ileal pouch anal anastomosis
3. Role of intraoperative ultrasound in GI malignancies. Comparison with conventional preoperative imaging techniques.
4. Estimation of standard liver volume in Indian population.
5. A prospective randomized trial comparing preoperative radiotherapy and transhiatal oesophagectomy vs. transhiatal oesophagectomy alone for squamous cell cancer of the middle third of oesophagus.

Ongoing

1. A randomized controlled trial of resection versus bypass procedure for the treatment of corrosive stricture of oesophagus.
2. Long term follow up of lienorenal shunt procedure in patients with extrahepatic portal vein obstruction.
3. Prospective evaluation of choledochoscopy for various biliary tract disorders.
4. Prospective evaluation of the role of intraoperative enteroscopy in the management of obscure gastrointestinal bleeding.

5. Assessment of the problem of mucocoele following bypass procedure for corrosive strictures of oesophagus.
6. Neoadjuvant chemoradiotherapy followed by surgery versus surgery alone in patients with squamous cell carcinoma of the oesophagus: A randomized controlled trial.
7. Role of neck ultrasound, CT and PET scan in assessment of cervical lymph node metastasis in middle third oesophageal carcinoma.
8. Wound infection after ileostomy closure: A prospective randomized study comparing primary versus circumferential subcuticular closure techniques
9. 'Duct-to-mucosa' and 'dunking' methods of pancreatico-jejunostomy after pancreatico-duodenectomy: A randomized clinical trial
10. Long term results of surgery in non-cirrhotic portal fibrosis.
11. Minimally invasive oesophagectomy: A feasibility assessment.

Collaborative Projects

Completed

1. The role of endoscopic ultrasound in the evaluation of periampullary tumours. (Department of Gastroenterology)

Ongoing

1. A randomized controlled trial of proximal lieno-renal shunt versus sequential endoscopic variceal ligation and endoscopic sclerotherapy for patients with extra-hepatic portal venous obstruction. (Department of Gastroenterology)
2. Development of a device for faecal incontinence. (With Stanford-India Bio-design project)
3. Role of neoadjuvant chemoradiotherapy in adenocarcinoma of gastro-oesophageal junction. (Department of Radiodiagnosis)
4. Prospective study on the effect of lienorenal shunt on pericholedochal collaterals causing portal hypertensive biliopathy. (Department of Gastroenterology)
5. A randomized controlled clinical trial of preoperative cholecystojejunostomy versus endoscopic stenting in surgical obstructive jaundice due to periampullary carcinoma. (Department of Gastroenterology)
6. A randomized controlled trial comparing surgery versus endoscopic treatment for chronic pancreatitis. (Department of Gastroenterology)
7. Functional outcome following necrotizing pancreatitis. (Department of Gastroenterology)
8. Minimally invasive pancreatic necrosectomy: A prospective study. (Department of Gastroenterology)

PUBLICATIONS

Journals: 15

Abstracts: 10

Books: 1

Chapters in books: 1

PATIENT CARE

OPD and specialty clinics

Total number of new patients seen 1999

Total number of old patients seen 5124

Special laboratory facilities

Anal manometry, oesophageal manometry, 24-hour ambulatory oesophageal pH monitoring

Inpatients

Number of procedures (Special interest areas)

Total admissions:	784		
Surgical procedures			
Total number performed:	585		
Elective:	410	Emergency:	175
Biliary obstruction	125	Portal hypertension	45
Oesophageal cancer	52	Carcinoma gall bladder	15
Ulcerative colitis	32	Upper GI haemorrhage	15
Lower GI haemorrhage	13	Acute pancreatitis	18
Chronic pancreatitis	18	Biliary strictures	19
Pancreato-duodenectomy	29	Liver resections	13

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Professor T. K. Chattopadhyay delivered the prestigious Col. Pandalai oration during the Association of Surgeons of India Annual Conference in December 2010, New Delhi. He is Member, Task Force of Medical Council of India and continues to be Editor of G. I. Surgery Annual.

Professor Peush Sahni is representative of the World Association of Medical Editors (WAME) at the International Committee of Medical Journal Editors (ICMJE). He is Editor of *The National Medical Journal of India* and Associate Editor of G. I. Surgery Annual. He is also Member of Specialty Board (Surgical Gastroenterology), National Board of Examination.

Dr Sujoy Pal was the invited surgical expert, ISG-IBD Task Force meeting (October 2010) to develop national clinical guidelines for diagnosing and managing patients with ulcerative colitis.

Dr Nihar Ranjan Dash is President, Ostomy Society of India.

9.14 Haematology

Professor and Head

R Saxena

Professor

HP Pati

Additional Professor

S Tyagi

M Mahapatra

Associate Professor

Tulika Seth

Pravas Mishra

Scientist - II

S. Sazawal

EDUCATION

The Department has DM courses in Clinical Hematology and Hematopathology. This year, 4 candidates passed DM Clinical Hematology and 2 passed the DM Hemato-pathology examination. 6 residents are undergoing training for DM Clinical Hematology and 7 for DM Hemato-pathology during the current academic year. Five students are registered for Ph.D in Hematology, which is ongoing.

The faculty continues to take undergraduate classes for Hematology and Medicine, and Clinical case studies for Dept of Pediatrics students. It also continues to train 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 17 doctors from other institutions for periods varying from 1 to 6 months. 150 M.Sc. students also undertook short-term training in molecular hematology for periods varying from 1 to 6 months during this year.

CMEs and Conferences organized by department

The department organized 6 CMEs and Conferences during the year:

1. 6th National Thalassemia Conference organized in Nov. 2010 at AIIMS
2. National Hematology Update VIII in February, 2011
3. Workshop on "Hemophilia" on 26.02.2011.
4. Workshop on "Hemoglobinopathy" on 26.02.2011.
5. Workshop on Challenges in Diagnosis of "Thalassemia" on 23rd Nov 2010 co-organized with National Thalassemia Welfare Society.
6. Educational symposium on Hemostasis organized at ISHTM annual conference Kolkata along with International society of Thrombosis and Hemostasis in November 2010.

Lectures delivered in CME/ National and International conferences: 53

RESEARCH

Funded projects

Completed

1. Evaluation of Platelet Receptor Polymorphism in patients with coronary artery disease, R. Saxena, Funded by: ICMR, 2007-2010, Funds: Rs. 23 Lakhs.

2. A study of the cytokine profile of chronic immune thrombocytopenic purpura patients, Tulika Seth, Funded by AIIMS, 2010-11, Funds: Rs. 1 Lakh.

Ongoing

1. Modulation of genes to understand the biology of stage progression in chronic myeloid leukemia patients, R. Saxena, Funded by ICMR, 2008 – 2011, Funds: Rs. 8,90,000/1st year.
2. Evaluation of molecular parameters affecting biology of chronic lymphocytic leukemia in India, R. Saxena, Funded by ICMR, 2009 – 2012, Funds: Rs.6Lakhs/ year.
3. Molecular Characterization and treatment of acute lymphoid leukemia on protocol modified MCP 841. International Network for Cancer Treatment and Research, R. Saxena, Funded by INCTR, 2001–2013, Funds: Rs. 4.5 Lakhs/year.
4. Qualityassessment in Hemogram, R. Saxena, Funded by: ISHTM, 2003-2008, Funds: Rs. 1.5 Lakhs/year.
5. Role of Nitric oxide in the development of stroke, R. Saxena, Funded by DST, 2008-2011, Rs. 20 Lakhs.
6. Molecular characterization of FV in Indian Patients with APCR and FV deficiency, R. Saxena, Funded by ICMR, 2010-2013, Funds: Rs. 27,62,563/-
7. Study No ABB-09-001. Inhibitor Development in Previously Untreated Patients (PUPs) Or Minimally Blood Component –Treated Patients (MBCTPs) When Exposed to Plasma –Derived Von Willerbrand Factor – Concentrates and to Recombinant Factor VIII (rFVIII) Concentrates: An Independent International, Multicentre, Prospective, Controlled, Randomised, Open Label, Clinical TrialMulti centric study (60 centres in 25 countries), Tulika Seth, Funded by Fondazione Angelo Bianchi Bonomi, 2010-2013, Funds: Rs. 5 Lakhs.
8. Community based planned intervention for the change in perception and health seeking behaviour of cancers in Delhi. A pilot study, Tulika Seth, Funded by ICMR, Three Years, Fund: Rs. 11,18,025/-
9. A study of the genetic profile of chronic immune thrombocytopenic purpura patients at a north Indian tertiary care center, Tulika Seth, Funded by AIIMS, Funds: Rs. 1 Lakh.

Departmental projects

Completed

1. Effect of glucocorticoids on vWF levels and its correlation with vWF gene promoter polymorphism.
2. Detection of mutations underlying Gleevac resistance in CML.

Ongoing

1. Role of alpha thalassemia in patients with iron refractory microcytosis and normal HbA2.
2. Role of FCM immunophenotyping in CLPD.
3. Role of nitric oxide and the enzymes controlling its level, in the development of ischemic stroke in young Indians.
4. Role of Molecular studies in pathogenesis of (MDS) in Indian patients.
5. Molecular and flow cyto-metric characterization of B lineage acute lymphoblastic leukemia for the evaluation of minimal residual disease.
6. Elucidation of Gleevac resistance in Indian CML patients and evaluation of underlying molecular mechanism.
7. Evaluation of aetiopathogenesis of anemia in elderly

Collaborative projects

Completed

1. Prevalence of thrombophilia in patients with adverse pregnancy outcome. (Department of Gynaecology)

Ongoing

1. Correlation of erythropoietin levels and serum transferrin receptor levels with other Hematological indices in patients with iron deficiency anemia in the third trimester of pregnancy. (Department of Obstetrics and Gynaecology)
2. To evaluate the efficacy of tranexamic acid in reducing perioperative blood loss and its effect on shunt patency in Leno Renal Shunt surgeries – a prospective, randomized double blind, placebo control study. (Department of Anaesthesia)
3. Zinc as an immunomodulator in the treatment of possible serious bacterial infections in infants more than 7 days and up to 4 months of age. (Department of Pediatrics)
4. Evaluation of Platelet Receptor Polymorphism and Thrombogenic Mutation in Patients with Coronary Artery Disease. (Department of Cardiology)

PUBLICATIONS

Journals: 27

Abstracts in journals: 9

Chapters in Books: 19

Books: 1

PATIENT CARE

In Patient Treatment

The hematology department has treated an increasing number of patients of leukemias, aplastic anemia, idiopathic thrombocytopenic purpura, lymphomas, myelodysplastic syndrome, hemophilia, multiple myeloma and various other hematological disorders as indoor patients. In the past year, 28 allogeneic transplants were performed successfully. The department also has a Day Care Centre for chemotherapy, procedures and blood product transfusions for hematological patients.

Hematology Day Care Centre

Month	Admission	Blood Transfusion	Chemo Therapy	IT	Phlebotomy	PRP	FFP	SDP	Cryo	BMBY	Discharge	Total
Apr	731	276	231	38	06	140	10	07	03	133	731	844
May	763	391	225	47	05	138	04	04	02	129	763	945
Jun	756	297	216	42	09	169	02	12	01	151	756	899
Jul	760	314	202	29	02	149	09	09	-	133	760	847
Aug	710	222	160	23	01	114	04	05	01	216	710	746
Sep	635	280	169	35	06	100	06	08	----	102	635	706
Oct	618	251	200	44	05	75	09	08	03	75	618	670
Nov	662	266	111	37	10	102	09	07	01	121	662	664
Dec	690	256	214	42	07	95	09	12	03	115	690	753
Jan	608	266	156	35	03	89	10	03	01	79	608	642
Feb	661	259	194	35	04	104	06	01	-	114	661	717
Total	8331	3368	2267	446	65	1405	89	77	21	1504	2331	9242

Census of OPD

	General Hematology			Special clinics							Grand Total
	Male	Female	Total (H)	HO	HC	HA	CML	HS	HT	HL	
Old cases	4932	2208	7140	5208	2173	865	1572	1572	756	324	21469
New Cases	1980	804	2784	286	169	110	264	195	37	4	6633

External Hematology Proficiency Testing Programme

External Quality Assurance Programme is being conducted in the department in basic parameters namely Hb, HCT, WBC, RBC, Retic, MCV, MCH, MCHC and Plt. Along with P.S. Assessment. The number of participating labs stood at about 750 in April 2010 which has risen to 910 in the corresponding period in 2011. The said programme has got prominence due to its contribution for maintenance of accuracy for the participating labs throughout India.

COMMUNITY SERVICES

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

LABORATORY SERVICES

The department has a full-fledged hematology laboratory and conducted the following tests

Tests for anemia

Test	No.
HPLC	1467
Urine hemosiderin	110
Sickling	70
Osmotic Fragility/Incubated osmotic fragility	145
G6PD	745
Heinz bodies	2
S Iron	1877
Methemoglobin	2
Coombs	424
Cryoglobulins Cold agglutinins	03
PNH Gel card CD55/CD59	153
Hb electrophoresis	60
PNH (Ham's test)	31
H inclusion	25
Plasma Hemoglobin	115
Serum Ferritin	681

Hemogram and Biopsy

Hemogram	40287
Biopsy	2175
Reticulocyte count	10045
Reticulin special stain	350
Bone marrow aspirate	2466

Tests for Hemostasis

Short screening coagulogram	5176
AT-III	467
Factor assay	495
P2GP	1060
Inhibitors screening	250
S. Homocysteine	263
Factor inhibitors assay	12
VWD	227
INR	4340
DNA Parental detection	34
Lupus anticoagulant	2280
DNA : Carrier detection	7
Platelet Function Test	1200
FV Leiden	140
D. Dimer	1100
MTHFR	45
Fibrinogen	720
Clot solubility test	200
Proglob C	1030
P2010	20
Protein C	757
Thalassemia molecular test	65
Protein S	757
Hemophilia B	3
APCR	757

Tests for Leukemia

Molecular studies for leukemias (BCRABL, 315 mut, t15;17,t8;21,Inv16,FIT3, JAK)	1371
Cytochemistry	430
Iron stain	243
LAP score	245

Flow cytometry

Acute leukemia	183
CLPD	68
CD34	37
PNH	117
Platelet disorders	11
Total	416

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Professor R. Saxena was awarded the JB Chatterjea Oration (2011) on 28th February by School of Tropical Medicine, Kolkata; Continued as member Editorial Board Clinical and Applied Thrombosis & Hemostasis since 2009; Continued as President, Indian Society of Hematology and Transfusion Medicine till November 2010; Member, Education council of International society of Thrombosis and Hemostasis 2009 onwards; Member Secretary - Institution Ethics Committee, AIIMS w.e.f. August 2008; Member, Medical Advisory Board, Hemophilia Federation of India 2005; Member executive committee HFI 2011; Member, ICMR project review committee for Genetics, hematology, anatomy since 2005; Coordinator ISHTM-AIIMS EQAP. Since 2003.

Dr M. Mahapatra continued to be the Treasurer of Indian Society of Hematology and Transfusion Medicine (ISHTM); Organizing Secretary of National Hematology Update- VIII.

9.15 Hospital Administration

Head

Shakti Kumar Gupta

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

Medical Superintendent, Main Hospital

D.K. Sharma

Professor

Sidhartha Satpathy

(Dr BRAIRCH and Main Hospital)

Additional Professor

I.B. Singh

(Main Hospital and NS Centre)

Sanjay Arya

(Main Hospital)

Aarti Vij

(ORBO, CT and NS Centre)

EDUCATION

The Department of Hospital Administration is running a 2 year postgraduate programme, viz., MHA (Masters in Hospital Administration) which entered its 45th year after inception. It was officially started in February 1966, for the first time in India and has since been recognized as a distinct post-graduate discipline. The Residency Programme in Hospital Administration focuses on “hands on” training, where Resident Administrators man the “Control Room” of the hospital, round the clock as “Duty Officers”, and coordinate all the hospital activities after duty hours.

The department introduced a paradigm shift in the academic programme by launching Integrated Learning Modules for the residents of Department of Hospital Administration from 1 January 2008. This includes lectures, discussions, problem based learning, case studies, journal club, seminars, etc. Various guest lectures were organized in the department so as to increase the horizon of teaching.

Faculty members conducted several training programmes for the doctors working in various organizations including central, state governments, paramilitary forces and in various PSUs such as IICM, Ranchi and also private sector management institutes.

Short-and-long term training

1. One student from Apollo Institute of Hospital Administration, Hyderabad in April and May 2010.
2. One student from Tata Institute of Social Sciences, Mumbai in April and May 2010.
3. Two students from Prin. L.N. Welingkar Institute of Management Development and Research, Mumbai, from April to June 2010.
4. Six students from Institute of Health Management Research, Jaipur from April to June 2010.
5. Two students from Down Town Charity Trust, Guwahati from July to August 2010.
6. Ten students from National Institute of Health and Family Welfare, Munirka, New Delhi, from July to August 2010.
7. Four PG students from Armed Forces Medical College, Pune, in November 2010.
8. Two PG students from Sher-I-Kashmir Institute of Medical Sciences, Srinagar, in January 2011.
9. One student from Sri Sathya Sai Institute of Higher Medical Sciences, Anantapur, Andhra Pradesh, from August 2010 to February 2011.
10. Twenty-one students from MG University, Kottayam in February 2011.

National and International Conferences

The Department of Hospital Administration organized 7 National and International Conferences, Seminars, and Workshops.

1. ‘*Healthcare Executive Management Development Programmes*’ for senior Healthcare Professionals, in collaboration with WHO – India Office at Goa from 19 to 24 April 2010.
2. Workshop on “*National Initiative on Patient Safety*” in collaboration with WHO – India office and INCLEN Trust at India Habitat Centre from 13 to 15 May 2010.
3. “*Healthcare Executive Management Development Programmes*” for senior Healthcare Professionals, in collaboration with WHO – India Office at Goa from 25 to 29 September 2010.
4. Workshop on “*National Initiative on Patient Safety*” in collaboration with WHO – India office and INCLEN Trust at India Habitat Centre from 13 to 15 September 2010.
5. CME on “*Emerging Healthcare Challenges, Issues and Strategies*” in collaboration with WHO – India Office, Ministry of Health, Jammu and Kashmir Government and Indo Tibetan Border Police at Leh, Jammu and Kashmir, from 27 to 28 July 2010.
6. CME on Best Practices in Hospital Logistics, Inventory and Stores Management”, in collaboration with WHO – India Office, held at AIIMS, New Delhi from 21 to 22 January 2011.
7. The Department organized poster making, collage and ceramic painting competition for creating awareness about patient safety among medical students in the annual festival of AIIMS, *Pulse*, in September 2010, which was attended by 120 medical students.

Lectures delivered in CME/ National and International Conferences: 41

RESEARCH

Departmental Projects

Completed

1. A comparative study of operation theatre disinfection and sterilization practices in select hospitals in Delhi.
2. A study to evaluate the Trauma Care System for Delhi Metropolis.
3. A study to evaluate competencies of Indian Healthcare Leaders.
4. A study of process of outsourcing of services in select hospitals of Delhi.
5. A study of inpatient medical records at AIIMS hospital as prerequisite for accreditation.
6. Study of Fire Safety System of AIIMS with a view to identify potentially hazardous areas along with gaps and to suggest measures for improvement.

Ongoing

1. To study the Costing of Gastroenterology and Endoscopy Procedures at AIIMS.
2. To study the Security Management and preparedness at AIIMS.
3. To study the Equipment Management System of sophisticated electro-medical equipment with reference to utilization at AIIMS.
4. To study the Faculty time utilization for research, education and patient care at AIIMS.
5. To study the disinfection and sterilization practices of medical equipment and instruments at AIIMS, Delhi and suggest measures for improving the system as per standards.

6. To study the knowledge, attitude and practice regarding adverse events related to medical devices among healthcare personnel in patient care areas in Main Hospital at All India Institute of Medical Sciences..
7. To evaluate the existing Medicine and Paediatric Intensive Care Units at Main Hospital, AIIMS in terms of Structure, Process and Outcome against established standards.
8. To study composition role and functioning of various committees in AIIMS with reference to NABH standards and to propose evaluation model vis-à-vis its functioning.
9. Costing of Healthcare Associated Infections in the Paediatric Intensive Care Units of AIIMS.
10. To study the system of budgetary Allocation and its utilization at AIIMS.

PUBLICATIONS

Books : 1

Chapters in books : 1

PATIENT CARE

The Department 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 at AIIMS.

It 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.

C.N. Centre

Patient care in C.N. Centre 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 and bringing quality care standards in patient care services.

- An initiative to streamline bio-medical waste management process and monitoring was started in C.N. Centre.
- Various patient care areas were renovated: (i) Cardiac Cath Lab (ii) Neuro Surgery ward (NS-4), (iii) Paediatric Cardiology ward (CT-6), (iv) CNC OPD Renovation is under process & State-of-the-art Neuro Surgery Seminar Room and Telemedicine Facility at Neuro Sciences Centre.
- Renovation of Cafeteria and Cardiac CCU is under process.
- Provision for satellite television and Wi-Fi internet connection in CN Tower is under process.
- Phased out mercury based equipment, etc., from C.N. Centre.
- Computerization of C.N. Centre OPD is in process.
- Revision of Package charges of CTC in process.
- Member of various committees in C.N. Centre and AIIMS.
- Co-ordination for VVIP care at C.N. Centre

Organ Retrieval Banking Organization (ORBO)

- Organ Retrieval Banking Organisation (ORBO) coordinates Organ and Tissue donations and transplantation. In addition, whole bodies were also donated through ORBO to facilitate medical education. In last one year 2521 persons pledged for organ donation on motivation of ORBO. Awareness activities with various NGOs, schools, and colleges, etc., were conducted. Collaboration with various NGOs to promote the noble cause of organ and tissue donation. Training was imparted to grief counselors. Orientation Programmes on Organ Donation and Transplant Coordination was imparted to M.Sc. Nursing students.

- Hon'ble Minister of Health and Family Welfare, Shri Ghulam Nabi Azad felicitated the donors who donated their Organs and Tissues after death on the occasion of Celebration of 6th World and 1st Organ Donation Day on 27–28 November 2010, at Vigyan Bhawan, New Delhi.
- Published a Book “*A Tribute to Life*” which contains the stories of organ and tissue donors.
- The 88th (M) Battalion of CRPF pledged for organ and tissue donation after death with ORBO on 8 March 2011, at New Delhi.
- Display Boards of ORBO were placed in various places of AIIMS and Trauma Centre for creating awareness.

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Dr Shakti Kumar Gupta was Member of Governing Council of National Accreditation Board for Hospital and Healthcare Providers (NABH), Quality Council of India; Appointed WHO Consultant for the preparation of “Module for Implementation of Electronic Medical Records” in Speciality hospitals in India; Nominated a Member of the Task Force on Health Sector Reforms for the state of J & K constituted by Government of Jammu and Kashmir; Nominated a Member of the Advisory Board of Welingkar Institute of Management Development and Research, Mumbai; Elected President, of Academy of Hospital Administration for the year 2011–2012; Awarded Fellow of Academy of Hospital Administration; Elected Fellow of the National Academy of Medical Sciences (India); Appointed an Inspector, MCI regarding assessment of the physical and other teaching facilities available at Kasturba Medical College, Manipal for purpose of permitting intake in MD (Hospital Administration) qualification by Manipal University. and verification of the compliance; Expert Member for preparing Hospital Infection Control Policy including; antimicrobial resistance monitoring under the chairmanship of DGHS; Expert Member in the meeting under the Chairmanship of DGHS to discuss their commendations made by the CII, National Health Council for the Indian Healthcare sector; Expert Member of the Technical Expert Committee on “Proposed Medical College and Rajan Babu Institute for Pulmonary Medicine and Tuberculosis premises”; Expert Member of the High Powered Selection Committee for selection of the Medical Superintendent and Assistant Prof, PGIMS, Rohtak; Submitted draft on The National Infection Control Policy to the Hon'ble Union Minister of Health and Family Welfare; Launched The Research Foundation of Hospital and Healthcare Administration for promoting research in the field of Hospital and Healthcare Management; Invited to attend conference on “Partners for Health in South East Asia” organized by World Health Organization, New Delhi; Chairman, International Conference on “Recent Advances and Future Trends in Healthcare Infrastructure and Medical Technology (HIMT-2011) in collaboration with World Health Organization (WHO), School of Planning and Architecture (SPA), The Indian Institute of Architects (NC) and Academy of Hospital Administration (AHA), 2–5 February 2011 at AIIMS, New Delhi.

Dr D.K. Sharma served as Chairman/Member of various intra-as well as extra mural policy making and decision making committee of AIIMS as well as other organization including Ministry of Health and Family Welfare, Central Pollution Control Board, Govt. of NCT of Delhi, etc; Invited Chief Guest/Guest of honor/Guest faculty etc. in various National & International Symposia, workshops & conferences; Served 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/selection of various positions like Medical Superintendent, Deputy Director (Admin), Faculty of Hospital Administration, Medical Officers, Nursing and other categories of Group ‘A’ and ‘B’ Staff; Nominated Chairman/Principal Member of various Committees of Bureau of Indian Standards (BIS), India on hospital planning, medical equipment, surgical instruments, disposables, and dressings; Nominated 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 Mantra Swasthaya Suraksha Yojana (PMSSY) of Ministry of Health and Family Welfare to establish Six AIIMS like institutions; Attended National Conference on the Medico Legal and Ethical Issues in Healthcare, Sree Chitra Tirunal Institute for Medical Sciences and Technology, Thiruvananthapuram.

Dr Sidhartha Satpathy was Editor, Journal of Academy of Hospital Administration (JAHA); Member, Technical Committee, National Accreditation Board for Hospitals and Healthcare providers (NABH), under aegis of Quality Council of India (QCI); Member, Accreditation Committee, NABH under Quality Council of India in 2010–11; Member, Bureau of Indian Standards (MHR-14) involved in preparation/review of Indian Standards on Healthcare

facilities; Expert Member, National Accreditation Board for Education and Training (NABET) under aegis of QCI. Conducted office assessment of several organizations to determine compliance with prescribed standards; Member, Technical Committee for preparation of Detailed Project Report (DPR) on behalf of Educational Consultants of India (Ltd.) for setting up a Medical College; Member, of Sectional Committee on Bio-medical Waste Management (MHD-22) at Bureau of Indian Standards (BIS); Attended the National Conference on Challenges and Issues in Hospital Administration, (CHIA) organized by the Department of Hospital Administration, Government Medical College, Chandigarh, 3–4 December 2010; Attended ASITECH-Symposium organized by ASICON-2010, New Delhi, 15–20 December 2010; Participated as Resource Faculty in CME on “Best Practices in Hospital Logistics, Inventory and Stores Management”, 21 and 22 January 2011.

Dr I.B. Singh chaired a Session in the CME programme on “Best Practices in Hospital Logistics, Inventory and Stores Management” organized by Department of Hospital Administration with World Health Organization, Country Office for India, 21–22 January 2011, at AIIMS, New Delhi.

Dr Sanjay Arya was invited external examiner for Postgraduate Examination (MHA) at PGIMER, Chandigarh 2010; Appointed external examiner for certificate course in Hospital Management through Distance Learning from 2 to 6 August 2010, at NIHF, New Delhi; Appointed external examiner by JNU, New Delhi for evaluation of doctoral thesis title “The New Public Management in Healthcare: A Case Study of Tamil Nadu Medical Services Corporation”; Chaired a scientific session in National Conference on Challenges and Issues in Hospital Administration (CIHA 2010), 3 December 2010, Chandigarh.

Dr Aarti Vij was Chairperson, Working Group (Group B) of the National Consultation on Public–Private Partnerships in Healthcare—Challenges and Opportunities, 13 April 2010, organized by Department of Hospital Administration, AIIMS in collaboration with World Health Organization – India Office (WHO); Elected an Executive Member of Indian Society of Organ Transplantation (ISOT) from 2010–2012; Invited an Expert to examine the Transplantation of Human Organs (Amendment) Bill, 2009 by the Parliamentary Standing Committee on Health and Family Welfare, 9 June 2010; Represented Ministerial Delegate of Ministry of Health and Family Welfare, Government of India for Training visit to National Transplant Organisation, Madrid, Spain, from 14–18 February 2011; Appointed a Non Official Part Time Director on the Board of HLL Life Care Ltd. by Ministry of Health and Family Welfare, Government of India, Nirman Bhawan; Received “Plaque of Appreciation” for ORBO, Hon’ble Minister of Health and Family Welfare, Government of India, during 6th World and 1st Indian Organ Donation Day (WODD), held on 27 November 2010, New Delhi; Letter of appreciation received from Dr. R.K. Srivastava, Director General, Director General of Health Services, Government of India, New Delhi for the sincere efforts and contribution extended to 6th World and 1st Indian Organ Donation Day (WODD), New Delhi; Co-organizer of Symposium on Promotion of Organ and Tissue Donation by Worldriderz Group by Australian Stephane Etienne in association with Stem Cell Facility and National Eye Bank and Department of Nephrology, AIIMS for organ donation and promotion from Sydney to Paris through New Delhi (30,000 KM, 5 Continents, 3 month tour) on 4 September 2010; Joint Organizing Secretary of Organ Donation Congress 2010 (6th World Organ Donation Day and 1st Indian Organ Donation Day organized by Directorate General of Health Service, Ministry of Health and Family Welfare, Government of India, 27–28 November 2010, at Vigyan Bhawan, New Delhi; Chief Organizing Secretary of CME on Best Practices in Hospital Logistics, Inventory and Stores Management organized by Department of Hospital Administration, AIIMS in collaboration with World Health Organization, Country Office for India, 21–22 January 2011; Member – Organizing Committee for International Conference on Healthcare Infrastructure and Medical Technology (HIMT 2011), 2–5 February 2011, organized by Department of Hospital Administration, AIIMS; Visited Madrid, Spain, National Transplant Organisation as delegation of eight officers/experts from Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India, 14–18 February 2011.

VISITING DELEGATIONS

1. A team of 30 senior Hospital Administrators from National Institute of Health and Family Welfare in September 2010.
2. Delegation from Stanford University, USA, in December, 2010.

9.16 Laboratory Medicine

Professor and Head

A.K. Mukhopadhyay

Professors

Sarman Singh

M. Irshad

Associate Professor

Subhadra Sharma

Scientists

A.K. Srivastava S-IV

Vandita Vasudev S-III

EDUCATION

Short-and-long term Training

Twenty Trainees, one from University of Kashmir, one from The Global Open University, New Delhi, one from LHMC, New Delhi, two from Jamia Millia Islamia, N. Delhi, one from Kothiwal Dental College & Res. Centre, Moradabad, five from Amity University, Noida; four from C.C.S University, Meerut; three from Jiwaji University Gwalior; one from H.N.B. Garhwal University, one from Vanasthali Vidyapeeth University, Rajasthan underwent short term training in the Department in different sections. The last 14 trainees opted for training only in Cl. Microbiology Section for Molecular Microbiology.

Continuing Medical Education

Workshop organized by the Department

Dr Sarman Singh

Two workshop were organized

1. Hands on workshop I: CD4+CD8+ cell count and HIV viral load estimation and their role in AIDS monitoring on 27th September 2010.
2. Hands on workshop II: HBV and HCV viral load quantification on 27th September 2010.

Conference organized by the Department:

1. International Conference: International Conference on Opportunistic Pathogens 27th -30th September 2010.

Lectures delivered in CME/ National and International conferences: 9

RESEARCH

Funded projects

Completed

1. Transmission of Drug Resistant Hepatitis B Virus close family contacts of HBV- Related Chronic Liver Disease Patients, Sarman Singh, Funded by DST, 2006-2009, Funds: Rs. 12.10 Lakh.
2. Identification of *Leishmania donovani* reservoir(s) in various animal species of endemic areas using species-specific antibodies and PCR technique, Sarman Singh, Funded by DST, 2007-2010, Rs. 18 Lakhs.
3. To study the molecular mechanism(s) of miltefosine induced drug resistance in *Leishmania donovani*, Sarman Singh, Funded by CSIR, 2004-2009, Funds: Rs. 7 Lakhs.

4. Inhibition of kinetoplast DNA replication using topoisomerase inhibitors, Sarman Singh, Funded by ICMR, 2004-2009, Funds: Rs. 8 Lakhs.
5. 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, Sarman Singh, Funded by Australia-India Council, 2006-2009, Funds: Rs. 3.10 Lakhs.
6. Detection of Hepatitis A, E, Salmonella, E.histolytica and Giardia lamblia from drinking water samples using novel multiplex PCR, Sarman Singh, Funded by DBT, 2007-2010, Funds: Rs. 34 Lakhs.

Ongoing

1. The role of neurotrophins, cytokines and genetic polymorphisms in clinical manifestation of depression in adolescents, A.K Mukhopadhyay, Funded by DBT, 2010-2013, Funds: Rs. 36 Lakhs.
2. Study of oxidative stress risk factors in Alzheimer's disease and vascular dementia in Geriatric patients, A.K Mukhopadhyay, Funded by ICMR, 2008-2011, Funds: Rs. 16.4 Lakhs.
3. Assessment of risk factor associated with Alzheimer's disease and Vascular dementia, A.K Mukhopadhyay, Funded by ICMR, 2007-2011, Funds: Rs. 21 Lakhs.
4. Effect of Yoga on Serum Interleukin Levels in Adolescents with Depression, A.K Mukhopadhyay, Funded by CCRYN, 2008-2011, Funds: Rs. 21.4 Lakhs.
5. Cloning, sequencing and expression of different genomic regions of transfusion transmitted virus (TTV) prevalent in Indian populations. M. Irshad, Funded by ICMR, 2008-2011, Funds: Rs. 27 Lakhs.
6. Role of Hepatitis C virus (HCV) core protein in diagnosis and pathogenesis of HCV infection, M. Irshad, Funded by ICMR, 2008-2011, Funds: Rs. 26 Lakhs.
7. To develop assays for HCV genotyping and establish a relation between genotypes and HCV core expression, M. Irshad, Funded by UGC, 2009-2012, Funds: Rs. 10 Lakhs.
8. Cloning and expression of N-22 region of Torque Teno Virus (TTV) and develop EIA system for anti-TTV antibodies, M. Irshad, Funded by CSIR, 2011-2013, Funds: Rs. 20 Lakhs.
9. Proteomic analysis of *M. tuberculosis* during the stage of acquisition of resistance to Isoniazid and Rifampicin, Sarman Singh, Funded by DBT, 2006-2011, Funds: Rs. 36 Lakhs.
10. A Novel multiplex PCR Assay for simultaneous detection and differentiation of mycobacterium tuberculosis, *M. avium* complex and other Mycobacterium species directly from clinical samples of suspected tuberculosis cases, Sarman Singh, Funded by DBT, 2007-2011, Funds: Rs. 24 Lakhs.
11. Isolation and purification of active compounds with anti-leishmanial activity of Unani Medical Plants, Sarman Singh, Funded by CCRUM, 2008-2011, Funds: Rs. 24 Lakhs.
12. Zinc Supplementation In Childhood TB Patients in Delhi, Sarman Singh, Funded by University of Bergen, 2008-2011, Funds: Rs. 37 Lakhs.
13. Identification of Biomarkers and Pathogens Regulated target for Tuberculosis Infection, Sarman Singh, Funded by ICGEB, 2010-2011, Funds: Rs. 7 Lakhs.
14. Doctors office diagnostic instrument for detection of *M. tuberculosis* in the field conditions adapted for use by unskilled personnel, Sarman Singh, Funded by DBT, 2009-2012, Funds: Rs. 11 Lakhs.
15. Animal studies on chimeric DNA vaccine for the prophylaxis of leishmaniasis and Tuberculosis, Sarman Singh, Funded by ICMR, 2010-2013, Funds: Rs. 38 Lakhs.
16. Genotyping of Mycobacterium tuberculosis isolates from an endemic area of Delhi and determining their transmission dynamics in the house hold contacts and the community using molecular methods, Sarman Singh, Funded by ICMR, 2007-2011, Funds: Rs. 40 Lakhs.

17. Cloning, Expression, Purification and evaluation of a recombinant antigen for the diagnosis, prognosis and prediction of MDR/XDR tuberculosis, Sarman Singh, Funded by ICMR, 2011-2014, Funds: Rs. 31 Lakhs.
18. Book Project: The new Science for Consciousness. The Mandate and the Agenda. Dr. A.K. Mukhopadhyay. Self funded.

Departmental projects

1. Role of Interleukin-1, 6 & 10 and TNF-a along with isoprostane in acute pancreatitis
2. Evaluation of coagulation profile in traumatic brain injury.
3. Role of VHA (Viscoelastic Hemostatic Assays); Point of Care device in severely injured Trauma patients.
4. Insulin resistance in liver diseases.
5. To assess the impact of viral hepatitis on steatosis of liver.
6. Role of TTV in renal failure patients.
7. Epidemiological studies on CRF in Indian Communities.
8. Cloning, sequencing and expression of TTV related polypeptides.
9. Genotyping of TTV in Indian population.
10. Effect of HCV core expression on oxidative status.
11. Real time PCR for sero detection of HCV genotypes.
12. Significance of HCV-genotypes in Cirrhosis / HCC.
13. Impact of HCV genotypes on host innate immunity
14. Transmission rate of HBV and HCV in family members of dually infected patient (with Deptt. of Gastro).
15. Hepatitis B viral load monitoring in patients undergoing Anti-HBV therapy using Quantitative Real-Time PCR (with Deptt. of Gastro).
16. Comparative evaluation of various PCR primers for the rapid and sensitive diagnosis of tuberculosis.
17. Standardization and evaluation of Multiplex PCR for the species specific diagnosis of various Mycobacterial infections.
18. To study reintroduction of anti-tuberculosis drugs and risk factors for anti-tuberculosis treatment induced hepatotoxicity (with Deptt. of Medicine).
19. Study of Mycobacteremia in Patients with milliary and extrapulmonary and tuberculosis (with Deptt. of Medicine).
20. To study the immune response in acute Toxoplasmosis using Western Blot Method.
21. Comparative evaluation of various TORCH test kits
22. Blood borne infections after needle prick injury in Health Care workers of AIIMS
23. *Toxoplasma gondii* IgG avidity assays in pregnant women attending AIIMS.
24. Sequence based diagnosis of Mycobacterial isolates from HIV positive and HIV negative patients.
25. Nested polymerase chain reaction for the diagnosis of congenital CMV infection.
26. Opportunistic infections in AIDS patients attending AIIMS.

PUBLICATIONS

Journals: 16

Chapter in Books: 13

PATIENT CARE

Total tests performed: 72,03,998

CENTRALISED COLLECTION CENTRES

BLOOD COLLECTION

Collection

Hematology: 58355 Chemistry (Sugar PP): 107447 Microbiology: 15090

Others

Blood Bank: 4257 CNC: 4880 Microbiology: 6893

HIV: 5099 Different clinics: 15273

Investigation

BT: 1100 CT: 1100 PT: 9459

Total: 2,28,953

Emergency Laboratory Service (Round the clock)

Critical Care Lab.

Clinical Biochemistry

Hemogram & Body Fluids

Test	Number	Test	Number
ABG+Electrolyte+	16120	Hb	117231
Metabolite		TLC	117231
Amylase	27553	Platelets	117231
Bilirubin (Total)	62691	Proth Time	31032
Calcium (Total)	115969	M.P.	2994
Calcium (Ionized)	115969	CSF cells	7480
Chloride	115969	Urine	1629
Creatinine	91504	Micro.Blood culture	9761
CSF (Protein)	5182	Micro.CSF	2170
Glucose	7257	Gram Stain	–
pH	115969	Slide Stain, Giemsa	3335
Potassium	115969	Stool. Hanging Drop	649
Sodium	115969	MCV	117231
Urea	99629	MCH	117231
		MCHC	117231
		PCV	117231
		RBC	117231
Total	1005750	Total	993563

GRAND TOTAL: 19,99,313

Note: Arterial blood gas (ABG) 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

New Investigation

Vit B12 72 Folate 65 Ferritin 43 Coagulation profile 10 APTT 105

Total: 295

Clinical Biochemistry Section

TEST	BLOOD	URINE	FLUID
Sugar	1,33,989	356	1,913
Urea	2,51,242	—	—
T. Protein	2,41,482	—	1,913
Albumin	2,41,482	1,913	—
24h Albumin	—	41,100	—
Bilirubin			
i) Total	2,43,538	—	—
ii) Conj.	2,43,538	—	—
Alk. Phosphatase	:2,34,080	—	—
Cholesterol	59,820	—	—
Na	2,33,408	3,300	—
K	2,33,408	3,300	—
Calcium	1,68,300	4,800	—
Phosphate	1,76,792	4,800	—
Uric Acid	1,71,150	4,239	—
Amylase	Nil	—	—
Creatinine	2,24,930	11,700	—
SGOT	2,34,300	—	—
SGPT	2,34,300	—	—
ABG	1,103		
pCO ₂	1,103	—	—
pH	1,103	—	—
pO ₂	1,103	—	—
HCO ₃	1,103	—	—
CO ₂	1,103	—	—
AsDO ₂	1,103	—	—
O ₂ sat.	1,103	—	—
BE	1,103	—	—
Total	31, 04, 012	73, 996	5, 739

Note : Arterial blood gas (ABG) includes pCO₂, pH, pO₂, HCO₃, CO₂, AsDO₂ O₂ sat., BE, all measured as a single test within the same time frame

Tests on request***Other Investigations***

Test	Number	Test	Number
HBsAg	360	IgM anti HBc	360
HBeAg	100	Anti HCV	600
Anti HEV	200	IgM Anti HDV	100
IgM Anti HAV	100	HCV- RNA	800
TTV-DNA	200	Superoxide dismutase	100
T.Antioxidant	100	Apoprotein A	100
Apoprotein B	100	Lp(a)	100
CK	100	LDH	100
GGT	100	TG	400
LDLC	400	HDLC	400
MDA	100	GPO	100
TOTAL	5, 220		
GRAND TOTAL	31, 88, 967		

Service From room no. 18 (under HoD).

Adenosine Deaminase Assay (ADA)	1705
TOTAL	1705

Hematology section

Test	OPD	Ward
Hb	85239	73681
TLC	85239	73681
PCV	85239	73681
DLC	78105	73681
ESR	73559	43346
D/M	67160	21479
PLT	85239	73681
Retic Count	19582	10700
ABS Count	36851	5282
MP	55161	12558
Thick Smear preparation and staining	-	13358
MCV	85239	73681
MCH	85239	73681
MCHC	85239	73681
RBC	85239	73681
PT*	9459	2583
B/C		
Others**		
Total	1012330	772435
GRAND TOTAL :		17,84,765

* Total No. of Investigations does not contain number of PT (OPD) samples which have been shown under the heading Blood Collection Centre.

** 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

PATIENT CARE

A. Routine Investigations

1. Urine

Name of the Tests	O.P.D	WARD	TOTAL
Medical board			8280
Routine	68610	47666	116276
Microscopic	95685	73740	169425
pH 33230	25120	58350	
Specific gravity	33230	25120	58350
Acetone	33230	25120	58350
Bile pigment/salt	33230	25120	58350
Urobilinogen	33230	25120	58350
Blood	33230	25120	58350
Bence Jones Protein	215	285	500
Chyluria	120	198	318
Porphobilinogen	40	44	84
Myoglobinuria	4	4	8
Microalbumin	3	—	3
Urine Cultures	13940	—	13940
Strain identifications tests	9500	—	9500
Antibiotic Sensitivity	2250	—	2250
<i>2. Stool Investigations</i>			
Wet mount saline	14824	5953	20777
Wet Iodine stain	14824	5953	20777
Occult blood in stool	2373	1258	3631
Fat globules	436	495	931
Special stains for stool Z-N stain, Modified Z-N stain, Trichrome and chromotop	1518	2042	3560
Subtotal	33975	15701	49676

3. Semen analysis

Routine	12672	—	12672
Morphology	3361	—	3361
Fructose	758	—	758
Subtotal	16791	—	16791

4. Sputum analysis

Z-N Staining for AFB	13865	5345	19210
Subtotal	13090	4906	17996

B. Specialised Investigations

Serology & Molecular Biology

Name of the tests **Total**

TORCH

15626

Toxoplasma gondii IgG 2265

Toxoplasma gondii IgM 2172

Rubella IgG 1439

Rubella IgM 1181

Cytomegalo virus IgG 2261

Cytomegalo virus IgM 2226

Herpes Simplex virus IgG 1085

Herpes Simplex virus 2 IgG 1085

Herpes Simplex virus (1+2) IgM 1091

Toxoplasma gondii IgG avidity 36

Rubella IgG avidity 105

Cytomegalo virus IgG avidity 88

Parvo virus B19 IgG 296

Parvo virus B19 IgM 296

Viral Marker & HIV **71156**

Anti HAV IgM 1971

HBsAg 21825

Anti HBcIgM 1182

HBeAg 2620

Anti HBe 1461

Anti HBs 1721

Anti HCV antibody 17344

HEV IgM 2725

HIV (1+2) ELISA	18814
HIV Spot Test	393
HIV Westernblot	6
HBsAg (spot)	843
HCV (spot)	251
<u>Others Serology</u>	2968
Measeles IgG	412
Measles IgM	245
Mumps IgG	116
Mumps IgM	80
Varicella IgG	126
Varicella IgM	69
EBV IgG	396
EBV IgM	396
Malaria Ag	50
Dengue	81
Latex Agg	25
Microalbuminuria	12
TBIgG/IgM/IgA	960
<u>Molecular Tests</u>	23072
Toxoplasma gondii PCR	22
Leishmania PCR	480
TB PCR	9146
HHV-6 PCR	50
EBV PCR	120
HSV (192) PCR	50
CMV (RT PCR)	650
HBV DNA Quantitative	1345
HCV RNA Quantitative	495
HIV Viral Load (NASBA)	150
Miscellaneous	3000
DNA isolation	13000
<u>Others</u>	1300
Gel Electrophoresis	1200
Sequencing	100

TB Laboratory,

1.	Total Number of samples received	6133
	AFB microscopy performed	
2.	ZN staining:	5719
3.	AR staining:	352
	Mycobacterial culture and maintenance performed	
4.	LJ medium inoculated	5855
5.	BACTEC MGIT 960 inoculated	6038
	Drug susceptibility testing performed	
6.	BACTEC MGIT 960:	316
7.	Agar Proportionate method:	108
8.	Tetrazolium Microplate assay:	93
9.	Biochemical analysis performed:	150
10.	Cultures cryopreserved:	626
11.	Tuberculin Skin Test Performed (PPD)	395
12.	TB Culture confirmation test performed by strips	223
13.	Line Probe assay (HAIN'S Test)	105
14.	DST by MODS (microscopy observed drugs susceptibility)	75

AWARDS AND HONOURS

Professor A.K. Mukhopadhyay was designated as Partner in the critical activity of collating knowledge, Public Health Foundation of India, New Delhi; Honored to be chosen as the member of Nominating Council for 2010 BBVA Foundation Frontiers of Knowledge Awards, Spain, also honored to be chosen as the member of Nominating Council of Infosys Science Foundation Award 2011; A.K. Mukhopadhyay's interview on consciousness was made available on You Tube <http://www.youtube.com>; Appeared on Live T.V. program on 'Total Health' on the topic, 'Routine investigations' telecast by National Doordarshan.

Professor M. Irshad was honored with "RASHTRIYA GAURAV AWARD" (IIFS, 2010); Honored with "Best Citizen of India" (International Publishing House, 2010); Nominated as the reviewer for the articles of Blackwell Publishers & Elsevier Publishers; Honorary Member of Editorial Board of *International Journal of Biological Science & Technology (IJBLST)*, *International Journal of Bio Sciences, Psychiatry and Technology (IJBSPT)* & *International Journal of Bio Sciences, Alternative and Holistic Medicine (IJBSAHM)*.

Professor Sarman Singh Currently CPCSEA (Ministry of Environment, Government of India) nominee for Institutional Animal Ethics Committees (IAEC) of Delhi University, National Institute of Malaria Research (ICMR), Institute of Genomics and Integrative Biology (IGIB), Army Medical College, Delhi, Defence Institute of Physiology and Allied (DIPAS), Panacea Biotech, New Delhi; Member, Condemnation Board of Indian Council of Medical Research, New Delhi, 2011 onward; Expert Member of the Senior Research Fellowship Award committee of the ICMR, 2011; Member Equipment purchase committee of ICMR, 2011 onward; Member Task Force of DBT for North Eastern Region-Biotechnology Programme Management Cell (NER-BPMC), 2010 onward; Chairman of the Expert Group Meeting of directorate of NVBDCP to decide the disposal of sodium antimony gluconate stocks; Expert Member of the Fellowship Award committee of the ICMR, 2010; Expert Panel Member of SERC (FAST TRACK SCHEME) of DST, Government of India, 2004-till date; Editor-in-Chief, Journal of Laboratory Physicians; Chaired the selection

committee for Scientist C, at ICMR, Post-Doctoral Fellowship Award committee of Indian Council of Medical Research, 2011; Member Expert committee of ICMR for reemployment of retired ICMR scientists, 2010 onward; Member standing selection committee of ICMR for promotion of ICMR Scientists for grade D, E and F, 2010-onward; Subject Assessor of Medical Council of India, 2010-11; Member of the Kala-azar elimination High power committee constituted by DGHS, Govt. of India, 2005-2013; Member Model Rural Health Research Unit (MRHRU), Department of Health Research, Government of India, 2010 onward; Chairman, International Conference on Opportunistic Pathogens (ICOPA-INDIA), New Delhi, September 2010; Elected Member of the Editorial Board of “The Open AIDS Journal” Bentham Publications, USA, 2007 till date; Elected Member of the Editorial Board of “Journal of Infection in Developing Countries” Italy, 2007- till date; Elected Member of Editorial Board of “Clinical Medicine: Dermatology”, La-Press, Australia, 2008- till date; Editor, Tuberculosis Research and Treatment. Hindawi Publishing Corporation, USA 2009-till date; Abstract Reviewer for International AIDS Society; Peer Reviewer for many International and National journals such as Lancet, JAMA, Clinical Infectious Diseases, and others

VISITING SCIENTIST

1. Robert Taylor (Program Officer), Bill & Melinda Gates Foundation, Global Health-Discovery, USA
2. Martin Colla, Head of strategic projects, Cepheid Europe, Viva-Solelh F-81470 Maurens-Scopont
3. Harleen Grewal, Professor and Senior Consultant, The Gade Institute, Section for Microbiology and Immunology, University of Bergen, Norway

9.17 Medicine

Professor and Head

S.K. Sharma

Professors

Randeep Guleria

A. B. Dey

G. C. Khilnani

Associate Professors

Naveet Wig

Ashutosh Biswas

Uma Kumar

Sanjeev Sinha

Naval K. Vikram

Anant Mohan

EDUCATION

The department runs a comprehensive undergraduate and postgraduate teaching programme, which includes integrated lectures, seminars, bedside clinical case discussions and journal clubs. The undergraduate students are assessed regularly at the end of each clinical posting.

Continue Medical Education

Organized by department

1. Medicine Update 2010 in association with Association of Physicians of India (API) Delhi State Chapter at All India Institute of Medical Sciences on August 08th, 2010.
2. Jointly organized Ranbaxy Science Foundation XXVI Round Table Conference on topic entitled, 'Sleep Disorders: Wake-Up Call for Physicians' at All India Institute of Medical Sciences, New Delhi on October 9, 2010.
3. Organized and conducted a workshop on 'Learning in a clinical environment' during the 1st SEARAME International Conference on 'Best Practices in Medical Education in SEA' at Jakarta, Indonesia, Nov. 2010.

Lectures delivered in CME/ National and International conferences: 34

RESEARCH

Funded projects

Completed

1. Efficacy and safety of immunomodulator (*Mycobacterium w*) as an adjunct therapy in Cat II pulmonary tuberculosis long with assessment of Immunological parameters (Double blind, randomized, Placebo controlled, Multicentre Clinical Trial), S.K Sharma, Funded by DBT & Cadila Pharmaceuticals Ltd, 2004-2010, Funds: Rs. 131.32 Lakhs.
2. International, multi-centre, randomized, *double blind* study to compare the overall mortality in acutely ill medical patients treated with enoxaparin versus placebo in addition to graduated elastic stockings, S.K Sharma, Funded by Reliance Clinical Research Services (P) Ltd, 2008-2011, Funds: Rs 12.88 Lakhs.
3. Prevalence of metabolic syndrome in obstructive sleepapnea and the effect of treatment with continuous positive airway pressure (CPAP) on metabolic syndrome, S.K Sharma, Funded by Pfizer India Ltd, 2008-2011, Funds: Rs. 16.20 Lakhs.
4. Double blind randomized placebo controlled clinical trial of herbal compound MA – 364 in patients with mild to moderate bronchial asthma, Randeep Guleria, Funded by Maharshi Ayurveda, Till September 2011
5. A randomized double-blind placebo controlled exploratory study to assess the safety and efficacy of multiple doses of ACZ885 in COPD, Randeep Guleria, Funded by Novartis, Till June 2011

6. An interventional Nutritional study in subjects with Newly Diagnosed Active Tuberculosis (TB), Randeep Guleria, Funded by Glaxo Smith Kline India, Till June 2011.
7. Clinical implication of Circulating DNA & Protein markers in lung cancer, Randeep Guleria, Funded by ICMR, Till November 2011
8. Genetic, Metabolic and Hormonal Profile in Obstructive Sleep Apnea Syndrome, Randeep Guleria, Funded by DST, Till February 2011.
9. Serum leptin, nutritional status and inflammatory markers in chronic obstructive pulmonary disease, Relationship with dyspnea and severity of disease, Randeep Guleria, Funded by ICMR, Till March 2011.
10. To evaluate the efficacy and safety of fixed dose combination of formoterol and fluticasone dry powder inhaler in the management of partly controlled and uncontrolled Asthma prospective study, Randeep Guleria, Funded by Ranbaxy India, Till June 2011.
11. To compare the efficacy of Yoga and Pulmonary rehabilitation on dyspnea, muscle strength, inflammatory markers and quality of life in Patients with chronic obstructive pulmonary disease, Randeep Guleria, Funded by ICMR, Till July 2012.
12. Dietary intake of micronutrients and their serum/plasma concentration in association with severity of Asthma, Randeep Guleria, Funded by ICMR, Till October 2012.

Ongoing

1. Association of OSA with metabolic syndrome, insulin resistance and TNF- α , IL6 and ACE polymorphism, S.K. Sharma, Funded by ICMR, 2010-2013, Funds: Rs. 46.67 Lakhs.
2. Antiretroviral Treatment (ART) Center for free treatment of HIV/AIDS patients [National AIDS Control Organization (NACO), S.K. Sharma, Funded by DSACS, 2005 till date, Funds: Rs. 4.50 Lakhs.
3. Nodal Center for free treatment of TB, S.K. Sharma, Funded by RNTCP through the District TB Centre, from 2005 till date, Funds: Rs. 4.32 Lakhs.
4. Efficacy of thrice weekly intermittent short course antituberculosis chemotherapy in tuberculosis patients with and without HIV infection, S.K. Sharma, Funded by NACO, 2006- 2011, Funds: Rs. 45.42 Lakhs.
5. Role of oral vitamin D as an adjunct therapy in Category I Pulmonary Tuberculosis along with assessment of immunological parameters (Double-blind, Randomized, Placebo-Controlled, Clinical Trial), S.K. Sharma, Funded by DBT, 2006-2011, Funds: Rs. 90.90 Lakhs.
6. 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), S.K. Sharma, Funded by DBT, 2006-2011, Funds: Rs. 63.38 Lakhs.
7. Efficacy and safety of immunomodulator *Mw* as an adjunct therapy in category I pulmonary tuberculosis, along with assessment of immunological parameters (Double-blind, Randomized, Placebo-Controlled, Multicentre Clinical Trial), S.K. Sharma, Funded by DBT, 2006-2011, Funds: Rs. 76.81 Lakhs.
8. Evaluation of the efficacy of thrice weekly DOTS regimen in TB pleural effusion at six months (multicenter project), S.K. Sharma, Funded by RNTCP, 2006-2010, Funds: Rs. 14.36 Lakhs.
9. Impact of HIV infection on latent TB among patients with HIV-TB co-infection (Facility has been designated as National Facility), S.K. Sharma, Funded by DBT, 2007-2011, Funds: Rs. 219.96 Lakhs.
10. Comparison of tuberculin skin test (TST) and interferon-release assay in latent TB infection and tuberculosis disease, S.K. Sharma, Funded by RNTCP, 2008-2011, Funds: Rs. 4.99 Lakhs.

11. Sustaining research momentum over the coming decades: mentoring the next generation of researchers for tuberculosis, S.K. Sharma, Funded by European Union Frame Programme 7 Work, 2008-2011, Funds: Rs. 67.84 Lakhs.
12. A Phase II, placebo-controlled, double-blind, randomized trial to evaluate the anti-bacterial activity, safety, and tolerability of TMC207 in subjects with sputum smear-positive pulmonary infection with multi-drug resistant Mycobacterium tuberculosis (MDR-TB), S.K. Sharma, Funded by Tibotec BVBA, General De Wittelaan LIIB3, Mechelen, Belgium, 2008-2011, Funds: Rs. 26.24 Lakhs.
13. Study of Early Versus Delayed Initiation of Antiretroviral Therapy for HIV Infected Patients with Tuberculosis on Antituberculosis Chemotherapy in Indian Subjects, S. Sinha, Funded by NACO, (A collaborative UCLA, USA and AIIMS project), 2006-2011, Funds: Rs. 40 Lakhs.
14. Study of prevalence and types of baseline HIV drug resistance in the antiretroviral treatment-naive and previously treated HIV infected Northern India population, S. Sinha, Funded by NACO, (A collaborative UCLA, USA and AIIMS project), 2006-2010, Funds: Rs. 65 Lakhs.
15. Nevirapine versus Efavirenz-based highly active antiretroviral therapy regimens in antiretroviral-naive patients with HIV and Tuberculosis infection in India, S. Sinha, Funded by NACO, 2008-2011, Funds: Rs. 50 Lakhs.
16. ASHA HIV Health Promotion Intervention, S. Sinha, Funded by NIH, USA, 2009-2011, Funds: Rs. 15 Lakhs.
17. A Study of Patients in Resource-Limited Areas with Cancer who also have HIV, S. Sinha, Funded by NCI, NIH, USA, 2010-2011, Funds: Rs. 5 Lakhs.
18. Mitochondrial DNA Mutations in Lung Cancer, A. Mohan, Funded by DBT, 2008-2011, Funds: Rs. 19.2 Lakhs.
19. Study of the variability in systemic inflammation in patients with chronic obstructive pulmonary disease due to smoking and non-smoking related causes, A. Mohan, Funded by ICMR, 2009-2012, Funds: Rs. 28 Lakhs.
20. Effect of Platinum based Chemotherapy on Oxidative stress, Nutritional profile and clinical response in advanced Non small cell lung cancer, A. Mohan, Funded by UGC, 2011-2014, Funds: Rs. 9.2 Lakhs.
21. Double blind randomized placebo-controlled clinical trial of herbal compound MA-579 in patients with non alcoholic fatty liver diseases, N.K. Vikram, Funded by Maharishi Ayurveda Products.
22. Double blind randomized placebo-controlled clinical trial of herbal compound MA-471 on metabolic profile of Type 2 diabetic patients, N.K. Vikram, Funded by Maharishi Ayurveda Products.
23. Evaluation of newer markers of atherosclerosis in patients with type 2 diabetes, N.K. Vikram, Funded by ICMR.

Departmental projects

Completed

1. Study of the prognostic utility of various inflammatory markers in patients with acute exacerbation of chronic obstructive pulmonary disease.

Ongoing

1. Determinants of Mortality and Morbidity in patients with Sepsis in the Medical ICU.
2. Prevalence of Metabolic Syndrome in COPD.
3. Study of the utility of Pre-procedure Inhaled bronchodilators in Improving Patient and Procedure related outcomes.
4. Study of Non Alcoholic Fatty Liver Disease and Atherosclerosis in Asian Indians.

5. Effect of progressive resistance exercise training on hepatic fat in Asian Indians with Non-alcoholic Fatty Liver Disease (NAFLD).
6. Study of association of adipocyte size with anthropometric and biochemical parameters.
7. Study of prevalence of metabolic syndrome in patients with COPD.

Collaborative projects

Ongoing

1. Study of Acute Febrile Illnesses with Cytopenias. (Dept of Hematology, Microbiology)
2. Diagnostic utility of F-18 FDG PET/CT in pyrexia of unknown origin. (Dept of Nuclear Medicine)
3. Study of Mycobacteremia in miliary tuberculosis. (Dept of Laboratory Medicine)
4. Study of ocular toxicity of ethambutol. (Dept of Ophthalmology).
5. Why do students choose medicine as a career. (UCMS, Multicentric)
6. Prevalence of Non-Alcoholic Fatty Liver Disease in an adult population living in a rural community of Haryana. (Dept of Community Medicine)
7. Prevalence of Metabolic Syndrome and its selected socio-behavioral determinants among females aged more than 20 years residing in an urban resettlement colony, South Delhi. (Dept of Community Medicine)
8. Impaired glucose tolerance in children and adolescents with cystic fibrosis. (Dept of Pediatrics)
9. DNA amplification study by polymerase chain Reaction (PCR) to detect sub-clinical Pneumocystis carinii Pneumonia (PCP infection and colonization in 'at risk' patients with or without respiratory symptoms. (Dept of Microbiology)
10. Primary drug resistance studies by Genotypic and Phenotypic analysis in HIV – Indian subtype C infected individual. (Dept of Microbiology)
11. Brachial plexus neurotization with phrenic and or intercostals nerves and its effect on pulmonary function. (Dept of Neurosurgery)
12. Study of genetic diversity and phylogenetic analysis of Pneumocystis jirovecii obtained from patients with clinical diagnosis of Pneumocystis carinii pneumonia. (Dept of Microbiology)
13. Study of genetic polymorphism of dihydropteroate synthase (DHPS) gene in Pneumocystis jirovecii isolates and its correlation with treatment failure and clinical outcome in patients with pneumocystis carinii pneumonia. (Dept of Microbiology)
14. Detection & quantification of Pneumocystis jirovecii in respiratory samples using real time PCR in patients with HIV infections. (Dept of Microbiology)
15. Double masked Placebo controlled parallel group multicentre dose ranging study within an optional extension to assist efficacy and safety of LX 211 as therapy in subjects with active fight threatening non-infectious intermediate anterior and intermediate posterior pan uveitis. (with Dr R.P Centre for ophthalmic sciences)
16. Double masked Placebo controlled parallel group multicentre dose ranging study within an optional extension to assist efficacy and safety of LX 211 as therapy in subjects with active fight threatening non-infectious anterior uveitis. (with Dr R.P Centre for ophthalmic sciences)
17. Double masked Placebo controlled parallel group multicentre dose ranging study within an optional extension to assist efficacy and safety of LX 211 as therapy in subjects with clinically quiescent fight threatening non-infectious intermediate anterior and intermediate posterior and pan uveitis. (Dr R.P Centre for Ophthalmic Sciences)

PUBLICATIONS

Journals: 59

Chapters in Books: 10

PATIENT CARE

Chest Clinic (Friday 2:00 pm)

New cases	2134
Old cases	4623
Total	6757

Infectious Diseases Clinic (Monday 2:00 pm)

New cases	194
Old cases	105
Total	299

Sleep Related Breathing Disorder (SRBD) Clinic

New cases	208
Old cases	130
Total	338

Antiretroviral center

Total registered till date	6162
ART started till date	2324
Regular follow-up till date	1265
ART started 2010-2011	308

AIIMS DOTS Centre

Total patients on DOTS	2175
CAT I	1406
CAT II	766
CAT III	3

Laboratories

(A) Respiratory laboratory

Spirometry procedures	6434
Diffusion capacity estimation	642
Body Box (plethysmography) measurements	317
Oxymetries	2215
Maximum voluntary ventilation	367
Arterial Blood Gas Analysis	3600

(B) Bronchoscopy laboratory

Fiberoptic bronchoscopy procedures 816

(C) Sleep laboratory

Polysomnography studies 338

Continuous positive airway pressure (CPAP) titration 120

(D) ADA/ACE laboratory

Angiotensin converting enzyme tests 178

Adenosine deaminase tests 89

(E) RNTCP

Sputum investigation performed 2425

(F) DOTS PLUS

Drug Susceptibility Test 1213

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Professor S.K. Sharma received Dr. Devi Chand Memorial Oration Gold Medal, VR Joshi Award for Outstanding Referee of Journal of Association of Physicians of India, 2010; Elected member, Faculty Council, Indian College of Physician, 2011-14; continued as member of 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, Indian Association of Sarcoidosis and other Granulomatous Disorders (IASOG), Indian Society of Critical Care Medicine, World Lung Health (initiative of International Union against Tuberculosis and Lung Diseases IUATLD); Vice President of Society for Tobacco Control (STC) of India since 2010; Editor, Indian Journal of Chest Diseases and Allied Sciences since 2001, section editor, Lung India since 2010, Associate editor, Indian Journal of Tuberculosis since 2006; Member, Editorial Board, Indian Journal of Sleep Medicine since 2005, Chest (American College of Chest Physicians) since 2006, The Open Tropical Medicine Journal since 2008, Indian Journal of Medical Research since 2009; Member, International Advisory Board, Davidson's Principles and Practice of Medicine (21st edition); continued to be reviewer for many international and national journals; Chairman, Board of Speciality in Pulmonary Medicine, Medical Council of India for drafting/updating curriculum for MD and diploma courses in the specialty of Pulmonary Medicine; Chairperson, Expert Group constituted by Director General, ICMR to look into issue of safety of consumption of vegetable juices with special reference to lauki (white guard) juice 2010-2011; Chairperson, Sub-Committee (Clinical) to screen the applications received from the faculty/non-faculty staff of the Institute for grant of financial assistance for attending International Conferences; Continued to be Member of Scientific Advisory Committee of Infectious Diseases, ICMR since 2004; World Lung Health [initiative of International Union Against Tuberculosis and Lung Diseases (IUATLD)] since 2004; Appointed as Co-ordinator of IMPACT (Indian Medical Professional Association's Coalition Against Tuberculosis) on behalf of the Association of Physicians of India (API) to fight jointly against tuberculosis by forming a coalition for a period of 5 years from year 2008; Continued to be Chairperson, National Task Force on Involvement of Medical Colleges in TB Control Programme of India, DOTS Plus Committee; Central Standing Committee for Operational Research on RNTCP related project, MoHFW; Expert member (group leader) of sub-group for Development of Standard Treatment Guidelines (STGs) for Medicine (Respiratory Diseases) constituted by MoHFW, 2010-2011; Selection Committee for the post of Director, New Delhi TB Centre, New Delhi; Standing Selection Committee for the posts of Additional Professor, Assistant Professor of Internal Medicine and Assistant Professor of Bone Marrow Transplant, Group 'A' faculty posts; Selection committee in subject-field of medicine for selection of candidates for award of Commonwealth Scholarship/Fellowship plan 2011 offered by the Government of United Kingdom; Selection; Special Medical Board for Candidates with disabilities, qualifying Joint Entrance Examination 2010, Indian Institute of Technology, IIT Hospital, New Delhi; Special Medical Board for

Candidates with disabilities, qualifying Joint Entrance Examination 2010, Indian Institute of Technology, IIT Hospital, New Delhi, June 2010; Expert member of Drugs Technical Advisory Board (DTAB) to examine continued marketing of certain drug formulations reported to be prohibited or restricted in other countries since 2010; Member, Expert Committee on Tuberculosis, Department of Biotechnology, Ministry of Science & Technology, Govt of India since May 2010 (for period of 3 years); Member of Selection process for ICMR awards, ICMR, New Delhi, 2009; Member, Board of Study, H.P. University, Shimla since 2008; Continues to be Member, Governing body of Lala Ram Sarup Institute of Tuberculosis and Respiratory Diseases, MoHFW since 2008 and an expert member of Drugs Controller General (India) [DCGI] in matters related to regulatory approval of clinical trials for Investigational New Drugs (IND) since 2008.

Professor Rita Sood is member of Editorial Board of the International Journal 'Advances in Medical education and Practice' (April' 10); Invited as adviser for the Personality test boards (PT Board) for Civil service examination by UPSC (26–28 April 10); invited by Guru Gobind Singh IP University as expert member Selection committee for selection of teaching faculty at VMMC & SJH (April, Aug' 10); Attended Policy group meeting of ASME at Cambridge, UK during Annual ASME Conference on Innovations in medical education in a Traditional World (July' 10); Invited by Open university, Milton Keynes London to write distance learning module on 'Managing meetings and group decision making' under the theme 'Educational management and leadership' (13-15 Sept. 10); Member, International Advisory Board, 6th Congress of the Asian Medical Education Association (AMEA), International Medical University, Kuala Lumpur, Malaysia (March 2011); Received fellowship of Royal College of Physicians (FRCP), London (May' 10) and Fellowship of National Academy of Medical Sciences (FAMS) Oct. 10; Elected President, South East Asian Regional Association of Medical Education (SEARAME) for 3 years (2012-15) and invited by Board of Governors, Medical Council of India to be a member of PG working group for revamping of medical education in the country (July' 10–March 11).

Professor Randeep Guleria has been awarded ZEE TV, LIC 'SWASTHA BHARAT SAMMAN for the year 2010 in the category of Medicine; Awarded 'Himachal Gaurav' award by the Himalayan Jagrati Manch (Regd.), New Delhi for 2010; External Examiner for M.D. (Medicine) at various institutions; Expert member for promotion of ICMR scientists; Member of the Scientific Advisory Committee of National Institute of Virology; Expert for selection for Assistant Professor (General Medicine) by UPSC; Appointed as consultant by the WHO for the Scientific Advisory Group of Experts (SAGE) working group for Influenza vaccination and immunization; Appointed member of expert team to formulate guidelines for vaccines of seasonal flu vaccine in India organized by ICMR; Deputed to represent AIIMS in the World response conference on Global Outbreak H1N1 +H5N1 Flu in its meeting; Nominated as the Chairman of Drugs Selection Committee, AIIMS; Nominated by the Govt. of India as a member of team to formulate the National policy issues and implementation policy for antibiotics use in public and private hospitals by the National Centre for Disease Control; Member, Project Review Committee, 'Leprosy, Tuberculosis and Other Chest Diseases' of the ICMR; Member, Project advisory Committee on Nutritional profile of Assam, Manipur and Meghalaya of the ICMR; 'Alfred Soffer Research Award' by the American College of Chest Physicians at Vancouver, Canada; Invited by WHO to attend the first meeting of the SAGE working group on Influenza Vaccines and Immunization in Geneva; Invited to attend a meeting in the Embassy of United States of America (USA) with the members of the delegates from NIH, USA; External Expert for the selection of faculty at PGIMER, Chandigarh; Nominated by Director, AIIMS to attend the National Conference on Health Impacts of Polluted Environment; Appointed core group member of Advisory Board to revise existing internal medicine curriculum for DNB internal Medicine; Invited to attend brain storming workshop on 20th October 2010 at India Habitat Centre organized by National Centre for Disease Control to formulate the National policy and get a broad understanding of the issues and the current status of implementation policy of antibiotics use in public and private hospitals; Invited to attend Scientific Advisory Committee meeting at the National Institute of Virology, Pune, 7–9 December 2010; Invited to attend 16th Annual Conference of Indian Association for Bronchology (BRONCOCON 2011), Department of Pulmonary Medicine, PGIMER, Chandigarh, 4–6 April 2011.

Dr Sanjeev Sinha was a member of Association of Physician of India, Indiaclen, National Academy of Medical Sciences (MNAMS), Indian Chest Society, Indian Thyroid Society, American Thoracic Society and International

AIDS Society; Member, Medical Board Antarctica Expedition, Govt. of India, Goa; Member, scientific committee, NACO, MoHFW; Organizing Secretary, Medicine Update-2010, August 2010, AIIMS, New Delhi.

Dr Anant Mohan was awarded 'Outstanding Research Poster' at Broncocon, Feb. 2011, Chandigarh for 'Diagnostic Utility Of Endobronchial Ultrasound guided TBNA for Mediastinal Lesions: A prospective three year analysis' and Alfred Soffer Award for co-authoring best abstract submitted at CHEST conference, 2010, Vancouver, titled 'Correlation of Inflammatory markers and Nutritional status with severity of disease in patients with stable COPD; continues to be reviewer for New England Journal of Medicine, Annals of Oncology, International Journal of Tuberculosis and Lung Disease, Postgraduate Medical Journal, Journal of Supportive Care in Cancer, Indian Journal of Medical and Pediatric Oncology; Member, Organizing Committee, Medicine Update, August 2010, AIIMS.

Dr N.K. Vikram was awarded NASI-SCOPUS YOUNG SCIENTIST AWARD in the category 'MEDICINE' for the year 2010; Member, Organizing Committee, Medicine Update 2010.

9.18 Microbiology

Professor and Head

J.C Samantaray

Professors

S. Broor

R. Chaudhry

A. Kapil

L. Dar

Additional Professors

B. R. Mirdha

B. K. Das

B. Dhawan

I. Xess

S. Sood

Associate Professors

M. Vajpayee

U.B Singh

EDUCATION

Short-and-long term training

Short term, summer and long term training was provided to students (M.Sc.) from various institutes and universities. Short term summer training was also provided to M.D. students.

Organization of National and International Conferences

The department organized four National and International conferences during the year.

1. 3rd Annual Conference of Indian Association of Medical Microbiologists; at All India Institute of Medical Sciences, New Delhi; 28 March 2011.
2. Pre-Conference Workshop entitled, Molecular Typing and Drug Resistance Detection for *Mycobacterium tuberculosis*; for the Indian Association of Medical Microbiologists, Delhi Chapter; All India Institute of Medical Sciences, New Delhi; March 25, 2011.
3. Workshop on “Diagnosis of Healthcare Associated Infections “during XI HISICON 2011 (Eleventh National Conference of the Hospital Infection Society-India) on 9th February, 2011 at Department of Microbiology, AIIMS, New Delhi.
4. Dr Urvashi B Singh organized one day symposium (CME) on the occasion of World TB Day. March 29, 2011: entitled ‘On the Move against Tuberculosis’.

Lectures delivered in CME/ National and International conferences: 27

RESEARCH

Funded projects

Completed

1. 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”, R. Chaudhry, Funded by ICMR, 2007-2010, Funds: Rs. 17 Lakh.
2. Cloning and Expression of flagellin Gene of *Salmonella* Typhi: An immunodiagnostic approach, R. Chaudhry, Funded by ICMR, 2007-2010, Funds: approx Rs. 24 Lakhs.
3. Mechanisms of resistance to Ciprofloxacin in *Salmonella typhi*, Arti Kapil, Funded by ICMR, 2008-2010, Funds: Rs. 12 Lakhs.

4. Pneumolysin DNA construct as a vaccine candidate against *Streptococcus pneumoniae* – An immune response study, B.K Das, Funded by DST, 2007-2010, Funds: Rs. 23.90 Lakhs.
5. Molecular Insights into Clinical Tuberculosis'. World Tuberculosis Day Symposium; AIIMS, New Delhi; 29 February 2011. 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, R. Chaudhry. Funded by ICMR, 2007-2010, Funds: Rs. 17 Lakhs.
6. Cloning and Expression of flagellin Gene of *Salmonella* Typhi: An immunodiagnostic approach, R. Chaudhry, Funded by ICMR, 2007-2010, Funds: approx Rs. 24 Lakhs.
7. Mechanisms of resistance to Ciprofloxacin in *Salmonella typhi*, Arti Kapil, Funded by ICMR, 2008-2010, Funds: Rs. 12 Lakhs.
8. Pneumolysin DNA construct as a vaccine candidate against *Streptococcus pneumoniae* – An immune response study, B.K Das, Funded by DST, 2007-2010, Funds: Rs. 23.90 Lakhs.

Ongoing

1. Multisite monitoring of human influenza in India –phase I, Shobha Broor and Lalit Dar, Funded by ICMR, WHO & DHSS, 2004- ongoing, Funds: Rs.4,67,64,390/-
2. Multi-Center study on Antimicrobial Resistance Monitoring of *Salmonella* Typhi and *Salmonella* Paratyphi A – An attempt to make national guidelines on antibiotic policy to treat Enteric fever, Arti Kapil, Funded by ICMR, 2010-13, Funds: Rs. 30 Lakhs.
3. Point of care (POC) Test for Diagnosis of Typhoid Fever using Immunochromatography Procedure (ICP), Arti Kapil, Funded by DRDO (GOI), 2010-11, Funds : Rs. 2.5 Lakhs.
4. Congenital cytomegalovirus infection and hearing loss in rural Indian population, Lalit Dar, Funded by ICMR, 2010- 2013, Funds: Approx. Rs. 60 Lakhs.
5. Molecular diagnosis of acute bacterial meningitis, B.K Das, Funded by AIIMS, 2010-2011, Funds: Rs. 1 Lakh.
6. Study of Genetic diversity and Phylogenetic analysis of *Pneumocystis jirovecii* isolates obtained from patients with clinical diagnosis of *Pneumocystis carinii* Pneumonia, B.R Mirdha, Funded by CSIR, 2008-2011, Funds: Rs. 17 Lakhs.
7. Study of genetic polymorphism of dihydropteroate synthase (DHPS) gene in *Pneumocystis jirovecii* isolates and its correlation with treatment failure & its correlation with treatment failure and clinical outcome in patients with *Pneumocystis carinii* pneumonia, B.R Mirdha, Funded by DST, 2009-2012, Funds: Rs. 24 Lakhs.
8. Detection and quantification of *Pneumocystis jirovecii* in respiratory samples by Real-Time PCR for clinical management of *Pneumocystis carinii* pneumonia (PCP) in human immunodeficiency virus (HIV) infected and uninfected individuals, B.R Mirdha, Funded by ICMR, 2009-2012, Funds: Rs. 15 Lakhs.
9. Molecular characterization and development of immunological based diagnostics for *Naegleria fowleri* infection, B.R Mirdha, Funded by DRDO (GOI), 2010-2013, Funds: Rs. 24 Lakhs.
10. Development of a DNA Biosensor for detection of *Neisseria gonorrhoeae* in clinical samples, Seema Sood, Funded by DBT, 2007- 2011, Funds: Rs. 67 Lakhs.
11. LAMP as Point-of-Care Test for Gonorrhoea, Seema Sood, Funded by DBT, 2009-2011, Funds: Rs. 31 Lakhs.
12. Establishment of networking for *Neisseria gonorrhoeae* surveillance in India, Seema Sood, Funded by ICMR, 2010-2013, Funds: Rs. 32 Lakhs.

13. Determination of mechanisms of resistance to ciprofloxacin in *Salmonella enterica* serotype Typhi. Arti Kapil, Funded by ICMR, 2008-2010.
14. External quality assurance scheme (EQAS) under NACP-III (National Reference laboratory), M. Vajpayee, Funded by NACO, 2009 onwards, Funds: Rs. 6 Lakh/year.
15. Integrated Counseling Testing Centre, M. Vajpayee, Funded by DSACS, 2009 onwards, Funds: Rs. 52,000/year.
16. Anti retroviral Therapy (ART) programme for CD4/CD3 testing, M. Vajpayee, Funded by DSACS, Funds: Rs. 50,000/year.
17. Role of newly identified T_H17 cells: its interplay with other T helper (T_H) subsets and consequence on disease progression, in HIV infected Indian individuals, M. Vajpayee, Funded by AIIMS, 2010-2012, Funds: Rs. 1 Lakh/year.
18. A detailed study of T cell immune exhaustion: Its causes and repercussion on disease progression, in HIV infected Indian individuals, M. Vajpayee, Funded by ICMR, 2011-2012, Funds: Rs. 40.64 Lakhs.
19. HIV vaccine immunogen design: Identification of T- Cell epitopes associated with control of viral replication in Indian and South African HIV-1 infected Indian individuals, M. Vajpayee, Funded by DST, 2011-2014, Funds: Rs. 58.35 Lakhs.
20. Role of oral vitamin D as an adjunct therapy in Category I Pulmonary Tuberculosis along With assessment of immunological parameters, Urvashi B Singh, Funded by DBT, 2008-2011, Funds Rs. 50 Lakhs.
21. Molecular Tracking of community-associated methicillin resistant *Staphylococcus aureus* strains disseminating in a tertiary hospital, Dhawan B, Funded by ICMR, 2009-2012, Funds: Rs. 14.66 Lakhs.
22. Development and clinical evaluation of a real time PCR assay for detection of *Chlamydia trachomatis* in Indian women with Infertility, Dhawan B, Funded by ICMR, 2010-2013, Funds: Rs. 19.53 Lakhs.

Collaborative Projects

1. Administration of *Lactobacillus rhamnosus* GG for the prevention and treatment of *Clostridium difficile* infection and subsequent diarrhea in Indian population. (with Energy Research Institute (TERI))
2. Development of Nanosilver Nanohydrogels for Biomedical Applications. (Department of Chemical Engineering, IIT, New Delhi)
3. A comparative study of effectiveness of immunotherapy with intralesional injection of Mycobacterium W vaccine in clinical resolution of external anogenital warts and reduction of viral load: A randomized trial. (Department of Dermatology)
4. Evaluation of an automated high throughput Flow Cytometry diagnostic technique for diagnosis of Malaria. (Department of Medicine and Laboratory Medicine)
5. A multicentric study of clinical and Microbiological profile of community-acquired pneumonia (CAP) in Indian patients. (Department of Medicine)
6. Immunologic effect of zinc supplementation in HIV infected children receiving highly active antiretroviral therapy: A randomized double, blind placebo controlled trial. (Department of Paediatrics)
7. Treatment outcome and drug resistance among CAT II pulmonary tuberculosis under Revised National TB Control Programme (RNTCP) of India. (Department of Medicine)
8. Role of ATT for positive Endometrial Aspirates DNA PCR in reproductive outcome in infertile patients in Indian setting: A randomized trial. (Department of Obstetrics and Gynaecology)

9. A study on treatment of Genital Tuberculosis-Randomized Controlled Trial of either discontinuation at 6 months or continuation till 9 months after initial response to 6 months RNTCP category I treatment. (Department of Obstetrics and Gynaecology)
10. Comprehensive proteomics profiling of CSF proteins from patients of different meningitis infections for biomarker discovery. (JNU, Delhi)
11. Detection of mycobacterial pathogens in Crohn's disease patients. (Department of Gastroenterology and Human Nutrition)
12. 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. (Department of Medicine)
13. Efficacy of thrice weekly intermittent short course antituberculosis chemotherapy in tuberculosis patients with and without HIV infection. (Department of Medicine)
14. 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, Multicenter Clinical Trial). (Department of Medicine)
15. 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). (Department of Medicine)
16. Evaluation of the efficacy of thrice weekly DOTS regimen in TB pleural effusion at six months (Multicenter project). (Department of Medicine)
17. Microscopy Center for Directly Observed Treatment Short-Course, (DOTS) Therapy. (Department of Medicine)
18. To study the diagnostic value of Quantiferon Gold Test in detecting latent TB infection in End stage Renal Disease patients on Renal Replacement therapy. (Department of Nephrology)

PUBLICATIONS

Journals: 49

Chapters in Books: 2

Books: 1

PATIENT CARE

A. Bacteriology Section

Clinical Samples

Sample	No. of Samples
Pus	19338
Urine	28800
Blood	28912
CSF	8735
Sputum/ Throat/Tracheal Swabs	15140
Stool	766
Total	101691

b) Antimicrobial Susceptibility Tests

Urine	9890
Blood	11178
Throat swabs, sputum, BAL,	8820
Pus, tissue, catheter tracheal secretions, ET tips, etc. tips, wound swabs, etc.	12702
CSF & Sterile fluids	176
Stool	2
Total	42268

B. Hospital Infection Control and Water Testing Laboratory

Water testing	1126
CSSD	2048
Disinfectant Liquid /in use	1386
Environment air samples	4398
Disinfectant Swab/article	6936
Total	16,894

Serology Laboratory

Widal	6628
VDRL	8343
ASLO	33
TPHA	101
Total	15105

Sexually transmitted diseases (STD Laboratory)

Clinical samples

High vaginal swabs (HVS)	285
Semen	410
Expressed prostatic secretions	69
Urethral discharge	25
Vaginal discharge	33
Cervical discharge	6
Total	828

Antimicrobial susceptibility testing

HVS	66
Semen	40
EPS	16
Urethral discharge	06
Vaginal discharge	01
Total	129

External quality assessment

Participated in external quality assurance (EQA) programme of WHO GASP (Gonococcal Antimicrobial Susceptibility Programme)

Anaerobic bacteriology

Anaerobic culture	830
Stool culture for <i>Clostridium difficile</i>	255
ELISA for <i>C. difficile</i> —	238
Antibiotic susceptibility testing of toxin A and toxin B anaerobic isolates	58

Other culture

<i>Propionibacterium acnes</i>	224
<i>Campylobacter jejuni</i>	53
<i>Leptospira</i> spp.	27
ELISA	
Leptospira IgM antibodies	125
<i>Legionella pneumophila</i> IgG antibodies	12
Recombinant ELISA for <i>Salmonella Typhi</i> IgM antibodies	220
<i>Polymerase chain reaction Salmonella typhi</i>	31
<i>C.difficile</i> – tcdA, tcdB and tcdC	66

Total **2139**

Mycoplasma

ELISA

<i>Mycoplasma pneumoniae</i> IgM antibodies	66
<i>Mycoplasma pneumoniae</i> IgG antibodies	20
<i>Mycoplasma pneumoniae</i> IgA antibodies	24
<i>Mycoplasma pneumoniae</i> culture	27
<i>Mycoplasma hominis</i> culture	264
<i>Ureaplasma urealyticum</i> culture	264

Antibiotic Susceptibility

<i>Mycoplasma hominis</i>	16
<i>Ureaplasma urealyticum</i>	25

ELISA

<i>Chlamydia pneumoniae</i> IgM antibodies	40
<i>Chlamydia pneumoniae</i> IgG antibodies	24
<i>Chlamydia pneumoniae</i> IgA antibodies	28

<i>Polymerase Chain Reaction</i>	
<i>Mycoplasma pneumonia</i>	66
<i>Mycoplasma hominis</i>	26
<i>Ureaplasma urealyticum</i>	264
<i>C.trachomatis</i>	264
Total	1656
Parasitology Laboratory	
<i>Serological Investigations</i>	
Amoebic Serology of anti-amoebic IgG antibodies by ELISA	144
Hydatid disease serology by indirect haemagglutination test	139
Toxoplasmosis serology for IgG antibodies by ELISA	52
<i>Investigation for Malaria</i> Fluorescent staining (Acridine Orange)	4516
Giemsa staining	4516
Quantitative Buffy Coat (QBC) Assay	1380
HRP-II Antigen Detection tests	742
<i>Investigation for Kala-Azar</i>	
Fluorescent staining (Acridine Orange)	124
Giemsa staining	124
Quantitative Buffy Coat (QBC) Assay	124
Kala-azar serology (rk-39)	630
Aldehyde test	630
<i>Examination of Fecal Samples for Intestinal Parasitosis</i>	
Direct and concentration techniques	2536
In-vitro Culture	30
Modified Acid-fast and special staining	2536
Tissue specimens (homogenates) for intestinal coccidian	60
<i>Examination of Aspirates</i>	
Sputum, pus and others	70
<i>Investigation for Filariasis</i>	
Direct and Concentration	152
Acridine Orange	152
Thin & Thick Smear	152
Hetrazan provocative test	152

Other Investigations

Investigation for <i>Pneumocystis jirovecii</i> infection (PCP)	214
Cerebrospinal fluid examination for Free Living Amoebae (FLA)	62
Total	19237

*Virology Laboratory**Viral serology*

Measles CFT (serum and CSF)	105
Dengue IgM ELISA	4495
Dengue NS1 antigen ELISA	115
Chikungunya ELISA	1113
Viral culture and identification (HSV, dengue, chikungunya etc)	29

Polymerase Chain Reaction

CMV	105
HSV	119
Chikungunya	13
Dengue	18

Real-time PCR

Influenza (including novel H1N1)	477
Miscellaneous (Tzanck smear etc.)	18

Total	6607
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HIV and Immunology Laboratories

CD4 Test	4833
HIV serology	2723
Total	7556

Mycology and ICP Laboratory

Culture

BAL	1570
Urine	1966
CSF	554
Sputum	69
Swab	211
Pus	342
Miscellaneous	967
Tissue/Biopsy	325
Nail/Hair/skin	130
Bone Marrow	162
Blood	1887

Fungal serology

Cryptococcus serology	238
Aspergillus serology	86
Histoplasma serology	35
Total	8542

Tuberculosis Laboratory

Samples processed for ZN smear and culture on LJ medium	9229
Samples inoculated for Rapid Culture on MGIT 960	3255
Anti-tubercular Drug Sensitivity done on BACTEC	650
PCR for <i>Mycobacterium tuberculosis</i>	2820
Total	15594

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Professor J.C. Samantaray was awarded Best Scientific Poster Award: Panda A, Kurapati S, Myneedu VP, Verma A, Samantaray JC, Behera D and Singh UB. Novel and rapid Identification of clinical Mycobacterial isolates using MALDI-TOF MS. IAMM – Delhi Chapter, City Hospital, New Delhi; 28 April 2010; Best Scientific Poster Award: Mohapatra S, Panda J, Dang N, Samantaray JC, Gandhi A and Geevarghese KP. Flowcytometric analysis: A novel and automated method for rapid diagnosis of malaria. IAMM – Delhi Chapter, G.B. Pant Hospital, New Delhi; December 2010; Best Scientific Poster Award: Mohapatra S, Panda J, Dang N, Samantaray JC, Gandhi A, Selvi A and Saxena. Comparative evaluation of two Flowcytometric analyzers as diagnostic tools for the automated detection of malaria. 3rd National Conference of Indian Academy of Parasitology TROPACON, KITS University, Bhubaneswar; 29-31 October, 2011.

Professor Rama Chaudhry was Nominated for Louis Dienes Award, “Polymerase Chain Reaction-Restriction Fragment Length Polymorphism (PCR-RFLP) on P1 Adhesin Gene of *Mycoplasma pneumoniae* from Lower Respiratory Tract Infections in Indian Children”, in the 18th Congress of The International Organization for Mycoplasma, Siena, Italy (2010); Nominated for Harry Morton Award, “Mapping of Immunodominant Regions in P1 Protein, a *Mycoplasma pneumoniae* Major Surface Antigen”, in the 18th Congress of The International Organization for Mycoplasma, Siena, Italy (2010); Best Poster award under free poster category at Micro-D-Con 2011 at Delhi Chapter on 26th March 2011 for “Mapping of immunodominant and cytoadherence segments(S) of mycoplasma pneumoniae P1 gene”

Professor Arti Kapil was awarded International Ambassador 2011 by the Society for Healthcare Epidemiology of American (SHEA); Appointed as a Member of the Central Technical Committee of the National Accreditation Board for Clinical Laboratory Standards (NABL), Department of Science and Technology, New Delhi.

Professor Lalit Dar was invited as a Technical Expert by the International Atomic Energy Agency (IAEA), Vienna, for IAEA project- related meetings at their headquarters in May 2010; Appointed as a Member of the Central Technical Committee of the National Accreditation Board for Clinical Laboratory Standards (NABL), Department of Science and Technology, New Delhi; Frontiers in Basic Cancer Research Scholar in Training Award of the American Association of Cancer Research (AACR), Avon Foundation, USA, 2009; Guided and was a senior author for the awarded research work; Member: HIV Technical Resource Group (Laboratories) of the National AIDS Control Organisation; DBT North East Twinning Research Projects Committee; Project Evaluation Committee of the Central Council for Research on Homoeopathy (CCRH), Department of AYUSH, Min. of Health and Family Welfare, Govt. of India; Ethics Committee of the National Brain Research Institute

Dr B. R. Mirdha elected as Secretary, Indian Association of Medical Microbiologists, Delhi Chapter for a period of three years (2011-2013); Best Scientific Poster Award: Tak V, Mirdha BR, Yadav P, Makharia G and Bhatnagar S. Anthropometric evaluation and assemblage study of *Giardia intestinalis* isolates in infected children. Meghna Krishna Baveja Award under the theme “Pediatric Infectious Diseases”. IAMM – Delhi Chapter, City Hospital, New Delhi; 28 April 2010.

Dr Seema Sood won Best Scientific Poster Award: Verma R, Sood S, Bala M, Mahajan N, Kapil A, Sharma VK, Pandey RM, Samantaray JC. Gonorrhoea Diagnosis: A continuing challenge !! 3rd Annual Conference on “Microbial Evolution- Adaptations & Challenges”- MICRO-D-CON-2011, 26th March, 2011, AIIMS, New Delhi.

Dr Urvashi B. Singh received the Shrinivas Award for best poster presentation “XDR tuberculosis (extensively drug-resistant) in immunocompromised patients, Newer clinical perspective” in Delhi Chapter IAMM on 11.12.2010; Young Scientist Award for best oral presentation entitled “Genomic Characterization of drug resistance mutations in XDR-TB isolates from Delhi” in Micro-D-Con conference on 26.3 2011; Member, Project review Committee of the task force on Female Genital Tuberculosis, ICMR, since 2009; Member, ‘STOP TB New Diagnostics Working group’, WHO since 2009.

VISITING SCIENTISTS

1. Sunil K. Ahuja, M.D., President’s Council/Dielmann Chair for Excellence in Medical Research, Professor of Medicine, Microbiology/Immunology and Biochemistry, Director, Veteran’s Administration Center for AIDS and HIV Infection, University of Texas Health Science Center at San Antonio, visited the department and gave a lecture on ‘Genetic and epigenetic determinants of HIV-AIDS susceptibility’, Jan 10, 2011.
2. Dr. Wayne Sullender, Professor, Department of Pediatrics and Infectious Diseases, University of Alabama at Birmingham, USA, on various occasions in 2010-11 for collaborative projects in virology.
3. Dr. Suresh Boppana, Professor, Department of Pediatrics and Infectious Diseases, University of Alabama at Birmingham, USA, in January 2011, visited the Department for a collaborative project in virology and gave a lecture entitled “An update on congenital CMV infection”.
4. Dr. M. F. Sarker, Assistant Professor, Department of Microbiology, Oregon State University, USA, Lecture of Clostridium spores, January 5, 2011.

9.19 Nephrology

Professor and Head

Sanjay K Agarwal

Additional Professors

Sanjay Gupta

Dipankar M Bhowmik

Sandeep Mahajan

EDUCATION

Long term training

Department runs DM Nephrology, a 3-year degree course for post MD (Medicine) candidates. Four candidates were admitted to DM Course during this period. Postgraduates in internal medicine are posted on rotation for a short period of one to two months. At present the department has eleven DM students.

Short and long term training

Department provided following short term training.

1. Three WHO fellows from DPR Korea were taken as observers in the department and 1 WHO fellow from Boston, Massachusetts, USA, was taken in the department for 3 weeks fellowship.
2. Department allows doctors from army hospital (R & R) to attend teaching schedule of the department.
3. Senior residents enrolled for MCh Urology are rotated in the department for exposure to nephrology as part of their MCh curriculum.
4. MSc. nursing students in nephrology are given training in nephrology nursing in the department.
5. Residents from the division of pediatric nephrology also come for discussion in Nephro-pathology conference on a regular basis.

Lectures delivered in CME/ National and International conferences: 21

RESEARCH

Funded Projects

Ongoing

1. 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. Principal Investigator: Dr SK Agarwal. Funded by Lajolla Pharmaceutical Company California (2006-12). Total funding Rs 10 lakhs.
2. A Randomised, Multicentric, Parallel, Open Label, Active Controlled, Phase III Study to Evaluate the Clinical efficacy and safety of Kremezin on Suppression of Progression of Chronic Renal Failure. Principal Investigator: Dr SK Agarwal. Funded by LG Chemical India Ltd. (2010-12). Total funding Rs 12 lakhs.

Completed

1. Validation and Development of Predicting Formula for Estimation of Glomerular Filtration Rate in Indian Adults with Various Degree of Renal Function. Principal Investigator: Dr SK Agarwal. Funded by ICMR (2006-10). Total funding Rs 15 Lakhs
2. Detection of HCV core antigen (HCVc-Ag) for Diagnostic Screening of HCV Infection in Patients on Maintenance Hemodialysis. Principal Investigator: Dr SK Agarwal. Funded by ICMR (2007-10). Total funding Rs 28 Lakhs

3. An open randomised prospective phase-III clinical trial to evaluate the efficacy and safety of Cinacalcit versus Calcitriol in the treatment of secondary hyperparathyroidism. Principal Investigator: Dr SK Agarwal. Funded by Macleod India (2009- 10). Total funding Rs. 0.2 lakhs
4. To study the Diagnostic Value of QuantiFERON Gold Test in Detecting Latent Tubercular Infection in End Stage Renal Disease Patients on Renal Replacement Therapy. Principal Investigator: Dr SK Agarwal. Funded by ICMR (2007-10). Total funding Rs 13 Lakhs

Departmental Projects

Ongoing

1. Clinicopathological correlation of HBV and HCV infection in patients on renal replacement therapy.
2. Impact of CsA and Tacrolimus on outcome of living related renal transplantation.
3. Proteinuria in Renal Transplant Recipient and histopathological correlation.
4. Assessment of vascular functions in patients with chronic kidney disease
5. Sleep disorders in ESRD and transplant patients.
6. Oxidative Stress in chronic peritoneal dialysis patients and effect of N acetyl Cysteine on it.
7. Tuberculosis prophylaxis in patients on maintenance haemodialysis.
8. Clinicopathological correlation of HBV and HCV infection in patients on renal replacement therapy.
9. Tacrolimus as induction therapy for proliferative lupus nephritis.
10. Study to assess interdialytic and intradialytic pain in patients undergoing hemodialysis.
11. Study of physiological parameters in living kidney donors – pre and post donation.
12. Quality of sleep in hemodialysis and renal transplant patients.

Completed

1. Study of spectrum and clinicopathological correlation in biopsy proven renal diseases.
2. Study of physiological parameters in living kidney donors – pre and post donation
3. Oxidative Stress in post renal transplant patients and effect of N acetyl Cysteine on it.

Collaborative Projects

Ongoing

1. Diagnosis of Cytomegalovirus pneumonitis in immunocompromised patients at AIIMS (Microbiology).
2. Detection and Genotyping of Human Cytomegalovirus From neonates and Renal Transplant Recipients (Microbiology).
3. Molecular detection and characterization of Pneumocystis jiroveci in respiratory samples from the patients both immunocompromised as well immunocompetent with suspected interstitial pneumonia and other chronic lung diseases (Microbiology).
4. Cloning, sequencing and expression of ORF-2 genomic region of Transfusion Transmitted Virus (TTV) and use it to develop serological assay (Lab Medicine).
5. Effect of traditionally used herbometallic preparation on renal and hepatic function ‘Experimental and Clinical Study’ (Pharmacology).
6. Estimation of anti-Oxidant in blood in renal and liver diseases (With Laboratory Medicine).

7. Cytokine profile in acute rejection in Renal Transplant recipients (Transplantation and Immunogenetics).
8. Assessment of vascular functions before and after renal transplantation (Physiology).
9. Prevalence of AKI in critically ill patients (Medicine).

Completed

1. Evaluation of systemic co-morbidity in patients with diabetic retinopathy (Ophthalmology).

PUBLICATIONS

Journals: 12

Abstracts: 2

PATIENT CARE

SN	Area	Sub-heading	2010-2011
1	Hemodialysis related	Total HD New Patients	746
		Emergency HD Patients	348
		Total hemodialysis	7005
		Plasmapheresis	165
		Femoral Vein catherisation	594
		Jugular / Subclavian catherisation	232
		AV Shunts	3
		AV Fistula	26
2	ICU Related	CRRT/SLED	40
3	Peritoneal Dialysis	Acute PD	135
		CAPD	52
4	Indoor Related	Kidney Biopsy	403
		Liver Biopsy	19
		Indoor admission	1161
		Nephrology consultation	3053
		Ultrasound Abdomen	402
5	Day Care Treatment	Pulse Methylprednisolone Tt	58
		IV iron Therapy	402
		IV Cyclophosphamide Therapy	40
6	Renal Transplant	Evaluation of LRRT	357
		Evaluation of Cadaver recipient	66
		Living RT done	114
		Cadaver RT done	NIL
7	Renal Lab related	Blood sampling	24420
		Biochemistry (Urea, Cr, Na, K)	40274
		Urine osmolality	431

	24 hr urine testing	4286
	Hemogram for RT Patients	6022
	CO2	1601
	Serum iron	1679
	TIBC	1496
	UIBC	1669
	T Saturation	1581
	Serum Ferritin	543
8	OPD Related	
	Renal clinic new patient	6088
	Renal clinic old patient	24429
	RT counseling clinic (3 days/wk)	1277
	RT new cases	112
	RT old cases	6330

1. Community service camp at Ramakrishna Mission Sevashrama, Vrindavan.

2. Health Mela in Banka, Bihar

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Professor Sanjay K Agarwal, nominated member scientific committee, Northern Chapter, Indian Society of Nephrology for three years 2009–2012; Invited Member, Medical Death review Committee of AIIMS; nominated Member of Specialty Advisory Board, National Board of Examinations to formulate guidelines and criteria of various issues related to Nephrology in India; nominated to be Chairman for Nephrology Specialty, Medical Council of India to formulate guidelines and criteria of various issues related to Nephrology curriculum in India; nominated member, Dean's Committee AIIMS, 2010–2011; nominated Member of Research Committee, AIIMS; conferred NN-Gupta-CG Agarwal Oration, Chhatrapati Shahuji Maharaj University, Lucknow; Official visit to Spain as member of delegation of Ministry of Health and Family Welfare regarding National Organ Transplant Programme in India; invited to editorial board of *World Journal of Transplantation*; invited as an expert to New Key Opinion Leader, meeting organised by Transplantation Society in Goa; and invited to be member of advisory board for National Organ Transplant Programme of Government of India; organizing secretary, 6th World Organ Donation Day and Organ Donation Congress, Vigyan Bhawan, New Delhi, 12–13 November 2011. Mr Azad, Honourable Minister for Health inaugurated the scientific congress and Chief Minister of Delhi Mrs Sheila Dikshit inaugurated the public function on the occasion.

Dr Sanjay Gupta, elected Governing Body Member, Indian Society of Organ Transplantation and Governing Body Member of Delhi Nephrology Society.

Dr Dipankar M Bhowmik, elected Joint Secretary and Treasurer of Delhi Nephrology Society.

Dr Sandeep Mahajan, awarded International Speaker Award, Japanese Society of Dialysis Therapy, 55th Annual Conference of Japanese Society of Dialysis Therapy, Kobe, Japan, June 2010.

VISITING SCIENTIST

- Dr Jeremy Chapman**, Past President, The Transplantation Society, Professor of Nephrology, Westmead Hospital, Australia
- Dr TK Sreepada Rao**, Professor of Medicine, State University of New York, Downstate Medical Center, USA.
- Dr G. Venkatraman**, Consultant Nephrologist, Queen Alexandra Hospital, Portsmouth, UK.
- Dr Rajiv Saran**, Associate Professor of Medicine, Division of Nephrology, Associate Director, University of Michigan, Kidney Epidemiology and Cost Centre.

9.20 Nuclear Medicine

Professor and Head

A. Malhotra

Professors

G.P. Bandopadhyaya

C.S. Bal

Additional Professors

Rakesh Kumar

Chetan D. Patel (CNC)

EDUCATION

The faculty of the department participated in and delivered 30 lectures in continuing medical education programme, workshop, symposia and annual conferences during the year

RESEARCH

Funded Projects

Ongoing

1. To develop ^{68}Ga labelled rituximab for the diagnosis of B cell non-Hodgkins lymphoma (NHL) patients. International Atomic Energy Agency, Vienna, Austria, 2010-2012.

Departmental Projects

Ongoing

1. Labelling and quality control of $^{99\text{m}}\text{Tc}$ -TRODAT-1 and determination of the role of $^{99\text{m}}\text{Tc}$ -TRODAT-1 in the diagnosis of restless leg syndrome.
2. Studies on formulation and characterization of alginate nanospheres for targeted radionuclide therapy of Neuroendocrine tumors.
3. Studies on development of Radiolabelled Skin Patches for Skin Cancer Therapy.

Completed

1. To evaluate radiolabelling and efficacy of radiolabelled beta-Cyclodextrin for infection imaging.
2. Characterization of Colloidal ^{188}Re -Rhenium Colloid for Synovectomy
3. Effect of geometry and volume of radioactive sample on Cerenkov production by Beta-Emitters.
4. The Role of ^{131}I -MIBG vs ^{15}F -DOPA in diagnosis of Pheochromocytoma
5. Comparison between ^{68}Ga -DOTA-NOC and ^{18}F -DOPA PET/CT for the detection carcinoid tumours.

PUBLICATIONS

Journals: 40

Chapters in Books: 6

PATIENT CARE

Radionuclide Investigations	Number
1. Radioactive Iodine Uptake (RAIU)	2536
2. Perchlorate Discharge Test	30
3. I-131 Whole Body Scan	1120
4. Dimercaptosuccinic Acid Scans	1550
5. Ca-thyroid I-131 Whole Body Scan	215
6. Thyrotoxicosis	242
7. DTPA/LLECT 99mTc renal dynamic scan	5723
8. Direct Radionuclide Cystourethrography	230
9. Gastro Esophagus Reflux	523
10. Golumlar Filtration Rate	2022
11. Bone Scan	2520
12. 99mTc HIDA(Hepatobillary)	330
13. Thyroid Scan	826
14. Liver Scan	10
15. Meckel's Study	18
16. Gastro Intestinal Bleed	12
17. Lymphoscintigraphy	43
18. MIBG (diagnostic and therapeutic)	239
19. 153Samarium bone pain palliation	30
20. Para Thyroid Scan	81
21. SPECT-CT/CT	1408
22. Sentinal Lymphnode	22
23. Cardiac Investigation	2533
24. Brain SPECT	260
25. PET-CT Whole Body (including Ga)	3895
26. Brain Gluocopheptonate (GHA)	48
27. Inpatient (New Patient)	422
(Total Therapy)	519

9. 21 Nuclear Magnetic Resonance

Professor and Head

N. R. Jagannathan

Associate Professors

Rama Jayasundar

S. Senthil Kumaran

EDUCATION

Postgraduate

The faculty participated in and delivered lectures for the course entitled '*Structural Biology and NMR Technology*' and '*Molecular Medicine*' of M. Biotech programme of the Biotechnology department, AIIMS.

Six students of the department are pursuing PhD programme, four students from Department of Neurology are pursuing PhD in MRI and Functional MRI related topics and six MD students from various departments are pursuing their theses in MRS/fMRI/MRI topics.

Short/Long Term Training

Eight persons from medical and science disciplines from various institutes and universities from all over India, and students of BSc. Radiography and BSc. Nursing from AIIMS, underwent training in MRI.

Lectures delivered in CME/ National and International conferences: 36

RESEARCH

Funded Projects

Ongoing

1. 700 MHz NMR Spectrometer for Biomedical Research. N. R. Jagannathan. Department of Science and Technology (2007- 2012). Rs. 842.6 lakhs
2. Magnetic Resonance Spectroscopic Imaging (MRSI) and diffusion-weighted MRI (DW-MRI) in the non-invasive detection, assessment of treatment response and tumor metabolism in breast cancer. N. R. Jagannathan. Department of Science and Technology (2008- 2012). Rs. 20.29 lakhs
3. Spectroscopic analysis of medicinal plants. Rama Jayasundar. National Medicinal Plant Board, Department of AYUSH, Ministry of Health and Family Welfare (2010 – 2013). Rs. 96.90 lakhs.
4. Body composition analysis using MR and correlation with body constitution types. Dr Rama Jayasundar. AIIMS (2010 – 2011). Rs. 1.0 lakh.
5. Neuro-cognitive changes associated with perception, spatial orientation, speech and language process in visually challenged subjects, using functional magnetic resonance imaging (fMRI). Dr S. Senthil Kumaran. Cognitive Science Initiative, Department of Science and Technology (DST) (2010–2013). Rs. 22.10 lakhs.

Departmental Projects

Ongoing

1. MRI and MRS study of animal model of demyelination.
2. Body composition analysis using MR.
3. MR spectroscopic analysis of medicinal plants.

Collaborative Projects

Ongoing

On clinical MRI/MRS scanner

1. *In vivo* MR spectroscopy study on human breast carcinoma (Department of Surgery, Radio-therapy and Pathology).
2. *In vivo* MRI/MRS of prostate cancer (Department of Urology).
3. Body composition analysis using MRI, DEXA and BIA and correlation with diabetic risk factors (Departments of Endocrinology and Lab Medicine).
4. MRI/MRS studies of brain metabolites in diabetic patients (Department of Medicine).
5. ³¹P MRS study of skeletal muscle in normal subjects with vitamin D supplementation (Department of Pediatrics).
6. Cognitive activation studies of language and memory as a preoperative evaluation in patients with intractable epilepsy – a novel non-invasive method of investigation (Department of Neurology).
7. Neuromapping of functional deficits associated with Parkinsonian disorders (Department of Neurology).
8. Study of feasibility and efficacy of intravenous infusion of autologous bone marrow derived MNC infusion in chronic ischemic stroke: Clinico radiological correlative study with biomarkers of recovery (Department of Neurology).
9. Comparison of constraint induced movement therapy and electrical stimulation in patients with chronic stroke on disability evaluation measures and functional imaging (Department of Neurology).
10. MRI/MRS studies to evaluate brain metabolism in patients with obsessive compulsive disorders (Department. of Psychiatry). Role of MR spectroscopy in diagnosis of cancer of extremities (Department of Orthopedics).

On Animal MRI/MRS Scanner

11. *In vivo* MRI and MRS: contrast enhancement strategies and studies of biochemical mediators in animal models of multiple sclerosis.
12. Evaluation of potential neuroprotective agents in rat model of acute ischemic stroke (Department of Pharmacology).
13. MRI studies of skin cancers in animal model (Department of Biochemistry)
14. MR imaging to evaluate the neuroprotective activity of drugs in the animal model of acute stroke (Department of Pharmacology).
15. MR imaging studies on in evaluation of nanoparticles as contrast agents and targeted drug delivery (IIT Delhi).
16. MR imaging studies on in evaluation of nanoparticles as contrast agents and targeted drug delivery (Institute of Life sciences, Bhubneshwar).

On High-Resolution NMR Spectrometer

17. High-resolution ¹H MR spectroscopy of breast tumor tissue extracts.
18. High-resolution ¹H MR spectroscopy of axillary lymph nodes in breast carcinoma (Department of Surgery).
19. *In vitro* MR spectroscopy studies of tissue extracts of prostate tumors (Department of Urology).
20. *In vitro* proton NMR studies of inflammatory bowel disorders (Department of Gastroenterology).
21. *In vitro* proton NMR spectroscopy study of blood plasma of patients with coronary artery disease (Department of Cardiology).

22. Detection of metabolic signature of patients with celiac disease using *in vitro* ¹H magnetic resonance spectroscopy (Department of Gastroenterology).
23. Spectroscopic analysis of medicinal plants using NMR, UV and FT-IR (Department of Ocular Pharmacology, RP Centre).
24. Spectroscopic analysis and evaluation of anti-oxidant properties of medicinal plants (Department of Ocular Pharmacology, RP Centre).
25. *In vitro* MR spectroscopy of intestinal mucosa in patients with celiac disease (Department of Gastroenterology and Human Nutrition).
26. *In vivo* MR spectroscopy study of human breast carcinoma (Department of Surgery).

PUBLICATIONS

Journals: 11

Abstracts in journals: 11

Chapters in books

PATIENT CARE

The department has two 1.5 Tesla and one 3.0 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 2010 to March 2011 are as follows.

Clinical Diagnostic MRI Scan	5556 patients
Research	322 patients and subjects

The Department has three whole body clinical MRI/MRS scanners, namely

1. 1.5 Tesla Magnetom Sonata (M/s. Siemens)
2. 1.5 Tesla Magnetom Avanto (M/s. Siemens)
3. 3.0 Tesla TX Achieva (M/s. Philips)

Other experimental facilities

The department has one 4.7 Tesla Animal MR system and one 16.4 Tesla High Resolution NMR Spectrometer. Various MR imaging, diffusion MRI and MR spectroscopy from various projects are routinely carried out on mice and rats. Using the 9.4 T (Bruker, DRX 400), approximately 300 rats and samples were imaged. Approximately 350 samples like serum/plasma/CSF/ biopsy tissues were studied using 16.4 T (Varian, 700 MHz) NMR spectrometers.

AWARDS, HONOURS AND SIGNIFICANT EVENTS

The department organized the following workshops/seminars/conferences.

1. '7th Asian Biophysics Association (ABA) Symposium and Annual Meeting of the Indian Biophysical Society (IBS)', 30 January– 2 February 2011.
2. A public lecture on 'Amazing Ribosomes', AIIMS, New Delhi, 31 January 2011, **Nobel Laureate Prof. Ada Yonath** (in Jawaharlal Auditorium).
3. SERC School on 'Biophysics in Medicine: Advanced Training in Imaging of Experimental Models', 3–9 February 2011. This DST sponsored event consisted of one-day workshop for about 100 participants, followed by theoretical, experimental and practical oriented research training on MR techniques for 15 participants from all over India.

Professor N. R. Jagannathan, elected President of the Asian Biophysical Association (ABA) in February 2011 till May 2013; elected Fellow of the International Society for Magnetic Resonance in Medicine (ISMRM), May 2010, Stockholm, Sweden; Member, Editorial board of 'MAGMA' (*Magnetic Resonance Materials in Physics, Biology and Medicine*) (Springer); Member, Editorial board *Magnetic Resonance Insights* (Libertas Academica, USA); Deputy Editor, *Neuroscience Imaging*, Member, Editorial board *NMR Biomedicine* (John Wiley & Sons); Member, Editorial board, *Magnetic Resonance Imaging* (Elsevier); Member, Editorial board, *Spectroscopy–Biomedical Applications* (IOC Press, Netherlands); Member, Editorial board, *Biophysical Reviews* (Springer); Elected member, Executive council, International Union of Pure and Applied Biophysics (IUPAB) (2008–2011); Member, Chapters Committee, International Society for Magnetic Resonance in Medicine (ISMRM); Member, Steering committee of Asian Biophysics Association (ABA); Council member, International Conference on Magnetic Resonance in Biological Systems (ICMRBS), USA; Co-organizer, Weekend Programme on 'Cancer MRS', 17th Annual Meeting of the International Society for Magnetic Resonance in Medicine (ISMRM), Stockholm, Sweden, 2010; Member, Programme Advisory Committee (PAC), Section for Biochemistry, Biophysics and Molecular Biology, Department of Science and Technology (DST), Government of India; Member, Steering Committee of the Sophisticated Instruments facilities (SAIFs) of Department of Science and Technology (DST), Government of India; Member, FIST Committee of the Department of Science and Technology (DST); Coordinator, Expert panel, Biomedical Devices and Bioengineering, Life Sciences Research Board (LSRB), DRDO; Member, INSA committee for International Union of Pure and Applied Biophysics (IUPAB); Member, Programme Advisory Committee (PAC), National Facility for High Field NMR, Tata Institute of Fundamental Research (TIFR), Mumbai; Member, Management Advisory Committee (MAC) of the Regional Sophisticated Instruments Facility (RSIC), Indian Institute of Technology (IIT), Chennai.

Dr Rama Jayasundar, Elected Member, Editorial Board, International Journal of Ayurveda and Integrative Medicine, 2010–till date.

Dr S. Senthil Kumaran, awarded E. K. Zavoisky Stipend for 18th Annual Meeting of the International Society for Magnetic Resonance in Medicine (ISMRM), Stockholm, Sweden, 2010.

VISITING SCIENTISTS

A number of distinguished NMR/MRI scientists both from abroad had visited and delivered lectures, notable among them are as follows.

1. Prof. Ada Yonath, Israel, Nobel Laureate
2. Prof. P. Cozzone, Marsille, France
3. Prof. R. J. Gillies, Moffit Cancer Center, Tampa, FL, USA
4. Prof. Kit S. Lam, University of California Davis, USA
5. Prof. K Nagayama, Okazaki Inst. Integrative Bioscience, NINS, Okazaki, Japan
6. Prof. Markus Rudin, University of Zurich & ETH, Zurich, Switzerland
7. Prof. M.A. Thomas, UCLA, Los Angeles, U.S.A.
8. Prof. Peter Barker, Johns Hopkins University, Baltimore, MD, USA
9. Dr Dorris Lin, Johns Hopkins University, Baltimore, MD, USA
10. Prof. John R. Griffiths, Cambridge University, Cambridge, UK
11. Prof. Benjamin Peng, Hong Kong University of Technology, Hong Kong

9. 22 Obstetrics and Gynaecology

Professor and Head

Suneeta Mittal

Professors

Alka Kriplani
Neerja Bhatla

Sunesh Kumar

Deepika Deka
K.K. Roy

Additional Professors

Neena Malhotra

Vatsla Dadhwal

Nutan Agarwal

Associate Professors

J.B. Sharma

Neeta Singh

Assistant Professor

Pradeep Garg (ad hoc)

EDUCATION

Delhi Postgraduate Medical Education Forum (Department of Obstetrics and Gynaecology) organizes 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 of postgraduates.

Short term and long term training

The department offers short and long term training in various subspecialty subjects like 'Gynaecology Endoscopy Surgery', 'High Risk Pregnancy', 'Gynaecology Oncology', and 'Gynaecology and Obstetrics Ultrasonography' and 'Infertility'. During the year 2010–11 we had one long term fellow undergoing training in different subspecialty subjects and eight short term trainees.

Continuing Medical Education

The department organizes 'National CME in Obstetrics and Gynaecology' 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. Series 3 Module 3 was held on 28th – 29th August, 2010 and Series 3, Module 4 was on 27th – 28th November, 2011 at AIIMS, New Delhi. The CME modules are attended by more than 200 students as well as senior gynecologists and are accredited by Delhi Medical Council.

1. 'Brigadier Khanna Oration' was delivered on 'Robotics in Gynaecology' by Dr Neena Agarwal from USA on 8 May 2010 at AIIMS.
2. PG Forum on Practices on suture and knots on 8 May 2010 at AIIMS.
3. National CME in Obstetrics and Gynaecology (Series 3, Module 3) at AIIMS on 28–29 August, 2010.
4. National CME in Obstetrics and Gynaecology (Series 3, Module 4) at AIIMS on 27–28 November 2010.
5. Orientation workshop on immediate postpartum IUCD insertion on 29 January 2011 at AIIMS New Delhi with JPIEGO and Ministry of Health, GOI.
6. Meeting on Ethical issues in Sexual and Reproductive Health Research organized by AIIMS, WHO & ICMR on 17 and 18 May 2010 in AIIMS.

7. Symposium on 'Evidence of Action for Reducing Maternal and Newborn Mortality and Morbidity' was conducted at All India Institute of Medical Sciences, New Delhi on 29–30 December 2010.
8. International Symposium and Workshop on IVF and PGD held on 5–6 February, 2011 at AIIMS, New Delhi.

Lectures delivered in CME/ National and International conferences: 120

RESEARCH

Funded Projects

Ongoing

1. Prevention of Parents to Child Transmission of HIV. Dr Suneeta Mittal. Funded by Delhi State AIDS Control Society. Total funding: Rs50,000.
2. Estimation of oxidative stress during oral iron supplementation in daily vs weekly schedule among pregnant mothers. Dr Suneeta Mittal. Funded by ICMR. Total funding: HRRRC funds.
3. Phase III multicentre clinical trial with subdermal single rod contraceptive implant— Implanon. Dr Suneeta Mittal. Funded by ICMR (Two years). Total funding: HRRRC funds.
4. Comparative study of oral single dose of Metronidazole, Tinidazole, Secnidazole and Ornidazole in the case of Bacterial Vaginosis. Dr Alka Kriplani. Funded by Department of Science and Technology (2008–2011). Total funding: Rs 2 lakhs
5. Effectiveness and safety of 2 vs 3 doses of HPV vaccine in preventing cervical cancer: An Indian Multi-centre randomized trial. Dr Neerja Bhatla. Funded by WHO-IARC (2009-2014). Total funding: US \$ 65,000.
6. Evaluation of efficacy and anti-inflammatory action of Placentrex™ in women with inflammatory Pap smears. Dr Neerja Bhatla. Funded by Albert David Ltd. (2010-2011). Total funding: Rs 2.5 lakhs.
7. A Phase III clinical trial to demonstrate the immunogenicity, tolerability, and manufacturing consistency of V503 (A multivalent Human Papillomavirus [HPV] L1 Virus-Like Particle [VLP] Vaccine) in Preadolescents and Adolescents (9 to 15 year olds), with a comparison to Young Women (16 to 26 year olds). Dr Neerja Bhatla. Funded by MSD Pharmaceuticals Pvt. Ltd (2010–2011). Total funding: Rs. 8.8 lakhs.
8. Early detection of cervical neoplasia by visual screening and hybrid capture testing by self and physician collection methodology – A community based study in rural area. Dr Neerja Bhatla. Funded by Qiagen India (2010-2011). Total Funding: Rs 4.5 lakhs.
9. CORONIS – International study of caesarean section surgical techniques – a randomized factorial trial. Dr J.B. Sharma. Funded by University of Oxford, UK. (March 2007 to March 2011). Total Funding: Rs 72 lakhs.
10. Efficacy of DOTS treatment of Genital Tuberculosis. Dr J.B. Sharma. Funded by Central TB Division, Ministry of Health and Family Welfare, Govt. of India (March 2009 to March 2011). Total Funding: Rs. 40 lakhs.
11. Efficacy of DOTS treatment in Genital Tuberculosis. Dr Neeta Singh. Funded by Central TB Division, Ministry of Health and Family Welfare, Govt. of India (March 2009 to March 2011). Total Funding: Rs 40 lakhs.

Completed

1. An open label, single-arm, non-comparative study to evaluate the efficacy and safety of iron surose (OROFER-S) injection in the treatment of iron deficiency anaemia during pregnancy. Dr Alka Kriplani. Funded by Emcure Pharmaceuticals Ltd. (2008–2010). Total funding: Rs 1 lakh.
2. Evaluation of Curcumin in the management of advanced cancer cervix. Dr Sunesh Kumar. Funded by DBT (2006–2010). Total Funding: Rs 51 lakhs.
3. Perifollicular vascularity and follicular fluid vascular endothelial growth factor (VEGF) concentration in in-vitro fertilization (IVF) cycles. Dr Neena Malhotra. Funded by AIIMS Research Grant (2008–2010). Total Funding: Rs 2 lakhs.

Departmental Projects

Ongoing

1. Sentinel Lymph node biopsy in endometrial carcinoma .
2. A randomized comparative study of ovarian reserve following two different techniques of laparoscopic cystectomy in ovarian endometrioma.
3. Correlation of erythropoietin levels and serum transferrin receptor levels with other haematological indices in patients with iron deficiency anaemia in late pregnancy
4. Gabapentin in management of postmenopausal symptoms.
5. To evaluate the efficacy of dehydroepiandrosterone (DHEA) therapy in cases of premature ovarian failure with infertility.
6. Evaluation of Efficacy of human placental extract and lycopene in clearing inflammatory cervical smears.
7. Role of sperm DNA damage and oxidative stress on outcomes of assisted reproductive techniques.
8. A randomized controlled study of minimal stimulation IVF with two different protocols in normal responders.
9. A randomized comparison of misoprostol administered simultaneously versus 36-48 hours after mifepristone for first trimester abortion.
10. Analysis of pregnancy outcomes and fetal complications in women undergoing prenatal diagnostic tests.
11. To study the role of combined hormonal vaginal ring in the management of dysfunctional uterine bleeding.
12. A comparative evaluation of total laparoscopic hysterectomy versus laparoscopic supracervical hysterectomy.
13. Evaluation of dehydroepiandrosterone (DHEA) therapy as an adjunct to gonadotrophins for ovulation induction in premature ovarian ageing.
14. Weekly paclitaxel in combination with carboplatin every 3 weeks for advanced epithelial ovarian cancer: a pilot study.
15. Randomized comparative study of conventional minilaparoscopy versus modern minilaparoscopy in patients of infertility.
16. Evaluation of efficacy of tranexamic acid in reducing blood loss during and after caesarean section.
17. Prediction of preterm delivery by determination of fetal fibronectin in vaginal secretions.
18. To study and compare the cost effectiveness of IVF minimal stimulation protocol versus the conventional protocol in a developing country hospital setup.
19. Role of Anastrozole for treatment of symptomatic leiomyoma in premenopausal women
20. A Clinical Trial comparing thermal balloon ablation and levonorgestrel intrauterine system in patients with dysfunctional uterine bleeding.
21. Nomogram of Fetal Nasal Bone Length at 11-14weeks of gestation.
22. Final protocol and Training manual – Manual for laboratory training on utility and operational feasibility of using the Haemoglobin Colour Scale (HCS) for haemoglobin estimation in the Indian setting.
23. Evaluation of efficacy of human placental extract and lycopene in clearing inflammatory cervical smears.
24. Screening for inherited thrombophilias in women with adverse pregnancy outcome.
25. Detection and quantification of fetomaternal hemorrhage (FMH) following deliveries in Rh-ve non immunized pregnancy by KBT, flow cytometry.

26. Comparison of harmonic scalpel with bipolar cautery in laparoscopic assisted vaginal hysterectomy.
27. A comparative study of VIA, cyto diagnosis, HPV testing and colposcopy as tools for cervical cancer screening.
28. 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.
29. Doppler assessment in various fetal vessels and fetal weight estimation using antenatal soft tissue thickness in intra uterine growth restriction with normal pregnancies.
30. Prevention of uterine atony during cesarean section : Randomized comparison of sublingual misoprostol versus syntocinon.
31. Value of routine antenatal screening ultrasonography at 24-28 weeks of gestation.
32. Effect of intraperitoneal bupivacaine in reducing postoperative pain after laparoscopic gynaecological surgery.
33. Endometrial changes and ovarian function in women with early breast cancer.
34. Prophylactic administration of micronized progesterone in prevention of preterm labour in women at increased risk.
35. Correlation of stage and imaging of endometriosis with fertility outcome.
36. Role of messenger RNA PCR in the diagnosis of genital tuberculosis in infertile women.
37. Comparison of uterine and radial artery flow changes detected by pulse Doppler in women undergoing stimulated intrauterine insemination for unexplained infertility.
38. To compare three different time regimen of vaginal misoprostol after oral Mifepristone for medical abortion.
39. Transvaginal ultrasound markers for ovarian reserve and periovarian adhesions after laparoscopic ovarian drilling in patients with clomiphene citrate resistant polycystic ovarian syndrome.
40. Comparison of the effectiveness of single versus double intrauterine insemination in infertile couples.
41. Role of PET in staging of ovarian malignancies.
42. To compare BPP with Doppler in pregnant patients with IUGR in normal pregnancies.
43. Ovarian function and endometrial changes in case of carcinoma breast.
44. Comparative study between MRI and Ultrasound in prenatal diagnosis using autopsy or postpartum imaging as a standard of reference.
45. Application of PET scan in preoperative evaluation of carcinoma endometrium.
46. Effect of oral contraceptive containing ethinyl estradiol combined with drospirenone vs desogestrel on clinical and biochemical parameters in patients of PCOS.
47. The Comparison between laparoscopic assisted vaginal hysterectomy with non descent vaginal hysterectomy for large large uteri - a randomized clinical trial.
48. Role of MRI in evaluation of pelvic organ prolapse and its relationship with POPQ classification.
49. Comparing thermal balloon ablation and levonorgestrel intrauterine system in patients with dysfunctional uterine bleeding.
50. Role of direct fetal intravascular immunoglobulin therapy in Rhesus isoimmunize pregnancies.
51. Evaluation of anti-mullerian hormone as a marker of ovarian response in IVFcycles.
52. Sonographic placental investigation in early pregnancy: correlation with fetal and maternal outcome in singleton pregnancy.

53. Clinical, imaging, endoscopic and laboratory evaluation of female genital tuberculosis.
54. Evaluation of the Screen-and vaccinate strategy as a model for comprehensive cervical cancer prevention.
55. To evaluate endometrial and sub endometrial blood flows in the prediction of pregnancy during in-vitro fertilization treatment.
56. Analysis of pregnancy outcome and fetal complication in women undergoing prenatal diagnostic test.
57. Direct visualization of fetus and placenta by fetoscopy.
58. Direct Fetal Intramuscular Administration Of Corticosteroids in spontaneous and indicated preterm delivery.
59. Direct Fetal Intravenous Immunoglobulin in Rh Isoimmunised pregnancies.
60. A comparison of treatment outcome of familial epithelial ovarian cancer and non-familial epithelial ovarian cancer.

Completed

1. Role of endometrial blood flow in predicting the outcome of IVF cycles.
2. Predictive value of Day 2 AMH for ovarian response in women undergoing IVF.
3. Role of middle cerebral artery peak systolic velocity in predicting fetal anemia in Rh Isoimmunisation after previous intrauterine transfusions.
4. Hyperhomocystenemia: In unexplained Recurrent Pregnancy loss and therapeutic response to vitamin B6, B12 and folic acid.
5. Prospective randomized comparative study of total laparoscopic hysterectomy, laparoscopically assisted vaginal hysterectomy and non descent vaginal hysterectomy for the treatment of benign diseases of the uterus.
6. Use of letrozole versus clomiphene citrate combined with gonadotropin in superovulation and IUI cycles.
7. Evaluation of role of FDG-PET/CT in staging and management of ovarian malignancies.
8. To determine the correlation of stage and imaging of endometriosis with fertility outcome
9. Evaluation of positron emission tomography Scan (Pet Scan) in preoperative assessment of cases of endometrial carcinoma.
10. Assessment of ovarian reserve in infertile woman with genital tuberculosis.
11. Relationship of fetal Doppler velocimetry to biophysical profile and fetal outcome in normal pregnancies and in pregnancies with intrauterine growth restriction.
12. Feasibility of virtopsy: minimally invasive autopsy using USG imaging and percutaneous organ biopsies as an alternative to open.
13. Seroprevalence of cytomegalovirus (CMV) Infection in pregnant women and
14. Prenatal diagnosis of fetal CMV Infection.
15. Development of HPV candidate vaccine/s: preparation of clinical trial site/cohort for vaccine testing.

Collaborative Projects

Ongoing

1. Role of s VEGFR-1 in the pathogenesis of Preeclampsia (Anatomy)
2. Prevention of Type II diabetes in women with gestational diabetes mellitus in urban India. A feasibility study (Endocrinology and Metabolism)
3. Cross-sectional study of cord blood immune markers in term appropriate for gestational age and small for gestation age neonates (Pediatrics)

4. Development of Human Papillomavirus vaccine prototype/s – Molecular Epidemiology of HPV types prevalent in India and Identification of HPV-16 L1 & E6 variants (Biochemistry)
5. Apoptosis in placental membranes in pre-eclampsia. An immunohistochemical study (Anatomy)
6. Role of sperm factors in recurrent spontaneous abortion. (Anatomy)
7. PEARL study (post menopausal evaluation and risk reduction with lasofoxifene) (Endocrinology)
8. 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 (Endocrinology)
9. Sequence based identification of mycobacterium species isolated from extra-pulmonary tuberculosis cases. (Lab. Medicine)
10. Establishment and characterization of human fetal liver hematopoietic stem cell line (Medical Oncology, IRCH)
11. To study the subset of antiphospholipid syndrome defined by anti b2 glycoprotein 1 anti body (Lab. Medicine)
12. Role of centchroman in benign breast disease (Surgery)
13. Epidural analgesia in labour (Anaesthesiology)
14. Chromosome aneuploidy and mosaicism in preimplantation embryo (Reproductive Biology)
15. Prenatal development and maturation of the human inferior colliculus (Anatomy)
16. Evaluation of ovarian function in female patients with multi-bacillary leprosy (Dermatology and Venereology)
17. Biostatistical aspects in case control studies on unintended pregnancies (Biostatistics)
18. A study of molecular basis of endometrial receptivity for blastocyst implantation in primates (Physiology)
19. Prevention of parent to child transmission of HIV (Paediatrics and Microbiology)
20. Efficacy of Phenobarbital on jaundice in babies ≥ 32 weeks presenting with Rh haemolytic disease of newborn A randomized, double – blinded, placebo controlled trial. (Pediatrics)
21. Diabetes mellitus and vulvovaginal candidiasis prevalence and its rational management (Endocrinology)
22. Prevalence of bacterial vaginosis and other reproductive tract infections among symptomatic women (study in tertiary centre) (Microbiology)
23. Effect of progesterone on hsp 27 expression in human, mid-secretory stage endometrial cells grown on collagen matrix in vitro. (Physiology)
24. To study the prevalence of vitamin D deficiency in pregnant women at first and third trimester during the routine care (Endocrinology)
25. Correlation between first trimester glucose screening and serum insulin levels with development of gestational diabetes mellitus in pregnancy (Endocrinology)
26. Comparative evaluation of neo adjuvant chemotherapy vs primary debulking surgery in the management of advanced epithelial ovarian cancer. (IRCH, AIIMS)
27. p16INK 4a and E-cadherin expression profile in pre-cancerous lesions of cervix and cervical carcinomas (Pathology)
28. Validation of strategies for rapid prenatal detection of aneuploidies (Pediatrics)
29. Evaluation of the diagnostic potential of fetal DNA in maternal plasma as a possible tool for non-invasive prenatal diagnosis of common single gene disorders (Pediatrics)
30. Non invasive prenatal diagnosis of Beta Thalassemia and fetal RhD status (Paediatrics)

31. Establishment and characterization of human fetal liver hematopoietic stem cell line (Medical Oncology, IRCH)
32. Endothelial progenitor cells as biomarker of disease activity in multiple myeloma (Medical Oncology)
33. Use of Hb. An estimation by HPLC for prenatal diagnosis of b-thalassemia in fetal blood samples during second trimester pregnancies. (Haematology)
34. Delineation of molecular basis of trophoblast invasion (National Institute of Immunology)
35. Implantation of human retinal pigment epithelial (RPE) cells in the 6-OH DA lesion rat model of Parkinson's disease. (Neurology)
36. Insights into the role of one-carbon metabolism in progression of cervical carcinogenesis (Biochemistry)
37. Effects of estrogen and estrogen-like compounds on female rat cerebellum. A histochemical and molecular study (Anatomy)
38. Elucidation of gene alterations in the pathogenesis of recurrent spontaneous abortions (Haematology)
39. Sperm factors (DNA damage, mt mutations, oxidative stress) – Role in recurrent spontaneous abortion (Anatomy)
40. Non-invasive prenatal diagnosis of common single gene disorders (Paediatrics)
41. To compare integrated screening with contingent screening for prenatal detection of Down syndrome in the Indian context (Genetic Unit).

Completed

1. Elucidation of endometriosis based on transcript profiling (Physiology)

PUBLICATIONS

Journals: 56

Chapters in books: 19

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	Frequency	Number of patients attended
1.	General OPD	6/week	New: 30,644; Old: 50,214
2.	High risk pregnancy clinic	3/week	New: 2241; Old: 12,457
3.	Gynae endocrine clinic	3/week	New: 48; Old: 77
4.	Gynaecological cancer clinic	2/week	New: 311; Old: 677
5.	Post natal clinic	3/week	New: 48; Old: 07
6.	Medical termination of pregnancy clinic	6/week	New: 955; Old: 400
7.	Family welfare clinic	6/week	New: 8145; Old: 3245

Operations performed

Gynaecological

Major :

Surgery for benign diseases	1500
Oncology surgery	230

Infertility	730
Endoscopic surgeries: Laparoscopy	2000
Hysteroscopy	160
Plastic surgery	100
Minor :	
D&C/EA	2880
Colposcopy/cryo/LEEP	120
Diagnostic hysteroscopy	1440
MTP	955
Pap smear	1500
Cervical biopsies	380
<i>Obstetrics</i>	
Major :	
LSCS	837
Minor :	
Operative vaginal deliveries: Forceps	160
Vaginal deliveries: Normal	1035
<i>Foetal medicine</i>	
Cordocentesis	168
Chorionic villus sampling	240
Amniocentesis	210
In-utero infusion	180
High risk obstetrics	
–Obstetric ultrasound	3000
–NST	1100
–BPP	1200
Gynae ultrasound	2000
Ovarian cyst aspirations	80
<i>Laboratory investigations</i>	
Urine pregnancy test	1100
Haemoglobin	1600
Blood group	1200
Urine albumin/sugar	3000

IVF Facility

1.	IVF	145
	ICSI	8
	Antagonist	32
	Agonist	100
	IUI	32
2.	Cycles cancelled	13
	Reasons for cancellation	No egg retrieved: 3 Failed Slim: 4 Polyp in early: 7 Failure to clear: 1 Fertilisation failure: 4
	Failure to respond	4
	Fertilization failure	4
	Severe OHSS	
	Converted to IUI	
	EHS	4
3.	Frozen embryo cycles	22
4.	PESA	0
5.	Total number of pregnancies	31
	Ongoing	
	Delivered	
	Abortions	1
	Ectopic	
6.	Andrology	
	Semen analysis	353
	Semen wash for IUI	32
	Semen preparation for IVF	173
7.	Ultrasounds	
	IVF cycles	855
	Follicle monitoring	
	Day 2 AFC and Day 21 ET	1440
	Total	2295
8.	OPD registrations	1715: Old; 459: New

POST-PARTUM PROGRAMME

The Post-partum programme (PPP) is a maternity centred hospital based approach to family welfare programme which provides a package of RCH and family welfare services in the vicinity of the hospital as well as in 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 (2010–11)

Methods	Performance
CuT	574
Oral pills (13 cycles=1 user)	cycle /146 patient + 456 pkts
Conventional contraceptives (72 pieces=1 user)	90500 pieces (2968 patients)
Sterilization	
(a) Tubectomy	1101
(b) Vasectomy	26

Note: Family planning methods are free of target

Maternal and Child Health (MCH) performance (2010–2011), post-partum programme

Services	Performance
Pregnant women	
TT (Mothers) (2nd or booster)	Ist: 1709 IInd: 1570
Children (0–1 year)	
DPT (3rd dose)	M + F = 600/537
Polio (3rd dose)	M + F = 500/537
BCG 1506 + 1207	
Measles	741 + 502
Children under 5 years	
DT	370 + 222

Community Services/Camps

1. 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 TV channels.
2. Reproductive child health camps organized by the Directorate of Family Welfare at different hospitals of Delhi government.
3. Monthly cervical cancer screening camps in collaboration with AOGIN-India and Can Support in the slum areas of Delhi, May–November 2010.

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Professor Suneeta Mittal received Distinguished Services Award 2010 of Geriatric Society of India; was Member of Project Review Group on Fertility Regulation and Expanding Contraceptive Choices of ICMR; Scientific Advisory Committee of Reproductive Health Research of Central Drug Research Institute, Lucknow; Multi-country Study Steering Committee of WHO, Geneva; Scientific Advisory Committee of Indian Institute of Technology, Kharagpur; Institute Body of Jawahar Lal Nehru Institute of Postgraduate Medical Education and Research, Pondicherry; Academic Council of Guru Gobind Singh Indraprastha University, Delhi; Chairperson, Project Review Group on Reproductive Health of ICMR; Member, Expert Committee to review marketing of Letrozole for induction of ovulation in anovulatory

infertility constituted by the Directorate General of Health Services; Reviewer for Journal of Obstetrics and Gynaecology Research JOGR; Member Technical Advisory Group (TAG) of PATH; Committee of ASSOCHAM and Planning Commission to make this country a better place to live and pay tribute to womanhood and motherhood; Expert Committee to examine issues related to the advertisement of Emergency Contraceptive (EC) Pills in the media of DGHS; IC-SCRT for Medanta – The Medicity; Academic Expert in Maternal Health – Board of the Partnership for Maternal, Newborn and Child Health; Member, Working Group on Maternal and Child Health nominated by the Ministry of Health and Family Welfare for the US–India Health Initiative.

Professor Alka Kriplani was Special Invitee, Advisory Council of AIIMS Student’s Union Elections, 2010; Member – Committee for inspection for Hindi usage, AIIMS, 2010; Committee for Planning & Monitoring issues of AIIMS with Health Ministry, 2010; Central Public Information Officer under Right to information Act, 2005; Member, Faculty of Medicine, IMS, in Obstetrics and Gynaecology, Banaras Hindu University, 2009-2011; Reviewer for International Journal of Gynecology & Obstetrics, London, 2011; Awarded Women of the Year award in Health by Delhi Gynaecologist Forum (East) and WOW India, Delhi, 20 August 2010; Editor, Asian Journal of Obstetrics and Gynaecology Practice; Elected Member, Governing Council of ICOG (Indian College of Obstetricians and Gynaecologists), 2009–2011; Chairperson, Endoscopy Committee, AOGD, 2009–2011; Co-ordinator, North Zone, Medical Education Committee of FOGSI, 2010–2011; Awarded FOGSI – Dr C.S. Dawn Prize for best presentation of paper on official theme of congress, ‘Levonorgestrel intrauterine system in medical management of adenomyosis’, 54th AICOG, Hyderabad, January 2011 (Dr Vidushi Kulshrestha).

Professor Sunesh Kumar was Member, Project Advisory Committee on ‘Screening for Common Cancers in three districts of Himachal Pradesh being conducted by ICMR

Professor Deepika Deka was awarded Dr CS Dawn Prize for Best paper in Operative Obstetrics: ‘Fetoscopy – Fetal Endoscopy’: A step into the future for minimally invasive fetal therapy, for Senior Obs/ Gynecologists, All India Congress of Obstetrics & Gynaecology – 2010, Hyderabad; Aprajita, Deepika Deka, Best Paper on - Clinical agenesis and functional uterus with endometriosis and endometrioma – conframing the Sampsons theory of retrograde menstruation leading to endometriosis, North Zone Yuva FOGSI 2010, 23–25 July 2010, Gorakhpur; awarded ICMR Senior Scientist Fellowship 2010-2011 : Fetal Endoscopy, King’s College, London, UK (15 days) 27 November–13 December 2010.

Professor Neerja Bhatla was Elected Fellow, International Academy of Medical Sciences–2010; awarded Silver Medal at AICOG, Guwahati–2010; Best Clinical Paper from Emerging Countries at the 26th International Papillomavirus Conference and Clinical Workshop, Montreal, Canada: Cervical infection with multiple HPV types–Correlation with colposcopy and histopathology–2010; Travel Award, 12th Biennial Meeting of the International Gynae Cancer Society at Prague, Czech Republic: PET scan – 2010.

Dr Neena Malhotra was awarded C. S. Dawn prize for best paper on the theme ‘Enhancing Fertility’ – by the Federation of Obstetrics and Gynecological societies of India (FOGSI) at the 54th All India Congress of Obstetrics and Gynecology, Hyderabad, January 2011. Received Overseas Research Fund (2010–11) by the Royal College of Obstetricians and Gynecologists, London, UK; Visited Assisted Conception units at Guy’s Hospital, London and Assisted Reproduction Unit, Aberdeen, Scotland.

Dr Nutan Agarwal was awarded ‘Dr. G.S. Reddy–Puducherry Oration: Living beyond menopause’ at 7th International Congress on Geriatric Care, 12–14 November 2010 at New Delhi.

Dr J.B. Sharma was awarded fellowship of National Academy of Medical Sciences, 30 October 2010; awarded Udbhav Shikhar Samman by Indian Council of Cultural Research and Udbhav (regd) for significant contribution to Women’s Health in India on 20 January 2011. Established Endoscopy Centre for Training Course on Minimally Invasive Gynaecology under Women’s Health Initiative; Involved in Construction of ART Centre at the Department of Obstetrics and Gynaecology.

VISITING SCIENTISTS

1. Dr Helena von Hertzen, WHO, Geneva
2. Dr Sheryl Z. Vanderpaul from Director’s Office, WHO Headquarter.
3. Dr Narimah Awin, WHO.

9.23 Orthopaedics

Professor and Head

Prakash P. Kotwal

Professors

Shishir Rastogi
Rajesh Malhotra

Arvind Jayaswal
Hira Lal Nag

Additional Professors

Ravi Mittal

Chandra Shekhar Yadav

Associate Professors

Shah Alam Khan

Vijay Kumar

EDUCATION

The undergraduate and postgraduate education courses remained the same.

CMEs organized:

1. 'AIIMS Cadaveric Hip and Knee Arthroplasty Course' organized by Orthopedic Research Society, AIIMS and DePuy at AIIMS on July 15–16, 2010.
2. 'AIIMS Cadaveric Hip and Knee Arthroplasty Course' Organized by Orthopedic Research Society, AIIMS Zimmer Bioskills on 30 September–3 October 2010 at AIIMS, New Delhi.
3. AIIMS Cadaver Arthroplasty Course as Course Director on 26 and 27 March 2011.
4. Cadaver Knee workshop organized by the Department. of Orthopaedics, AIIMS, 12 September 2010.

Lectures delivered in CME/ National and International conferences: 138

RESEARCH

Funded Projects

Ongoing

1. 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 (26 May 2005–25 May 2012). Total funding Rs. 30.33 lakhs.
2. An Observational Study to Assess Back Pain in Patients with Severe Osteoporosis Treated with Teriparatide Versus Antiresorptives. Dr R Malhotra. Funded by Eli-Lilly Company Pvt. Ltd. (9 May 2008–9 May 2011). Total funding: Rs. 4.20 lakhs.
3. Evaluation of cytokines in patients undergoing total hip replacement and their correlation with osteolysis. Dr R Malhotra. Funded by ICMR (30 October 2009–30 October 2012). Total funding: Rs. 20 lakhs.
4. A multicenter, prospective, open label study of the safety and efficacy of 6ml Synvisc-One[®] (hylan G-F 20) in Indian patients with symptomatic osteoarthritis of the knee(s) after initial and repeat treatment. Dr R Malhotra. Funded by Max Neeman (30 June 2010–30 June 2012). Total funding: Rs. 2.25 lakhs.
5. A multicenter, prospective, open label study of the safety and efficacy of 6 ml Synvisc-One[®] (hylan G-F 20) in Indian patients with symptomatic osteoarthritis of the knee(s) after initial and repeat treatment. Dr R Malhotra. Funded by ICMR (15 March 2011–14 March 2014). Total funding Rs. 27.30 lakhs.

6. Efficacy of Short term 6 months Vs 9 months intermittent ATT in Extra spinal Osteoarticular Tuberculosis. Dr CS Yadav. Funded by Ministry of Health, Government of India. Rs 60 Lakhs, 3–4 years.

Completed

1. Evaluation of efficacy of platelet concentrates in the treatment of non-union of fracture of long bones. Dr R Malhotra. Funded by ICMR (2.01.2008–1.01.2011). Total funding: Rs 27.49 lakhs.
2. ‘A phase III randomized, parallel group, double-blind, active controlled study to investigate the efficacy and safety of oral 220 mg dabigatran etexilate (110 mg on the day of surgery followed by 220 mg once daily) compared to subcutaneous 40 mg enoxaparin once daily for 28–35 days in prevention of venous thromboembolism in patients following primary elective total hip arthroplasty (RE-NOVATE II)’. Dr R Malhotra. Funded by SIRO Clinpharm Pvt. Ltd. (6 December 2008– 6 December 2010). Total funding: Rs 25.50 lakhs

Department Projects

Ongoing

1. Clinical comparative evaluation of arthroscopic assisted anterior cruciate ligament reconstruction by anatomic double bundle and single bundle hamstring grafts.
2. A prospective study comparing the clinical, radiological and functional outcomes between variable angle and fixed angle volar locking plate for displaced intra articular distal radius fractures.
3. Arthroscopic elbow synonectomy in rheumataoid arthritis long term follow – up of more than two years.
4. Radiographic and Functional Evaluation in TKA and Effects of Malplacement of prosthesis on functions
5. Accuracy of Internal Vs External alignment zigs over the Tibial tray placement and its functional effects

Completed

1. Intralesional autologus bone marrow stem cell injection in avascular necrosis of femoral head and evaluation of outcome using MRI, PET Scan and Bone Scan.
2. MR evaluation of chronic internal derangements of knee.
3. Arthroscopic elbow synovectomy in rheumatoid arthritis- its effectiveness and MRI correlation
4. Evaluation of arthroscopic Bankart repair of recurrent traumatic anterior dislocation shoulder

Collaborative Projects

1. Efficacy and safety of Lawsonia inermis, Terminalia chebula, Coriandrum sativum in experimental models of Arthritis ongoing (Department of Pharmacology)
2. A study to establish the role of T – helper 17 cells in the Asian Indian Arthritis patients (Department of Anatomy)

PUBLICATIONS

Journals: 52

Chapter in Books: 9

PATIENT CARE

1. ‘Sports Clinic’ is held once in a week on Thursday afternoon at OPD of Department of Orthopaedics to cater the needs of the injured athletes and sports personnel.
2. Dr H. L. Nag attends the athletes and sports personnel once in a week on Monday afternoon at Medical Centre, Sports Authority of India, JL Nehru Stadium.

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Professor P. P. Kotwal delivered the prestigious Prof. K.S. Bose Memorial Oration on ‘Thumbs up on Thumb Reconstruction’ at the West Bengal Orthopaedic Association Conference (WBOACON-2011) at Malda, Feb. 2011; Chairman, Selection Committee at NCAOR, Goa. Chairman, Technical Specification Committee, Centre for Dental Education and Research, AIIMS, New Delhi, 2010; Designated as Appellate Authority at AIIMS under Right to Information Act, 2005 for Transfusion Medicine (Blood Bank), Main Hospital, Emergency Medicine and Casualty, Transplant Immunology and Immunogenetics, Radio-Diagnosis and Centre for Community Medicine; July 2010; Designated as Central Public Information Officer at AIIMS under Right to Information Act, 2005 for Computer Facility, July 2010; Member, Project Evaluation Committee, Technology Development Board, Department of Sciences and Technology; September 2010; Education Officer, AO Trauma Asia Pacific, 2010; Attended Education Committee Meeting in Hong Kong in September 2010; External Expert, UPSC for selection of Assistant Professor in Orthopaedic Surgery in November 2010; Member, Specialty Advisory Board of National Board of Examination for the period 2010–2011; Expert Member, Jand K Public Service Commission Selection Board for the selection of Assistant Professors in Orthopaedics, January 2011; External Expert, Government of Bihar, Health Department to explore the possibilities of MOU between the AIIMS and Superspeciality Hospital in Patna on 17 February 2011; Member, Board of Speciality in Orthopaedics for M.S. and Diploma Course of Medical Council of India; Chaired a Scientific session in the 23rd Indian Foot and Ankle Society Conference held at New Delhi in August 2010; Chaired a Scientific Session in the ‘International Symposium on Haemophilia’ held at New Delhi in September 2010; Attended the AO Trauma Asia Pacific General Council Meeting, as Education Officer, held at Taipei, Taiwan, in February 2011.

Professor S. Rastogi delivered the prestigious Prof. T.P. Srivastava Oration on ‘Giant Cell Tumors of Bone’. UPORTHOCON 2009 held at Lucknow; Dr B.B. Ohri Oration, at Annual Conference of Madhya Pradesh on – ‘Radioprotection in orthopaedics – are we sitting on a volcano’ from 29–31 October 2010 at Kanha, MP; Dr.B.N.Sinha Oration (CEZCON) at Jaipur on 25 September 2010: ‘Current concepts in management of Osteosarcoma’; Dr B. Mukhopadhyay oration at Begusarai: Annual Conference of Bihar Orthopaedic Association, Bihar from 25–27 February 2011. Lecture: ‘Malignant bone tumors’; MCI inspection at Vydehi Insttt, Bangalore on 17 February 2010; Attended the DNB programme trainees selection panel as expert member for selecting candidate for Department of Orthopaedics on Friday, the 29 January at Sir Ganga Ram Hospital, Delhi; Visited Vydehi Institute of Medical Sciences and Research, Bangalore on 30 September for inspection (Medical Council of India); Vienna from 18–22 May 2009. Review and finalize training material for the draft version of the training CD on radiation protection for doctors using fluoroscopy at the IAEA headquarters in Vienna.

Professor Rajesh Malhotra was Regional Advisory Board Member– Ortho Hyperguide – A web based global Orthopedics learning portal; Adjunct Faculty CMET, AIIMS; Editor, Orthopaedics Today: An orthopaedic journal with nationwide circulation; Reviewer for Journal of Bone and Joint Surgery (British), Indian Journal of Orthopedics, Journal of Pediatric Health (U.K.), Journal of Medical Case Reports, National Medical Journal of India, Clinical Anatomy, Neurology India and International Journal of Medical Reports (IJMR); Delivered multiple talks on TV programs; Organizing Secretary, ‘AIIMS Cadaveric Hip and Knee Arthroplasty Course, Orthopedic Research Society and DePuy International, All India Institute of Medical Sciences, New Delhi, 15–16 July 2010; Organizing Secretary, Current Concepts in Arthroplasty 2010-Theme – Mastering Arthroplasty Techniques, AIIMS, New Delhi, 21–22 August 2010; Organizing Secretary, AIIMS Cadaveric Course (THA, TKA, Trauma and Spine), Orthopedic Research Society and Zimmer Bioskills, AIIMS, New Delhi, 30 September–3 October 2010; Chairman, AO Trauma Principles Course, New Delhi by AO International on 7–9 October 2010; Convenor, Symposium on Current Trends in Revision Hip Replacement, IOACON 2010, Jaipur, 9–12 December 2010; Convenor, Workshop on Revision Hip Replacement, 9 January 2011, AIIMS, New Delhi, DOACON 2011; Organizing Secretary, Signature Symposium on Advances in the Hip and Knee Arthroplasty, Orthopedic Research Society and Department of Orthopedics, AIIMS, New Delhi, 5 April 2011.

Dr Ravi Mittal was awarded the Fellowship of Royal College of Physicians and Surgeons of Glasgow; Reviewer for Indian Journal of Orthopaedics and Clinical orthopaedics and Related research; Member, Appraisal team for DNB candidates at Base Hospital, Delhi Cantt on 29 May 10; Member, Selection team for DNB orthopaedics candidates at ISIC hospital on 20 July 2010; Member, Selection team, Scientist B (surgery) at NJIL and OMD at Agra, 3 February 2011; Member, MBBS curriculum committee, AIIMS for 2011; Co Organizing chairman of AIIMS cadaver knee arthroscopy course on 12 September 2010.

Dr Chandra Shekhar Yadav was Awarded IOA – Dartmouth Hitchcock fellowship, USA.

Dr Shah Alam Khan was elected Assistant Editor of the Indian Journal of Orthopaedics; Member, Advisory and Review Board, International Journal of Academic Research and Journal of Medicine and Biomedical Sciences; Reviewer, Clinical Anatomy (Journal of the American Association of Clinical Anatomists) and International Journal of STD and AIDS (Musculoskeletal Section).

Dr Vijay Kumar received Indian Orthopaedic Association Inland Fellowship 2009–2010; Indo-British Travelling Fellowship 2010, 13–26 June 2010, UK; Fellow of International Medical Sciences Academy; Member of National Academy of Medical Sciences.

9.24 Otorhinolaryngology, Head and Neck Surgery (ENT)

Professor and Head

Suresh C Sharma

Additional Professor

Alok Thakar

Associate Professors

Rakesh Kumar

Venkatarathikeyan C.

EDUCATION

The Department has a 3-year residency training programme and takes in an average of six candidates every year. Six positions of Senior Residents are available for post-qualification (M.S.) training usually for fixed three year tenure. The department runs a schedule of academic activities directed at postgraduate students (seminars, journal clubs, case discussions and research activity reviews) every Thursday (8:00 am to 9:00 am and 3 pm to 5 pm). Department also provides short term training to visiting specialists from India and abroad. Dr Ghafur Jan from Afghanistan, Dr Ravi Jain from New Zealand and Dr Sunil Somani from MP, India, received short term training from the department.

Continuing Medical Education programs

Organized by the department

1. Monthly meet of Association of Otolaryngologists of India, Delhi Branch; July 2010.
2. CME on vertigo on 11 February 2011. Dr Michael Strupp from Germany delivered a talk on Vertigo diagnosis and management.
3. Interactive discussion on head and neck oncology was held on 26 October 2010. The session was attended by ENT surgeons, medical oncologists, radiation oncologists and by a team of head and neck oncologists from UK.
4. Organized a joint Franco Indian Congress on Otology and Cervico-Facial surgery, 3 November 2010, which was attended by a group of about 40 visiting Otolaryngologists and head-neck surgeons from France.

Lectures delivered in CME/ National and International conferences: 49

The residents and research staff presented 13 papers/posters/videos and various conferences.

RESEARCH

Funded Projects

Ongoing

1. Effects of long term macrolide with intranasal corticosteroids spray v/s monotherapy with intranasal corticosteroid spray in patients of chronic rhinosinusitis. Prof. R.C. Deka. Funded by ICMR. Total Funding 23.95 lakhs. 3 years (August 2010 to 2013).
2. Phase II/III randomized placebo controlled clinical trial of curcumin in resectable stage III and IV Oral Squamous Cell Cancer. Dr Alok Thakar. Funded by Department of Biotechnology. Total funding 43 lakhs. 2010–12.
3. Feasibility studies for developing an indigenous, low pressure, indwelling, microbial resistant tracheoesophageal prosthesis (TEP) for voice rehabilitation of laryngectomy patient. Dr Alok Thakar. Funded by Ministry of Social Justice and Welfare. Total funding Rs 1 lakh. 2009–2011)

Completed

1. Prevalence of hypothyroidism following treatment of head–neck cancer and its impact on quality of life. Dr Alok Thakar. Funded by Department of Science and Technology. Total funding : Rs. 12 lakhs. completed December 2010.

Departmental Projects

Ongoing

1. Immunohistochemical characterization of Juvenile nasopharyngeal Angiofibroma, radiological and histological evaluation of JNA in vidian canal.
2. Evaluation of NRT based mapping in post lingual deafened cochlear implantees and its correlation with conventional behavioral test based mapping in the same patient.
3. Comparative study of outcomes of Tympanoplasty using titanium and hydroxyapatite prosthesis.
4. Evaluation of injury pattern and non surgical treatment in traumatic facial palsy and surgical treatment in any etiology of facial nerve palsy.
5. Clinical, radiological profile and role of sialoendoscopy in patients with salivary gland obstructive pathology.
6. Podoplanin expression and its clinical significance in oral cancer patients
7. Study of internal dimensions of human cochlea.
8. Assessment of site directed surgical treatment by nasal, palatal, retroglossal advancement in cases with OSAS.
9. Role of r TMS therapy in chronic tinnitus.
10. Voice analysis before and after vocal cord fat injection in unilateral cord palsy
11. Clinicopathological study of antral mucosal changes in cases of b/lethmoidalpolypi.

Completed

1. Oncological adequacy and functional outcome following TLM surgical resection for early laryngeal and hypopharyngeal malignancies
2. Role of 18-FDG PET CT in detection of unknown primary tumors of head and neck with cervical lymph node metastasis.
3. Study of effect of cricoid split with or without rib grafting in cases of subglottic stenosis
4. Effect of per-cochleostomy dexamethasone steroid injection into inner ear in randomly selected patients undergoing cochlear implant surgery on intracochlear electrodes impedance and its impact on outcome results
5. Study of profile of patients with external nasal deformity requiring septorhinoplasty and its surgical outcome

Collaborative Projects

1. Congenital cytomegalovirus infection and hearing loss in rural Indian population. Indian Council of Medical Research (Microbiology).
2. Deregulated initiation of translation in oral carcinogenesis. Department of Science and Technology (Biochemistry)
3. A stereological study of age related morphological and neurochemical changes in the human cochlear nucleus. Indian Council of Medical Research. (Anatomy)
4. A randomized, double masked, active controlled phase iii study of efficacy, safety and tolerability of repeated doses of intra-vitreous vegf trap–eye in subjects with neovascular age-related macular degeneration (amd). Bayer Schering Pharma (Ophthalmology).

PUBLICATIONS

Journals: 14

PATIENT CARE

The department has developed expertise in most of the current subspecialties in the Otorhinolaryngology. It provides a Cochlear Implant service and also runs specialty clinics in head–neck cancer, otology and audiology, vertigo, rhinology, skull base surgery and voice disorders. The department also includes a special Rehabilitation Unit of Audiology and Speech Therapy, which provides comprehensive diagnostic and rehabilitative services in Paediatric hearing loss, hearing aid fitting and testing, cochlear implant programming, speech therapy and post laryngectomy rehabilitation. The department provides a state of the art ENT services and is equipped with the entire range of diagnostic and therapeutic equipments including a Cochlear Implant Lab, audiological facilities, videonystagmographic facilities, Electro diagnostic audiometry, hearing aid analyser, ear mould lab, play therapy, stroboscopy, and computer aided speech analysis and nasal and laryngeal endoscopes.

The state-of-art equipment used for all sorts of surgical procedures has enabled comprehensive ENT healthcare to all the patients. The department recently procured the equipment for sialoendoscopy for diagnosis and treatment of salivary gland disorders. The department also has procured image guided navigation system to provide state of art care to patients undergoing endoscopic nasal and skull base surgeries.

The Rehabilitation Unit of Audiology and Speech Therapy functions with the clinical department to provide supportive diagnostic and rehabilitative services for the hearing impairment, speech problems and post-laryngectomy speech disabled. The department provides a comprehensive, twice a week ENT services, at the Primary Health Centre at Ballabgarh, Haryana, and once a week services at Centre for Speech and Hearing Disabled at Gurgaon, Haryana.

Census

OPD:	New: 37198	Old: 38356
Speech therapy	667	
Minor OT	28256	
RUAS	6645	

Speciality clinics

Vertigo	New: 101	Old: 64
Audiology and Skull Base	New: 130	Old: 60
Rhinology	New: 79	Old: 52
H & N B clinic	New: 1023	Old 3772

The department performed a total of 2337 major and 1973 minor operations during the year. The department admitted 1304 patients for in hospital care during the year.

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Professor S.C. Sharma was Honorary Member, Otolaryngological Association of France, November 2010; Chief instructor and guest faculty, International Head and Neck Surgery Workshop and cadaver dissection in Tribhuvan University hospital, Kathmandu, Nepal, 26–28 December 2010. The participants included specialists from Cambodia, Bangladesh, Pakistan, India and Nepal; Guest faculty at 3rd annual CME-cum-workshop, Gangtok, Sikkim, 25–28 April 2010; Delivered Guest Oration “Management of tumors of Parotid Gland”, 29th AOI Conference, Delhi state branch, March 2011; Invited faculty at annual conference of Cochlear Implant Group of India, PGIMER Chandigarh, 18–20 November 2010.

Dr Alok Thakar delivered Prof. Surya Narayan Guest Oration (2010), South Zone Branch of Asson of Otolaryngologists of India; Included by “ENT NEWS” in selection of prominent International Head–Neck Surgeons; President elect, The Neuro-Otological and Equilibriometric Society of India; Governing Body member, The Skull Base Society of India and Association of Phono-surgeons of India; Executive member, AIIMSONIANS, 2010; Section Editor, Image of the week, International Journal of Head & Neck Surgery; Editorial Board Member, Journal of ENT Masterclass, UK, 2010–2013; The Otorhinolaryngologist, UK; International Online Journal of Otorhinolaryngology; Otology India (Journal of the Indian Society of Otology) and Indian Journal of Otology; Member, Educational Committee – Foundation for Head and Neck Oncology; Member participant, Technical Advisory Group Committee for Neuro-developmental Disabilities, INCLLEN (India Clinical Epidemiology Network), August 2010; Invited faculty at AOI Coimbatore academic meeting, Coimbatore, 7 August 2010; Invited faculty at Clinical Meeting, Coimbatore Medical College, Coimbatore, 7 August 2010; Invited faculty at “A 2 Z in thyroid disorders”, Thiruvanthapuram, 8 August 2010; Invited faculty at Teaching Workshop (CME) – Head & Neck Oncology, Dr BL Kapur Memorial Hospital, Sept 4-5, 2010; Invited faculty at ENT CME Programme, Sitaram Bhartia Hospital, New Delhi, 26 September 2010; Member, Expert Committee for the framing of Guidelines for the screening, testing, and isolation for H1N1, Ministry of Health and Family Welfare; International Federation of Head–Neck Oncology World tour. Bangalore, 13–15 October 2010; 2nd International Course on Sialendoscopy, (in collaboration with the European Sialendoscopy Training Centre) GTB Hospital, 11–12 November 2010; Invited faculty at PG Teaching and Cadaveric Dissection Workshop in Head–Neck Surgery 2011, Base Hospital, Delhi Cant. January 2011; Invited faculty at 7th Annual Conference of Association of the Phonosurgeons of India (Phonocon 2011), February 2011, Delhi; Distance Learning Educational Programme; Diplomat National Board and Indira Gandhi National Open University, February 2011; Chief organizer and faculty at the pre-conference CME on “Conservation Surgical Options for Cancer Larynx” at the 63rd Annual Conference of the Association of Otolaryngologists of India, January 2011, Chennai; Chief organizer and faculty at pre-conference CME on “Lasers in ENT” at the Annual Conference of the Association of Otolaryngologists of India, Delhi State Branch, March 2011.

Dr Rakesh Kumar was Co–member of Sectional committee of ENT surgical instruments (MHR04) of Bureau of Indian Standards; Member, Undergraduate Curriculum Committee, 2010–11; Member, Staff Council, AIIMS, 2011–12; Deputy Hostel Superintendent, AIIMS, 2011–12; Reviewer of Journal of Cutaneous and aesthetic surgery; Chief organizer and faculty at the pre-conference CME on “Lasers in ENT” at the Annual Conference of the Association of Otolaryngologists of India, Delhi State Branch, March 2011.

Dr C. Venkatakarthikeyan was Member, ethics committee, AIIMS, 2010; Assistant Editor for Indian Journal of Otology; Reviewer of Indian Journal of Paediatrics; Member, Core committee of Tuberculosis – DOTS programme; Nodal officer for the National Programme of prevention of deafness for AIIMS; Member, editorial board committee for Annual report 2010; delivered a public awareness talk for Gyanvani on “Allergic rhinosinusitis” via teleconferencing in IGNOU on 22 July 2010, New Delhi.

Dr Shuchita Singh won the first prize for the paper “Effects of percochleostomy steroid instillation in cochlear implant patients on Neural response telemetry and impedance and its impact on outcome results” 34th AOI annual conference, Delhi state branch, 27–29 March, RML Hospital, New Delhi.

Dr Prem Sagar won the first prize for the poster titled “Telescopy to the Past: metastatic papillary carcinoma of thyroid in the parapharyngeal space” at 34th AOI annual conference, Delhi state branch, 27–29 March, RML Hospital, New Delhi.

9.25 Pediatrics

Professor and Head

Vinod K. Paul

Professors

Maharaj K. Bhan

(On deputation)

Ashok K. Deorari

Sushil K. Kabra

Arvind Bagga

Madhulika Kabra

Additional Professors

Pankaj Hari

Sheffali Gulati

Associate Professors

Rakesh Lodha

Ramesh Agarwal

Rachna Seth

Vandana Jain

Scientists

Shinjini Bhatnagar (on deputation)

Madhumita Roy Choudhary

Pratima Ray

Manju Saxena

EDUCATION

The Department runs a multifaceted education programme encompassing undergraduate, postgraduate (MD), PhD, and DM programmes in Neonatology and Pediatric Neurology.

UG programme

The UG students brought the department and the Institute laurels by winning the national title in the Pediatrics Quiz of the Indian Academy of Pediatrics.

MD Pediatrics Programme

The Department introduced (i) additional weekly session on clinical case discussions, attended by all faculty, (ii) assessment of competence in clinical methods with a high 70% benchmark, (iii) new log book for postgraduates in the department, (iv) Essential postings in the Department of Hematology and Casualty (two weeks each) have been initiated for the postgraduates, (v) guidelines for thesis protocol.

The following special workshops were organized for the PGs in addition to the regular programme

- ‘Advances in Management Type 1 Diabetes’ for postgraduate students’, organized by Dr Vandana Jain.
- ‘Laboratory Techniques for Postgraduates’, organised by Dr SK Kabra and Dr Madhulika

Senior Residency Programme

- The department initiated an award for the best Senior Resident in teaching the junior residents. This is a certificate of merit and is given every 6 months.

PhD Programme

There were at a total of 10 PhD students in the department in different divisions— Pediatric Gastroenterology (4), Genetics (5), and Pediatric Pulmonology (1)

In-service training workshops were conducted for the nursing staff of the Pediatric Intensive Care Unit by Dr Rakesh Lodha and for nurses of different wards on breastfeeding by the Neonatology Division.

The Department conducted national Postgraduate Quiz in Pediatrics, Neonatology Quiz for Physicians and Nurses (zonal round) under the aegis of Indian Academy of Pediatrics and National Neonatology Forum, respectively.

Short and long term training

A total of 77 short term trainees from India and other countries were trained in different super specialties in the department.

Genetics	44	Neonatology	14
Nephrology	06	Pulmonology and Intensive care	03
Medical Social Services	10		

In addition, 2 trainees sponsored by state governments received long term training.

Continuing medical education

The department organized following workshops or training courses:

1. DBT Workshop – Clinical Genetics for Pediatricians
2. DBT Workshop – Genetics for Obstetricians
3. DBT workshop on Advanced Molecular Cytogenetics
4. Symposium on The current practice of Genetic and Genomic Medicine
5. 4th Pediatric Nephrology Training Course in collaboration with International Society of Nephrology.
6. Workshop on Evidence based medicine faculty members from other medical colleges. Organized by Dr Rakesh Lodha and Dr Ramesh Agarwal

International meetings

1. **An International Consultation on Biology of Fetal Growth Restriction and its Consequences** was organized by Dr Vandana Jain sponsored by Department of Biotechnology, Department of Health Research and Indian Council of Medical Research, Indo-US Science and Technology Forum (IUSTF) and MCH STAR / USAID. It was attended by world's top scientists in the field. The Consultation recommended cardinal research priorities in fetal growth restriction and postnatal growth and body composition.
2. Division of Neonatology, WHO CC convened **South East Asia Regional Network Meeting** on Capacity-building, Networking and Developing Standard Practice Guidelines for Newborn Care in Small Hospitals.

Lectures delivered in CME/ National and International conferences: 128

RESEARCH

Funded projects

Ongoing

1. Glue Grant on developing a long-term partnership for translational health research in child health: linking basic and clinical science departments in inter-institutional linkages. Dr Vinod K Paul. DBT, 2010–2015, Rs 7 crores.
2. Adiponectin, CRP and IL-6 in overweight children and adolescents and their relationship with insulin resistance. Dr Vandana Jain, AIIMS, 2010–2011, Rs 2 lakhs.
3. KIGS multinational growth survey. Dr Vandana Jain. Pfizer Research Division, 2010–2011, Rs 70,000.

4. 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. Dr Shinjini Bhatnagar and Prof. H K Prasad. DBT, 2007-2011, Rs 89 lakhs. .
5. Efficacy of stem cell in improvement of left ventricular function in patients with acute myocardial infarction. Dr Shinjini Bhatnagar, DBT, 2006–2011, Rs 16 lakhs.
6. Data management for intravenous autologous bone marrow-derived stem cell therapy of patients with acute ischaemic stroke: a multi-institutional project. Dr Shinjini Bhatnagar, DBT, 2008–2011, Rs 20 lakhs.
7. Hib Meningitis Sentinel Surveillance in North India. Dr Shinjini Bhatnagar. John Hopkins Bloomberg School of Public Health, USA; and INCLIN. 2008–2011, Rs. 1 crore.
8. Development of a rapid diagnostic test for diagnosis of celiac. Dr Shinjini Bhatnagar and Dr Arvind Bagga, DBT, 2010–2011, Total funding Rs. 0.54 lakhs.
9. Evaluation of Chikungunya infection in children and adults. Dr Pratima Ray, DBT, 2008–2011, Rs. 1.23 crore.
10. Molecular characterization of Rotavirus strains infecting neonates born in the hospital and diarrheal children admitted at AIIMS, Delhi, during 2007–09. Dr Pratima Ray. ICMR, 2009–2012, Rs. 34 lakhs.
11. 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. Dr Shinjini Bhatnagar, DBT, 2007–2009, Rs. 42 lakhs.
12. National Alliance Programme for Biodesign and in-vitro diagnostics between Translational Health Science and Technology Institute and AIIMS, Dr Pratima Ray, DBT, 2010–2015, Rs. 11 lakhs.
13. Center of Excellence (COE) Programme Support Projects. Dr Madhulika Kabra, Dr Madhumita Roychowdhury, DBT, 2007–2012, Rs. 3.53 crores.
14. Evaluation of MLPA and Array CGH for the detection of cryptic subtelomeric rearrangements in Idiopathic mental retardation. Madhulika Kabra, DBT, 2007–2010, Rs. 30 lakhs.
15. Molecular genetic studies in steroid resistant nephrotic syndrome. Arvind Bagga and Dr Madhulika Kabra. Funded by DBT, 2007–2010. Rs. 4.7 lakhs.
16. Validation of strategies for rapid prenatal detection of aneuploidies. Dr Madhulika Kabra. DBT, 2007–2010, Rs. 18 lakhs.
17. 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. Dr Madhulika Kabra, DBT, 2007–2010, Rs. 15 lakhs.
18. Identification of novel genes for non-syndromic hearing loss in the Indian population, Dr Madhulika Kabra, Manju Ghosh. DBT. 2007–2012, Rs. 54.3 lakhs.
19. Newborn screening for congenital hypothyroidism and congenital adrenal hyperplasia – A multicentric study. Dr Madhulika Kabra,. ICMR, 2007–2012, Rs. 15 lakhs.
20. A multicenter, randomized, double-blind, parallel-group study of Gene-Activated® Human Glucocerebrosidase (GA-GCB) Enzyme Replacement Therapy Compared with Imiglucerase in Patients with Type I Gaucher Disease. Dr Madhulika Kabra, Shire Human Genetic Therapies, USA, 2007–2010, Rs. 12 lakhs.
21. Centre for Advanced Research in Newborn Health. Dr Vinod K Paul and Dr A. K Deorari. Funded by ICMR, 2010-2015, Rs. 9.5 crores.
22. Functional characterization and genetic basis of anticomplement factor H antibodies in hemolytic uremic syndrome. Dr Arvind Bagga, DBT, 2010-11, Rs. 76,000.

23. Effects of rituximab on lymphocyte subsets in children with difficult nephrotic syndrome. Dr Arvind Bagga, ICMR, 2010-11, Rs. 17 lakhs.
24. Pathogenesis of idiopathic nephrotic syndrome of childhood: Th1 and Th2 polarization of naïve T cells and its relation to disease course, Dr Arvind Bagga, DBT, 2010-12, Rs. 52 lakhs.
25. Levamisole treatment for children with steroid sensitive nephrotic syndrome: multicentric double blind placebo controlled randomized trial. Dr Arvind Bagga, ACE Pharmaceuticals, Netherlands, 2010-12, Rs. 21 lakhs.
26. 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. Dr Arvind Bagga, ICMR, 2010-12, Rs. 15 lakhs.
27. Randomized double blind placebo controlled trial to compare the efficacy of three months versus six months therapy with prednisolone for the first episode of idiopathic nephrotic syndrome in children. Dr Arvind Bagga, ICMR, 2010-12, Rs. 29 lakhs.
28. Efficacy of oral calcitriol and enalapril versus enalapril alone in reducing proteinuria in children with chronic kidney disease. Dr Pankaj Hari, ICMR, 2010–2013, Rs. 14 lakhs.
29. Effects of atorvastatin on hyperlipidemia and progression of carotid intima media thickness in steroid resistant nephrotic syndrome: a randomized controlled trial. Dr Pankaj Hari, ICMR, 2011–2014, Rs. 14 lakhs.
30. Randomized placebo controlled trial of valproate in children with spinal muscular atrophy. Dr Sheffali Gulati, AIIMS, 2008–2010, Rs. 2 lakhs.
31. Detection of minimal residual disease (MRD) in B cell lineage acute lymphoblastic leukemia (ALL) at the end of induction by flowcytometry. Dr Rachna Seth, ICMR, 2009–2012, Rs. 35 lakhs.
32. Understanding the biology of childhood cancer survivorship in India. Dr Rachna Seth, AIIMS, 2010–2011, Rs. 1 lakh.
33. Immunologic effect of zinc supplementation in HIV infected children receiving highly active antiretroviral therapy: a randomized, double blind placebo controlled trial. Dr Rakesh Lodha, ICMR, 2008–2010, Rs. 31 lakhs.
34. Nevirapine levels in HIV-infected children receiving antiretroviral therapy with fixed dose combinations. Dr Rakesh Lodha, ICMR, 2008–2010, Rs. 18 lakhs.
35. Biomarker discovery in asthma using an integrated-omics approach. Dr Rakesh Lodha, IGIB, 2008–2010, Rs. 48 lakhs.
36. Zinc supplementation in childhood tuberculosis patients in Delhi, India. Dr S K Kabra, Norwegian Programme for Development, Research and Education (NUFU), 2007–2012, Rs. 1.74 crore.

Completed

1. Vitamin D status of summer-born exclusively breastfed babies at 3 months of age. Dr Vandana Jain. AIIMS, 2007–2008. Rs. 1 lakh.
2. Growth, puberty and carbohydrate metabolism in children and adolescents with cystic fibrosis. Dr Vandana Jain. AIIMS, 2008–2009. Rs. 1 lakh.
3. Cloning and Expression of NSP4 Enterotoxin of Rotavirus in *E. coli* and evaluation of NSP4 specific immune responses during natural rotavirus infection in children. Dr Pratima Ray, DST. 2004-2007, Rs. 20 lakhs.
4. The Indo-US collaboration to develop rotavirus vaccine. Prof. M.K. Bhan/Dr Pratima Ray. NIH, 2003–2008, Rs. 2.1 crore.
5. Safety and Immunogenicity of 116E rotavirus vaccine candidate. Prof. M.K. Bhan/Dr Pratima Ray. DBT, 2000-2008, Rs. 28 lakhs.

6. Characterization of rotavirus strains from a multicentric Rotavirus study at AIIMS, Dr Pratima Ray, DBT, 2005-2008, Rs. 32 lakhs.
7. Molecular characterization of VP3 gene of Rotavirus. Dr Pratima Ray. ICMR, 2009-2010, Rs. 13 lakhs.
8. A Multicenter, Randomized, Double-Blind, Parallel-Group Study of Gene-Activated® Human Glucocerebrosidase (GA-GCB) Enzyme Replacement. Dr Madhulika Kabra. Shire Human Genetic Therapies, USA, 18 months 2009–2010: Rs. 10 lakhs.
9. Systematic review Vitamin K1 therapy in neonates. Dr Vinod K Paul. WHO. 2009 –10, Rs. 2.4 lakhs.
10. Systematic review on when to perform phototherapy or exchange transfusion in neonates with jaundice. Dr Ashok Deorari. Funded by WHO. Total funding Rs. 4.8 lakhs. Duration 2009-10.
11. Development low cost diapers for LBW infants. PI Dr Vinod K Paul. Funded by DBT. Total funding Rs. 25 lakhs (with SIIR). Duration 2006-8.
12. Micronutrient status of LBW infants at birth and 3 months of age. PI Dr Ramesh Agarwal. Funded by ICMR. Total funding Rs. 13 lakhs. Duration 2009-10.
13. Antibiotic prophylaxis in the management of vesicoureteric reflux: a randomized double blind placebo controlled trial. Dr Pankaj Hari. ICMR, 2006–2009, Rs. 11 lakhs.
14. To understand the deviation in cell signaling pathway of autism through neurotrophic factors (insulin like growth factor-1) and undertake a randomized blinded trial with olanzapine to evaluate its effect on insulin like growth factor-1 (IGF-1), clinical symptoms of autism and autism rating scales. Dr Rachna Seth. DST, 2006–2009. Rs. 4 lakhs.
15. Assessment of psychosocial and neurocognitive outcomes in childhood leukemia . Dr Rachna Seth, AIIMS, 2006–2009, Rs. 67,000.
16. Evaluation of anthracycline induced myocardial cardiotoxicity in children with cancer: a comparative study with echocardiography and MUGA. Dr Rachna Seth, AIIMS. 2006–2009, Rs 40,000.
17. A study of infections in febrile neutropenic pediatric oncology patients at a tertiary care hospital. Dr Rachna Seth, AIIMS, 2009, Rs. 1 lakh.
18. Strengthening of CF services at AIIMS. Dr S K Kabra. Cystic Fibrosis Worldwide (CFW). 2006–2010, Rs. 4 lakhs.

Departmental Projects

Ongoing

1. Catch-up growth in term low birth weight infants
2. Sensitivity and specificity of the Biocard Celiac Disease kit in identifying celiac disease.
3. A study of chronic pancreatitis and other risk factors for the development of cancer of the pancreas.
4. Molecular genetic studies in Rett Syndrome.
5. A study of subtelomeric imbalances in children with idiopathic mental retardation using real time PCR.
6. Molecular Genetic studies in Indian patients with organic aciduria.
7. Randomized double blind placebo controlled trial to examine the effectiveness of zinc supplementation in reducing relapse rates in patients with frequently relapsing nephrotic syndrome.
8. Assessment of dry weight by monitoring changes in blood volume and inferior vena cava diameter during hemodialysis.

9. The effect of strict blood pressure control by ambulatory blood pressure monitoring (ABPM) on carotid intima media thickness, flow mediated dilatation, left ventricular mass index and left ventricular hypertrophy in renal transplant children.
10. To study HR variability in children between 2 to 15 years of age with GBS.
11. Role of skin biopsy in the diagnosis of childhood muscular dystrophy.
12. Blood heavy metal levels in children with autism and ADHD. A cross sectional study.
13. Telephonic follow up of children with mild neurocysticercosis with seizures: how accurate it is to identify to management related events.
14. Study of the prevalence of genetic polymorphisms of UGT1A6 and their association with serum valproate levels in children on valproate monotherapy.
15. Efficacy of low glycemic index diet therapy in children with refractory epilepsy – A randomized controlled trial.
16. Prevalence of electro-physiologically defined peripheral neuropathy in children with cystic fibrosis aged one to eighteen years, on vitamin E (twice the RDA) supplementation for at least six months.
17. Neurodevelopmental and epilepsy outcome in children aged one to five years with infantile spasms, one or more years after onset- a cross sectional study.
18. Study of Neurocognitive deficits and cognitive status in acute lymphoblastic leukemia survivors.
19. Evaluation of role of Arsenic as first line therapy in acute promyelocytic leukemia.
20. The role of FDG-PET in resolving therapeutic dilemmas in Pediatric Hodgkin lymphoma.
21. Pharmacokinetics of antitubercular medications in children.
22. Prevalence of *Pneumocystis jirovecii* on Induced Sputum of <15 Yr Immunocompromised Children with Pneumonia by Gomori Methenamine silver stain and Polymerase Chain Reaction.
23. Cloning and expression of Chickungunya Virus genes and evaluation of their role in chickengunya pathogenesis in children and adults.
24. Role of FeNO in identification of uncontrolled asthma in children between age group 5-15 years.
25. Tuberculosis: Evaluation of the Diagnostic value of Quantiferon Gold in Tube test in Indian Children. M Phil in International Health, University of Bergen, Norway Thesis

Completed

1. Bone mineral density in extremely preterm toddlers.
2. Comparison of serum and intraerythrocyte magnesium level in obese and non-obese children and its relationship with insulin resistance.
3. Impaired glucose tolerance in children with cystic fibrosis.
4. A study of chronic pancreatitis and other risk factors for the development of cancer of the pancreas,
5. Molecular genetics studies in Indian patients with ectodermal dysplasia and ichthyosis.
6. Natural history of and role of BNP in the diagnosis of symptomatic PDA in preterm neonates
7. Delivered oxygen concentration at different flow rates in resuscitation bags in neonates.
8. Costing of neonatal care in tertiary care setting.
9. Role of phenobarbitone in prevention of jaundice in Rh isoimmunization.
10. Diagnostic ability of BERA phone for screening of hearing deficit in neonates.

11. Iron status of AGA and SGA preterm neonates.
12. Maturation of aEEG in preterm SGA and AGA infants.
13. Breastfeeding problems in mothers of term and late preterm neonates.
14. Comparison of daily versus intermittent (10 days a month) prednisolone therapy in ambulatory children with Duchhene Muscular dystrophy- an open label randomized controlled trial.
15. Comparison of the Full Outline of Unresponsiveness (FOUR) Score Coma Scale and the Glasgow Coma Scale (GCS) in children aged 5–18 years with non traumatic coma in predicting outcome (in-hospital mortality and functional outcome at discharge).
16. Molecular genetic studies in Indian children with Rett syndrome.
17. Validation of new diagnostic instrument for epilepsy and neuromotor impairment including cerebral palsy among children aged 2–9 years.
18. Evaluation of the efficacy of the modified Atkins diet in children with refractory epilepsy: a randomized controlled trial.
19. Clinical and electrophysiological characteristics of neuropathy in HIV infected children over five years of age receiving anti-retroviral therapy.
20. Evaluation of modified Atkins diet in patients with infantile spasms: a pilot study.
21. Clinical and electrophysiological characteristics of childhood Guillain Barre syndrome: a cross sectional study.
22. EEG maturation in preterm AGA and preterm SGA infants.
23. Costing of neonatal intensive care at AIIMS.
24. Efficacy of phenobarbitone in infants with Rh isoimmunization for prevention of hyperbilirubinemia.
25. Comparison of serum iron status in preterm AGA and preterm SGA infants.
26. Breastfeeding problems in mothers and infants: a cohort study (MSc. thesis, College of Nursing).
27. Evaluation of pediatric cancer survivors for long/late effects of cancer therapy.
28. To study the profile of infections in Febrile neutropenic pediatric oncology patients and determine the antimicrobial sensitivity profile.
29. Predictors of adverse outcomes in episodes of Febrile neutropenia in children with cancer.
30. Comparison of rapid bronchodilatory effect of formoterol and salbutamol in children between 5–15 years with mild acute exacerbation of asthma: a double blind, randomized, controlled trial 2008–2011.
31. Hyperglycemia in critically ill children.

Collaborative Projects

Ongoing

1. Efficacy and safety of single dose 6 lakh IU arachitol in treatment of rickets in children (Department of Endocrinology and Metabolism).
2. ICMR Young Diabetics registry (Department of Endocrinology and Metabolism).
3. ICMR Childhood Obesity Task Force (Department of Endocrinology and Metabolism).
4. Genotype-phenotype correlation in Asian Indian subjects with childhood onset GHD (Department of Anatomy).
5. To compare integrated screening with contingent sequential screening for prenatal detection of Down's syndrome in the Indian context. In collaboration with Prof. Seema Kapoor, Genetics Division, Department of Pediatrics, MAMC, New Delhi.

6. Neonatology Newborn care services in Faridabad district (CRHSP, Ballabhgrah) Role of in-utero injection of steroids in pregnancies undergoing fetal intervention (ObGyn)
7. Centre for Research in difficult to treat epilepsy (Departments of Neuro Surgery and Neurology).
8. Comprehensive proteomics profiling of CSF proteins from patients of different meningitis infections for biomarker discovery (Department of Biotechnology).
9. Randomized controlled trial of early vs late surgery in childhood intractable epilepsy patients in India (Department of Neurology).
10. Evaluation of reflexology as an adjunctive therapy in children with spastic cerebral palsy (Department of Biophysics).
11. Evaluation of reflexology as an adjunctive therapy in children with West syndrome (Department of Biophysics).
12. To develop and characterize Duchenne Muscular Dystrophy disease specific induced pluripotent stem cells from adult cells (ORBO).
13. Evaluation of predictors of adverse outcome in febrile neutropenic episodes in pediatric oncology patients (Department of Microbiology).
14. Evaluation of myocardial function in pediatric cancers and pediatric cancer survivors: an ongoing evaluation for evaluation of long/late effects of cancer therapy (Department of Cardiology).
15. Evaluation of focal consolidation and systemic chemo reduction in management of intraocular retinoblastoma (Department of Ophthalmology).
16. A prospective study on nosocomial infections in a Pediatric high risk unit with special reference to device associated infections (Department of Microbiology).
17. Development of taqman based real timer quantitative polymerase chain reaction assay for detection of pneumocystis carinii/ jervacci pneumonia (Department of Microbiology).
18. Detection of mycobacterimea in patients with extra pulmonary tuberculosis (Department of Laboratory Medicine).
19. Immunological characterization of HIV 1 infection in children in India (Department of Biochemistry).

Completed

1. Efficacy of flutamide in reducing tumor size and vascularity in nasopharyngeal carcinoma (Department of ENT).
2. Body fat and its relationship with metabolic syndrome indicators in overweight pre-adolescents and adolescents. (Clinical Pharmacology Division, Department of Medicine).
3. Feasibility of involving ASHA worker in newborn care in rural settings (CRHSP, Ballabhgarh).
4. Uterine/umbilical artery flow pattern in growth restricted pregnancies (ObGyn).
5. Fundal changes in children receiving vigabatrin (Dr R P Centre).
6. Screening for cardiomyopathy in muscular dystrophy with tissue doppler imaging, (Department of Cardiology).
7. Evaluation of anthracycline toxicity in childhood cancers; A comparative study with echocardiography and MUGA (Cardiology and Nuclear Medicine).
8. Evaluation of expression of P-glycoprotein (P-gp) in Rretinoblastoma (Department of Ophthalmology).
9. Enhanced Surveillance for Pandemic H1N1 (PH1N1) of swine origin lineage: A multicentre study, INDIA supplemental project for developing sustainable Influenza surveillance network in India (Department of Microbiology).
10. Antigenic and molecular characterization of Influenza Virus strains from acute respiratory infection (Department of Microbiology).
11. Oral voriconazole versus intravenous low dose amphotericin B for primary antifungal prophylaxis in pediatric acute leukemia induction: a proaspective randomized clinical study (Department of Medical Oncology).

PUBLICATIONS

Journals: 107

Chapters in Books: 64

Books: 11

PATIENT CARE

Outpatient Services

Department of Pediatrics provides general OPD services daily in Pediatrics OPD. There are 15 superspeciality services provided by the department, which are as follows.

Name of service	New cases	Old cases	Total Attendance
General OPD	30930	42034	72973
Pediatric Neurology Clinic	754	2112	2866
Myopathy Clinic	294	602	896
Pediatric Gastroenterology Hepatology and Nutrition	1122	3164	4286
Well Baby Clinic	248	492	740
High Risk Neonatology Clinic	416	2164	2580
Pediatric Nephrology Clinic	522	3854	4376
Pediatric Chest Clinic	577	4650	5227
Pediatric Tuberculosis Clinic	346	1605	2001
Pediatric Rheumatology Clinic	132	1469	1601
Genetics and Birth Defects Clinic	2572	1180	3752
Pediatric Oncology Clinic	301	1802	2103
Pediatric Cancer Survivor Clinic	430	148	578
Pediatric Endocrine & Metabolism Clinic	1097	1500	2597
Development Clinic	207	312	519
Grand Total	39948	65284	1052732

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.

Medical Social services were provided to all the patients admitted in pediatric wards and patients attending clinics and general OPD.

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.
- Newborn care services are provided through two neonatal intensive care units (NICUs A and B) of 10 beds each and a 10-bedded Kangaroo Mother Care Unit.

Long admissions in pediatric wards	377 + 818	1195
Admissions in day care facility (short admission)	2360+1896	4256
Patients admitted in PICU		200
Mechanical ventilation		182
NICU admissions (NICU A & B)		311
Neonatal Ventilation		77

Special Investigations/Procedures

Endocrinology

Water deprivation test	10	Vasopressin challenge test	10
ACTH stimulation test	26	HCG stimulation test	40
GnRH stimulation test	30	Dexamethasone suppression test	10
GH stimulation test	30	Modified oral glucose tolerance test	40
Continuous blood glucose monitoring	10	Ambulatory BP recording	05
HbA1c (point of care testing)	200		

We introduced point of care HbA1c testing (by finger-prick) for our diabetic patients in 2010.

Gastroenterology, Hepatology and Nutrition

Upper Gastrointestinal Endoscopy and Colonoscopy	1017
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Laboratory facilities

Celiac serology	461	C-Reactive Protein	410
Fecal fat	26	D-xylose	09
Stool-pH & reducing substance	400		

CD Serology

IFA (AEA) for diagnosis of Celiac disease and tTgELISA	600 each
<i>Faecal Fat</i> (Sudan III stain quantitative)	28
<i>D-xylose quantitative</i> (NBT for chronic granulomatous disease)	60

Diagnostics for Sepsis

CRP: Latex agglutination (semi quantitative) 1200

PCT: Chemiluminescence assay 250

Micronutrient Assays

Serum Zinc Research 4500 Patient care 25

Serum Copper Research 4500 Patient care 25

Assay for Endocrinology

HbA_{1c} 103 17-OHP 28

Assay for Nephrology

Complement factor 'H' Assessment by Elisa 101

Anti-CFH-Antibody Assessment by Elisa 101

Genetics

Developmental / Behavioural evaluation and intervention 1092

Cytogenetics laboratory

Peripheral blood cultures 629 Cord Cultures for Karyotyping 57

Amniotic fluid cultures 236 CVS cultures 23

QFPCR for Prenatal test 173

Biochemical laboratory

Prenatal screening for pregnancies 1808 each
by triple test (MSAFP, hCG, free Estriol)

TLC for disorders of amino acid metabolism

a) Urine 185

b) Plasma NA

Disorder of Mucopolysaccharidosis (Urine Spot test) 80

Homocysteinuria test 46 Reducing substances in urine 203

DNPH 205 FeCl₃ 191

Urine porphyria 29 Oligosaccharides 16

Enzyme assays for inborn errors of metabolism

Total no. patients for enzyme assays 370

Single enzyme assays 106 Multiple enzyme assays 264

Enzyme assay disorder *n*

Arylsulfate A metachromatic-leukodystrophy 77

β-Glucosidase Gaucher Disease 46

α-Iduronidase Hurler Syndrome (MPSI) 19

Iduronate Sulfate Hunter Syndrome (MPSII)	24		
Galactose-6- Morquio A Sulphate Sulphatase (MPS IVA)	1		
β -Galactosidase GM1 Gangliosidosis And Morquio B (MPSIV B)	55		
Arylsulfatase B Maroteaux- Lamy Syndrome (MPS VI)	6		
β -Glucuronidase MPS VII	25		
Hexosaminidase A Tay-Sachs (GM 2)	54		
Galactose-1-phosphate Galactosaemia Uridyl Transferase	21		
Biotinidase assay	19		
Plasma - Hexosaminidase A	01		
Plasma – ASA	05		
Chitotriosidase (Plasma)	27		
Molecular laboratory			
Thalassemia mutation studies (Sequencing & ARMS)	345	Thalassemia prenatal diagnosis	106
Duchenne muscular dystrophy (DMD) family studies	263	DMD prenatal diagnosis	18
Cystic fibrosis family studies	60	Cystic fibrosis prenatal diagnosis	1
Spinal muscular atrophy family studies	78	Spinal muscular atrophy prenatal diagnosis	8
Hemophilia A family studies	9	Hemophilia A prenatal diagnosis	1
Hemophilia B family studies	1	Hemophilia B prenatal diagnosis	1
Fragile X screening	135	Fragile X Prenatal diagnosis	1
Intersex cases for genotyping	48	Skeletal dysplasia mutations	18
Connexin 26 mutations (sequencing)	48		
MLC Mutation testing	10	MLC prenatal diagnosis	2
Rett Syndrome Mutation testing	54	Rett syndrome prenatal diagnosis (sequencing)	2
MLPA for MR	100	MLPA for DMD	4
Prader Willi syndrome (MLPA/Methylation PCR)	24	Angelman syndrome	2
CAH Mutation studies	57	CAH prenatal diagnosis	4
Nephrology			
Hemodialysis	1037		
Acute peritoneal dialysis (including automated peritoneal dialysis)	151		
Continuous ambulatory peritoneal dialysis	17	Plasmapheresis sessions	114
Temporary hemodialysis catheter placement (internal jugular, subclavian, femoral)	60		
Renal biopsy	120	Renal transplantation	08

Neurology

EPS Laboratory

EEG

(Routine 1974 + Ambulatory 74 + Video 25) Total = 2073

NCV	313	EMG	108
RNST	15	Muscle biopsies	139
Skin biopsies	15	Nerve biopsies	07
Arterial lactate	310	CSF lactate	157

Oncology

Bone marrow examination	480	CSF examination	360
Lymphnode aspiration	25	Flowcytometry	60
Clinics: 2 per week			

Pulmonology and Intensive Care

Sweat test	450	Bronchoscopies	150
Sputum induction:	570	Ambulatory gastric aspirates	570
Quantiferon assay	340	Spirometry	450
Infenat PFTs	98	Impulse oscillometry	167
FeNo estimation	450	Nasal scrapings	154
Exhaled breath condensate (EBS)	154		

Pediatric Intensive Care

Admissions	200	Mechanical Ventilation	182
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Community Service

The Department organized the following meetings with the community stakeholders:

- Parent interaction meeting on Rett Syndrome .
- Parents Meeting On Down syndrome.
- Parents meeting for Autism.
- Parent Interactive meet on childhood cancer, November 2010
- Parent Education Meet on supportive care and financial assistance in childhood cancer, March 2011

Medical Social Services

Function:	No. of patients
Counseling	3500
• Individual Counseling	Especially in chronically ill
• Group Counseling	patients (NS, CRF, ARF,
• Family counseling	CKD, HIV + CLD and
• Relationship Counseling	other diseases).

Issuing of Railway Concession to Patients	1250
Exemptions of charges	1600
Recommendation & arrangement of medical/surgical/items from hospital medical store/surgical store to patients	450
Recommendation for Dharmashalas	150
Mobilizations of financial assistance for poor patients from Government & NGOs PM Relief Fund, National Illness Assistance Fund, State Illness Assistance Fund, Chief Minister Relief Fund, Hospital Poor Fund, AIIMSONIANS Fund, Women & Child Aid, CANKIDS, HCRA, Cotton Concept, Amul Sahara, Indo-German Social Service Trust, Red Cross Society : More than Rs. 55 Lakhs medical help mobilized for poor patients	

Rehabilitation of 9 unknown babies through Child Welfare Committee.

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Departmental

- We developed statements on **Vision, Mission and Core Values** of the Department through consultations and consensus:
 - **VISION:** Our vision is to be one of the ten best academic centres of pediatrics in the world before 2020
 - **MISSION:** Our mission is to improve the health of children through world-class excellence in
 - **Education:** Imparting knowledge, skills and competencies in child health to diverse providers
 - **Patient care:** Ensuring specialty-based, evidence-based, equity-driven and state-of-the-art pediatric care
 - **Research:** Creating and translating knowledge to improve child health at individual and population level
 - **Innovation:** Innovating solutions and harnessing novel technologies to preserve, protect and restore child health
 - **Policy assistance:** Extending technical assistance for child health policy and programme to government and other stakeholders
 - **CORE VALUES:** We are committed to:
 - **Accountability:** Being accountable to the society and loyal to the Act, mission and brand of Institute
 - **Enabling mentorship:** Ensuring caring mentorship to students to enable them to learn, explore, innovate and excel
 - **Child friendliness:** Delivering humane, family-centred and child-friendly services to children
 - **Partnering:** Nurturing partnerships within and outside the country to transform child health on scale
 - **Team spirit:** Working as a team and practicing a multidisciplinary approach;
 - **Good governance:** Ensuring a participatory, transparent and consensus-based decision-making and governance
 - **Fraternal ethos:** Fostering an environment of trust, respect and fraternal harmony.
- The Department bagged the prestigious **Glue Grant on Translational Research in Child Health** with investigators across all the sub-specialities with funding of US\$ 2 million over 5 years.
- **Division of Neonatology, Department of Pediatrics has been recognized as WHO Collaborating Centre for Training and Research in Newborn Care for South East Asia Region for 4 more years, for the fourth consecutive time.**

- **Pediatric Science Symposium Series** launched with invited talks once a month for enhance knowledge of basic science concepts among the PhD scholars, DM students, postgraduates, scientists and faculty. (Organized by Dr Madhulika and Dr Pratima Ray)
- **Division of Neonatology, Department of Pediatrics is recognized as Advanced Centre for Newborn Health Research by ICMR, New Delhi 2010–2014 with a funding grant of Rs 9.5 crores for 5 years.**
- Division of Neonatology continues to host a **website** www.newbornwhocc.org. The website highlights the activities of our Division and provides free access to learning resource materials, software for Data collection etc developed by Neonatology Division. It has registered more than 100 000 hits already.
- Division of Neonatology in collaboration with **PGI Chandigarh** has operationalised regular **Tele education** classes for DM fellows on regular basis every two week attended by Faculty and students from both institutions.
- Division of Neonatology has developed a teaching learning package on Essential Newborn Care for **Online Learning on interactive platform**. This is being used to educate health professionals at distant places with skill learning at partner institutions.
- The **Goat Lung Surfactant Extract** developed by the Department was licenced by the appropriate regulatory authorities for marketing by Cipla as Cadisurf.
- The **Rotavirus vaccine** developed by the Department has now entered phase III clinical trials on a large population.

Professor Vinod K Paul was Member, High Level Expert Group on Universal Healthcare Coverage set up by the Planning Commission at the direction of the Hon'ble Prime Minister. Chaired group on Human Resources for Health; Member, Committee on Affordable Healthcare Biotechnologies, Department of Biotechnology; Member, National Technical Advisory Group on Immunization (NTAGI), Ministry of Health and Family Welfare; Member, Committee on RCH Drugs. Ministry of Health and Family Welfare; Member, Committee on Bachelor of Rural Medical Practitioner course. Ministry of Health and Family Welfare; Member, National Codex Committee of the department of Women and Child Development; Member, International Advisory Panel on National Rural Health Mission; Editor and lead author of the landmark Lancet series on Universal Health Care in India; Member, Indo-US Joint Working Group on Maternal and Child Health research partnered by NIH/NICHHD and ICMR; Member Inter-governmental Indo-US Working Group on Women's and Child Health; Co-chair, Board of the global Partnership for Maternal, Newborn and Child Health (PMNCH) hosted by WHO, Geneva; Member, working group for drafting Global Strategy for Women's and Children's Health formulated by the UN Secretary General (2010). Provided inputs as the representative of the neonatal health academics to the UN. Received a letter of appreciation from Secretary General Ban ki Moon; Organized the global 'Partnership Meeting: from pledges to action' on MDGs 4 and 5 inaugurated by the President of India that led to the 2010 Delhi Declaration on MNCH; Chaired discussions at the Women Deliver Conference, Washington DC; Invited to the prestigious Pacific Health Summit in London; Member, technical advisory committee for the PATH-Gates Foundation initiative to develop a novel, point-of-care for neonatal sepsis; Member, Technical Advisory Group of the research NGO SNEHA (Mumbai); Member of the advisory panel of the credentials committee of the National Academy of Medical Sciences; Temporary advisor to WHO Geneva for revising clinical care guidelines for care of sick children at small hospitals; Member, Data Safety Monitoring Board for the WHO Multi-centre study on impact of neonatal vitamin A supplementation on child mortality; Member, Child Health Epidemiology Research Group (India); Member of the following committees of ICMR: National Ethics Committee, Task Force on Birth Defects, Scientific advisory committee for neonatal infection surveillance network, and member core group for the task force study on home-based management of newborn and young infant study; Invited by the London School of Tropical Medicine and Hygiene to interact on India's reproductive and child health issues; Member of the Governing Body of the National Neonatology Forum; Adjunct Faculty, Public Health Foundation of India, New Delhi.

Professor A. K. Deorari served as National Technical Expert, UNOPS for strengthening health system in WB, Haryana 2010; Member ICMR Project Review Board 2010; Served as WHO consultant for Maldives to assist

Ministry of Public Health, Government of Maldives for a period of 12 days by SEARO/WR Maldives for strengthening Newborn care in Maldives, w.e.f. 21 January 2011; Nominated as a regional coordinator for Reproductive Health Library of WHO HQs on Newborn Health 2011; Coordinator of workshop on CPAP at Annual NNF meeting held at Jaipur; Coordinator of workshop on CPAP at Annual IAP meeting held at Jaipur; Attended first meeting of the Project Review Steering Group (PRSG) to review the progress of the project 'Development of a Web-enabled e-healthcare system for Neonatal Patient Care Services (eNPCS)' implemented by IIT, Khargpur organized by Department of Information Technology, Ministry of Communication and Information Technology, New Delhi.

Professor Arvind Bagga was Associate Editor, Indian Pediatrics, Indian Journal of Pediatrics; Member, Editorial Board, Pediatric Research, World Journal of Pediatrics, Indian Journal of Practical Pediatrics; International Advisory Board, Current Pediatrics and Child Health.

Dr Pankaj Hari was reviewer for Indian Pediatrics, official Journal of Indian Academy of Pediatrics

Dr Sheffali Gulati served as expert for neurology projects for Indian Council of Medical Research and also reviewer for various National and International journals including American Journal of Medical Genetics; Selected as a commentator for Evidence-Based Mental Health, an International digest which is published by the British Psychological Society, the Royal College of Psychiatrists and the BMJ publishing group; Invited as an expert for the National Epilepsy Control programme, Nirman Bhawan, New Delhi; as a part of a Neurodevelopmental disabilities project, INCLIN instrument for Diagnosis of Attention-Deficit/Hyperactivity Disorder (I-FDA), INCLIN Diagnostic evaluation for Autism (IDEA), INCLIN Diagnostic Evaluation For Epilepsy (I-DEEP) & INCLIN Diagnostic Evaluation For Cerebral Palsy (I-DEC) have been validated among Indian children and have been found to be as good as well established international tools. These culturally sensitive tools can be used in our country and other resource constrained countries as they are being published soon and made available free of cost. Our division has been the main contributor to these validation studies; Paper by Neurology team (Arya R, Gulati S, Kabra M, Sahu JK, Kalra V.) Folic acid supplementation prevents phenytoin-induced gingival overgrowth in children. *Neurology* 2011;76 (15):1338-43 was selected for podcast interview (Gulati S and Arya R) with Prof Nathan B. Fountain, Director, Dreifuss Comprehensive Epilepsy Program, University of Virginia.

Dr Rakesh Lodha was Associate Editor, Indian Pediatrics; Member, Editorial Board, Indian Journal of Pediatrics; Member, Technical Reference Group of NACO on Pediatric HIV;

Dr Rachna Seth was awarded fellowship to attend and present work at the St Jude Viva Forum for Hematological Malignancies, Singapore; Member, Indian Pediatric Oncology Initiative (IPOI) of the Jiv daya foundation, USA; The department's division of Pediatric oncology has been nominated as one of regular centers in the St Jude Viva forum of childhood malignancies; The postgraduate team from our department won the first prize at the 10th annual at the Rajiv Gandhi Cancer Institute and Health Center.

Dr Ramesh Agarwal was Member Research Review Board on two task force studies by ICMR namely role of magsulf in eclampsia and feasibility of KMC in community settings; faculty in evidence-based medicine: ToT in collaboration with University College of London.

Dr Vandana Jain was awarded travel support to present the paper 'Magnesium and insulin resistance in overweight children' at the 36th Annual Meeting of the International Society for Pediatric and Adolescent Diabetes (ISPAD) at Buenos Aires, Argentina; Coordinated the IAP undergraduate and postgraduate Pediatric quiz. The IAPUG quiz team brought the Department and the Institute laurels by standing first at National level; Member, Teaching Schedule Committee and Curriculum Committee of AIIMS.

Dr Shinjini Bhatnagar was Member, Technical Advisory Board for Diarrhoea, Institute of One World Health; National Coordinator Indian Academy of Pediatrics (IAP) and UNICEF for National Consultative Group for dissemination of rationale guidelines for treatment of diarrhea.

Dr Pratima Ray was awarded ICMR International fellowship for senior biomedical scientist 2007; Elected life member of American Society of Virology; Member, Technical reference Group (Pediatric) of the National AIDS Control organization, 2011.

VISITING SCIENTISTS

1. Dr Ulf Klangby, Holland
2. Dr Sailesh Gochait, New Delhi
3. Prof. Vinod Bhutani, USA
4. Dr Ram Prasad, Chennai
5. Dr Ashwani Kumar Mishra, New Delhi
6. Dr Ciarra O'Sullivan, Spain
7. Dr Alexia Pena, Pediatric Endocrinologist from Adelaide, Australia delivered a talk on Metabolic syndrome and endothelial dysfunction in adolescents in April 2010.

9.26 Paediatric Surgery

Professor and Head

D. K. Gupta

Professor and Head

V. Bhatnagar

Professor

M. Bajpai

Additional Professors

S. Agarwala

M. Srinivas

EDUCATION

Teaching of undergraduate medical and nursing students. Postgraduate teaching and training of MCh Paediatric Surgery trainees – inclusive of seminars, journal clubs, case discussions, Thesis presentations and teaching rounds. Trainees on rotation – MCh trainees in Neurosurgery, DM trainees in Neonatology, MS Trainees in General Surgery. Training in the ward of BSc and the MSc Nursing students.

In addition Fellows from Korea, Austria, and Switzerland underwent short term training.

Lectures delivered in CME/ National and International conferences: 22

RESEARCH

Funded projects

1. A concept Model: Role of Autologous and Human stem cell in an Experimental model of Biliary atresia in rats. DK Gupta, ICMR, 2008 – continuing.
2. Long term results of children diagnosed antenatally with hydronephrosis.
3. Antibiotic prophylaxis in the management of vesico-ureteric reflux : a multicentric randomised double blind placebo controlled trial. V. Bhatnagar, ICMR Project with Paediatric Nephrology
4. A study on clinical and molecular markers of chronic interstitial nephropathy in congenital unilateral ureteropelvic junction obstruction (non-genetic markers). M. Bajpai
5. To study the role of molecular markers in the diagnosis and treatment of posterior urethral valves. M. Bajpai
6. Genetic parameters of neuroblastoma: A study on fine needle aspiration cultures. S. Agarwala, AIIMS Research Grant, 2009–2010, Rs 1 lakh.

Departmental projects

Ongoing

1. A study of management issues in crossed fused renal ectopia.
2. A study of management issues in ectopic kidneys.
3. Comparison of efficacy of continuous epidural infusion of morphine, fentanyl and combination of morphine and fentanyl with bupivacaine for post-operative analgesia in children.

4. Effect of intralesional injection sclerotherapy using Na⁺ tetradecyl sulphate in vascular malformations.
5. Effect of intralesional injection sclerotherapy using Na⁺ tetradecyl sulphate in vascular malformations.
6. Evaluation of N-Myc amplification and Tyrosine Hydroxylase in Neuroblastoma.
7. Long term evaluation of children undergoing definitive procedure for Hirschsprung's Disease.
8. Long term outcome of children treated for posterior urethral valve.
9. Long term results following Kasai's procedure for biliary atresia .
10. Long term results following pediatric pyeloplasty using single transanastomotic stent.
11. Long term results following pyeloplasty in solitary kidneys.
12. Long term results following reimplantation of ureters in under one year old patients with VUR.
13. Long term results following tubularisation of pouch colon for pull through.
14. Long term results in asymptomatic patients operated for Hypospadias.
15. Monotherapy for standard risk hepatoblastoma.
16. Mucous production in the neobladder after augmentation colocoloplasty.
17. Musculoskeletal and pulmonary functional abnormalities after thoracic surgeries.
18. Neurogenic bladder: A study on identification of risk groups and their therapeutic implications.
19. Prospective study of treatment of children with hepatoblastoma on treatment with PLADO regime.
20. Prospective study of treatment of children with rhabdomyosarcoma on treatment with IRS-5 regimen.
21. Prospective study of treatment of children with Wilms' tumor on treatment with NWT5-5 regimen.
22. Prospective study on five drug regimen for the management of clear cell sarcoma of the kidney.
23. 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.
24. Results with the use of platinum based regimes in the treatment of pediatric malignant germ cell tumors.
25. Role of autologous bone marrow mononuclear stem cells in polio affected neurologically deficit patients".
26. To study the effect of ipsilateral ureteric obstruction on contralateral kidney & the role of renin angiotensin system blockade on renal recovery in experimentally induced unilateral ureteric obstruction-a morphometric analysis.
27. To study the histological changes following the Use of cultured Mononuclear stem cells in a rat model of renal dysplasia.
28. Use of steroids and beta blockers in children with hemangiomas – a double blind controlled study.

Completed

1. Long term outcome of children treated for posterior urethral valve.
2. Long term results following pediatric pyeloplasty using single transanastomotic stent.
3. Outcomes of pulmonary metastatectomy for pediatric solid tumors.
4. To study the effect of ipsilateral ureteric obstruction on contralateral kidney and the role of renin angiotensin system blockade on renal recovery in experimentally induced unilateral ureteric obstruction-a morphometric analysis.
5. To study the role of renin angiotensin system blockade on renal recovery in experimentally induced unilateral ureteric obstruction– a morphometric analysis.

Collaborative projects

Ongoing

1. A study of management issues in crossed fused renal ectopia (Nuclear Medicine, Radiodiagnosis).
2. A study of management issues in ectopic kidneys (Nuclear Medicine, Radiodiagnosis).
3. Analysis of bile in various hepato-biliary disease states (Gastroenterology).
4. Biochemical analysis of bile in various disease states (Gastroenterology).
5. Comparison of pre and post operative liver histology in patients with choledochal cysts (Pathology, Radiodiagnosis).
6. Correlation of intracystic pressure with volume, liver histology, bile composition in choledochal cyst (Pathology).
7. Evaluation of cardiotoxicity related to adriamycin in children with solid tumors. (Nuclear Medicine, cardiology).
8. Evaluation of restrictive lung disease in long-term survivors of malignant germ cell tumors who have received Bleomycin as a part of treatment. (Pediatrics).
9. Evaluation of role of adjunctive therapy with ¹³¹I MIBG therapy for advanced non-responsive, relapsed and metastatic Neuroblastoma (Nuclear Medicine).
10. Gene deletions and mutations in Wilms Tumor: Correlation with histopathology and Outcome. (Pathology).
11. Genomic and proteomic analysis of SCF/C-Kit gene in a pediatric neoplasm, Neuroblastoma. (Pathology and Biochemistry).
12. Growth and development and micronutrient status in patients with biliary atresia (Pediatrics).
13. Long term results following Kasai's procedure for biliary atresia (Nuclear Medicine, Pathology).
14. Long term results following pyeloplasty in solitary kidneys (Nuclear Medicine, Radiodiagnosis).
15. Long term results following reimplantation of ureters in under one year old patients with VUR (Nuclear Medicine).
16. Long term results following tubularisation of pouch colon for pull through (Pathology, Radiodiagnosis).
17. MRI evaluation of intrahepatic ducts in post operative patients of biliary atresia (Radio diagnosis).
18. Pre and post operative liver histology in choledochal cyst (Pathology).
19. Study of association of CMV infections in biliary atresia (Microbiology).

Completed

1. Comparison of efficacy and safety of oral antibiotics (amoxicillin-clavulanic acid and ofloxacin } with intravenous combination (Ceftriaxone and amikacin) in outpatient setting in pediatric patients of low risk febrile neutropenia (Medical Oncology).
2. Evaluation of hearing deficiencies in children who have received cis-platinum for treatment of solid tumors. (Otorhinolaryngology).
3. Evaluation of lymphocytic infiltration in wilms' tumor and adjoining normal renal parenchyma and its relation to recurrence and outcome (Pathology).
4. Long term results of esophageal replacement by reverse gastric tube (Radio-diagnosis, Nuclear Medicine).
5. Loss of heterozygosity at 11p15.5 in hepatoblastomas (Pathology).
6. Role of FDG PET-CT in staging and evaluation of early response to chemotherapy in children with neuroblastoma (Nuclear Medicine).
7. Telomerase estimation in patients with wilms' tumor and hepatoblastoma as a marker for prognosis (Pathology, Biochemistry).
8. The role of nitric oxide in portal hypertension (Biochemistry).

9. Volumetric analysis of the spleen in portal hypertension (Radio-diagnosis).
10. 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. (Medical Oncology, Radiodiagnosis and Nuclear Medicine).

PUBLICATIONS

Journals: 24

Abstracts: 4

Chapters in books: 5

PATIENT CARE

Facilities available

- Intensive care unit for neonatal surgical patients
- High dependency area for pediatric surgical patients
- Computer based urodynamic study facilities
- Computer based anorectal manometry facilities
- Computer based esophageal manometry facilities
- 24 hours pH monitoring for gastro-esophageal reflux

Special clinics/laboratories

- Hydrocephalus clinic
- Pediatric Urology and Intersex clinic
- Gastrointestinal and Hepatobiliary surgery clinic
- Pediatric Thoracic Surgery clinic
- Pediatric solid tumor clinic
- Laboratory for urodynamics, esophageal and anorectal manometry

Community services

Weekly outpatient and surgery session at CRHP, Ballabgarh

Attendance in OPD and specialty clinics

	New cases	Old cases	Total
<i>General OPD</i>	5727	12540	18267
Specialty clinics			
Hydrocephalus	07	157	164
Intersex	27	268	294
Craniosynostosis	02	19	21
Pediatric urology	355	2729	3084
Pediatric solid tumor	131	1710	1841
Minor procedures	2968	-	-

Admissions

AB-5 ward	1219
AB5- ICU	205

Surgical procedures

Major	1852
Minor	645
At CRHS Ballabgarh	253
Total	2750

Special investigations

Urodynamic evaluation	425
Uroflometry	724
Ano-rectal manometry	73
Esophageal manometry	1
24-hr pH monitoring	12

AWARDS, HONOURS AND SIGNIFICANT EVENTS

The department organised the Third World Congress of Pediatric Surgery with the 36th Annual National Conference of Indian Association of Pediatric Surgeons, New Delhi, 21–24 October 2010. This was with Pre-Congress Course on Minimally Invasive and on Anorectal Malformations Surgery, 21 October 2010 New Delhi, India. It also organised a Live Operative Workshop on Hypospadias and Disorders of Sex Differentiation, 25–26 October 2010, New Delhi, India. It also conducted a Symposium on Pediatric Uro-Oncology was conducted on 3–4, December 2010, AIIMS, New Delhi. It conducted the monthly meeting of Delhi Chapter of IAPS, New Delhi, 26 February 2011.

Professor D. K. Gupta was appointed Vice Chancellor of the King George Medical University, (CSMMU) Lucknow, 4 March 2011; elected as President World Federation of Associations of Pediatric Surgeons, President, Federation of Association of Pediatric Surgeons SAARC nations, the Chairman–Asia Representative – Journal of Pediatric Surgery International; nominated Chairman from SAARC Nations for the Award Selection committee of the Lister and BAPS Fellowships UK, Editor in Chief – Journal of Pediatric Surgical Specialities (Romania), the Editorial Board Member - Journal of Hepatology (Beijing China), Editorial Board Member, Latvian Journal of Pediatric surgery; Conferred honorary membership by Pediatric Surgical Association of Iran and Association of Pediatric Surgeons, Ukraine.

Professor V. Bhatnagar appointed Member, Board of Studies for the new Department of Pediatric Surgery at Sanjay Gandhi Post Graduate Institute of Medical Education and Research, Lucknow; member of the Executive Editorial Board of Indian Journal of Pediatrics and Editorial Board of Journal of Indian Association of Pediatric Surgery; his paper “The role of nitric oxide in portal hypertension caused by extra hepatic portal vein obstruction. P.Goel, K.Srivastava, N.Das, V.Bhatnagar’ received the UC Chakravorty Award, at 36th Annual Conference of Indian Association of Pediatric Surgeons, New Delhi, 21 October, 2010.

Dr Sandeep Agarwala awarded the CCLG (UK) travel grant for 2010 and was selected as course instructor for Surgical Oncology course conducted by European Union of Pediatric Surgical Associations (EUPSA) for 2010, at Berne, Switzerland.

VISITING SCIENTISTS

1. Dr Meier Mortiz, Austria
2. Dr Kun Sok Pak, DPR Korea
3. Dr Hyok Ra, DPR Korea
4. Dr Sung Chan Ro, DPR Korea
5. Dr Mohd. Shadrul Alam, Bangalore.
6. Dr Rita Gobet, Switzerland.
7. Dr Andreas Dietl, Switzerland.

9.27 Pathology

Professor and Head

Subrat K. Panda

Professors

Chitra Sarkar

Manoj K. Singh

S. Datta Gupta (On Leave)

Rajni Safaya

Ruma Ray

A.K. Karak

Additional Professors

A.K. Dinda

Associate Professors

M.C. Sharma

Venkateswaran K. Iyer

Assistant Professors

Sandeep R. Mathur

Vaishali Suri

EDUCATION

Postgraduate

MD students	20	Senior Residents	13
PhD students	16	Pool Officers	5

Short term and Long term training

One MBBS student and 4 MSc students, underwent short term training in the department.

Lectures delivered in CME and National and International Conferences: 37

RESEARCH

Funded projects

Ongoing

1. Non structural polyprotein (pORF1) processing of Hepatitis E virus (HEV). SK Panda. 2010–2013 Funds: Rs. 66.39 lakhs
2. Glial tumors: A correlative clinicopathological study of chromosomes 1p/19q status, epidermal growth factor receptor (EGFR) amplification and p53 expression. Chitra Sarkar, ICMR 2007-2010 Rs. 16.5 lakhs (approx).
3. Study of the role of bone marrow derived mononuclear cells in peripheral nerve repair of adult rats. Study of the role of bone marrow derived mononuclear cells in peripheral nerve repair of adult rats. Vaishali Suri, ICMR, 2006-2010, Rs. 18 lakhs (approx),.
4. Efficacy and safety of AP 12009 in adult patients with recurrence or refractory anaplastic astrocytoma (WHO grade III) as compared to standard treatment with temozolomide or BCNU: A randomized actively controlled, open label clinical phase III study. Chitra Sarkar, Antisense Pharma, Germany, 2007–2010. Rs. 25 lakhs (approx).
5. Angiogenesis in astrocytic tumors of the brain: A clinicopathological study with special reference to expression of vascular endothelial growth factor (VEGF), and hypoxia inducible factor (HIF)–1 alpha and correlation with vascular morphometric parameters and tumor infiltrating inflammatory cells. Chitra Sarkar, ICMR, 2009–2012, Rs. 21 lakhs (approx).

6. Glioblastomas in children. A study with special reference to molecular pathways and MGMT methylation status. Vaishali Suri, ICMR, 2010–13, Rs. 24 lakhs (approx).
7. Open label, prospective, multicentric study to evaluate the safety and efficacy of BIOMAb-EGFR (Nimotuzumab) as induction and maintenance therapy in combination with radiotherapy plus temozolamide (concomitant and adjuvant) in Indian patients with glioblastomamultiforme – Phase II / III clinical trial. Chitra Sarkar, Biocon Biopharmaceutical, 2008–11, Rs. 15 lakhs.
8. Hypoxia and p53-HIC1 axis in stemness of glial tumors and cell lines. Chitra Sarkar, DBT, 2009-12, Rs. 50.5 lakhs.
9. Prognostication of paediatric abdominal solid tumors on the basis of 1p and 16q chromosomal deletions. Venkateswaran K Iyer, AIIMS, 3 years, Funds: Rs. 300,000.
10. ‘Analysis of her-2/neu status on fine-needle aspiration cytology smears and its correlation with hormone receptor status, proliferation markers and apoptosis in breast cancer: a fluorescent in-situ hybridization (fish) and immunocytochemistry study’, Sandeep Mathur, CSIR, Rs. 14 lakhs, April 2009-May 2011.
11. Analysis of morphological features and prognostic markers in serous ovarian cancer following neoadjuvant chemotherapy. Sandeep Mathur, Institute Research Grant, Rs. 1 lakh, March 2010-March 2011.
12. Synthesis and characterization of ultra fine gold nanoparticles, their utility and safety as a novel X-ray contrast agent: an in-vivo study in animal model. AK Dinda, ICMR, 2010–2012, Rs. 30 lakhs.

Completed

1. Study of viral proteins and other molecular markers in Hepatitis E virus (HEV) infected cells using high throughput molecular techniques, S. K. Panda, DBT for three years 2007–2010. Funds: Rs. 65.85 lakhs
2. Investigation related to mechanism of entry of HEV into the host cells; S. K. Panda, DBT, for 3 years 2008–2011. Funds: Rs. 84.89 lakhs
3. p16INK4a and E-cadherin expression profile in pre-cancerous lesions of cervix and cervical carcinomas’; Sandeep Mathur, IRG, AIIMS, duration, 2009-2010 Funds: Rs. 1 lakh
4. Development of nanoparticulate system for selective receptor specific macrophage targeting. AK Dinda, DBT, two years (2007–2009) Funds: Rs. 34 lakhs

Departmental Projects

Ongoing

1. Study of gliomagenesis: Role of Shh-Gli pathway
2. Study of Limb Girdle Muscular Dystrophy (LGMD) Patients in Indian Population Using Calpain-3, Dysferlin and Sarcoglycan Protein Analysis.
3. Study of PTEN and CDKN2 gene alterations in GBMs.
4. Study of IDH-1 mutations in gliomas.
5. Study of WNT pathway in ependymomas.
6. Analysis of CDKN1A/p16 alterations in ependymomas.
7. Diagnostic accuracy of skin biopsy in diagnosing muscular dystrophy— a cross sectional study. Dr
8. Study of Notch Signaling pathway in Ependymomas.
9. Characterization of dendritic cells and expression of cytokines, chemokines and NF κB in idiopathic inflammatory myopathies.

10. Analysis of genetic alterations in meningiomas.
11. Study of LOH on chromosome 10q in GBMs.
12. Analysis of 1p/14q deletion in meningiomas.
13. Histopathological and morphometric evaluation of surgically excised specimens of thoracic aortic aneurysms.
14. Histopathological analysis of light microscopical and ultrastructural features of surgically excised left atrial appendage in patients with atrial fibrillation due to rheumatic heart disease.
15. Chief Investigator of 'A Study of Tissue Response in Periprosthetic Tissue and Role of Cytokines in Pathogenesis of Loosening of Prosthesis in Knee and Hip Replacements. Department of Pathology, 2011.
16. Gene deletions and mutations in Wilms tumor: Correlation with histopathology and outcome.
17. CD5+ B cell lymphomas: a morphological and immunohistochemical study.
18. Study of iron metabolism associated proteins in renal cell lines in hyperglycemic and hypernatraemic condition.
19. Study of endocytosis and fate of calcium phosphate based and gold nanoparticle.
20. Nanoparticle mediated antigen presentation and modulation of antigen processing by macrophage.
21. Development of metal nanoparticle for cancer targeting.
22. Study of IL10 dependent MicroRNA and IL10 expression in Breast Cancer.

Completed

1. Primary and secondary glioblastomas: A study of EGFR amplification, EGFR vIII mutants and p53 expression.
2. Histopathological and morphometric evaluation of surgically excised specimens of thoracic aortic aneurysms.
3. Modulation of macrophage function with nanoparticle.
4. Role of macrophage in modulation of renal fibrosis.
5. Ultrastructural study of podocyte changes in immune and non-immune mediated glomerular diseases.
6. Airway remodeling in Bronchial Asthma; A study in experimental mice model.

Collaborative projects

Ongoing

1. Effects of administration of human umbilical cord blood cells (HUCBG) in combination with melatonin versus HUCBG alone in rat with stroke (Neurology).
2. Comparative study of the treatment outcome with concurrent chemoradiotherapy in glioblastoma with Temozolomid post chemoradiotherapy 6 cycles vs. 12 cycles and molecular basis of resistance based on EGFR, MIB-1 and p53. (Radiation Oncology)
3. Expression of Notch signaling molecules, Epithelial Mesenchymal Transition (EMT) markers and HIF-1alpha in Glioblastoma Multiforme (Biochemistry).
4. Oxygen concentration, p53-HIC1 axis and stemness characteristics in glial tumors cell lines. Effects of bone marrow derived mononuclear cells on nerve regeneration rat sciatic nerve transection model.
5. Dose dependent facilitation of peripheral nerve regeneration by bone marrow derived mononuclear cells – Randomized controlled trial.
6. Study of placenta for oxidative stress status in pregnant women on daily versus weekly iron supplementation: An ICMR Task Force Study.
7. Safety and efficacy of 2 versus 3 dose HPV vaccine in adolescent girls aged 10–18 years (International Agency for Research in Cancer, Lyon, France).

8. 'Development of HPV candidate vaccine/s: Preparation of a clinical trial site/cohort for vaccine testing' (Gynaecology).
9. Correlation of HPV DNA testing with residual disease in treated cases of CIN. (Obstetrics and Gynecology).
10. Analysis of sperm chromatin structure and its relation to male infertility', (Anatomy). Randomised controlled study to evaluate the role of pelvic and para aortic lymphadenectomy versus no lymphadenectomy on survival in stage III ovarian cancer', (Obstetrics and Gynecology).
11. 'Early detection of cervical neoplasia by visual screening and hybrid capture testing by self and physician collection methodology- a community based study in rural area' (Obstetrics and Gynecology).
12. Development of tumor targeting with nanogel system. (Center for Biomedical Engineering, IIT, Delhi).
13. Role of macrophage and oxidative stress in airway remodeling (IGIB, Delhi).
14. Effect of blocking of HIF1á gene expression on macrophage endocytosis and generation of ROS. (JNU, Delhi).
15. Fabrication of chitosan-gelatin-alginate composite tissue engineering scaffold by foaming method without using surfactant, its characterization and biocompatibility studies (Department of Paper Technology, IIT Roorkee).
16. Development of hydrogel based wound dressing and study of its efficacy in experimental model. (Center for Biomedical Engineering, IIT, Delhi).
17. Development of scaffold for Corneal Tissue Engineering (Textile Engineering, IIT Delhi, R.P.Center of Ophthalmology and Stem Cell Facility).

Completed

1. Analysis of immunomodulation property of IFN-g on classical, nonclassical MHC 1 and TGF-b expression in astrocytic tumors and their relevance in immunotherapy(Neurobiochemistry).
2. Study of HIC-1 in tumorigenesis and cell response(Biochemistry).
3. Molecular detection and genotyping of HPV in cervical cancer(a population based study (Biochemistry)
4. Study of genetic polymorphisms of dihydropteroate synthase (DHPS) gene in Pneumocystis jiroveci isolates: correlation with clinical outcome in patients with PCP. (Microbiology)
5. Reconstruction of Extensive Long-Bone Defects in Rabbit Using Calcium Phosphate-Mullite Composites (Department of Metallurgy, IIT Kanpur)

PUBLICATIONS

Journals: 127

Abstracts: 4

PATIENT CARE

Laboratory services

Surgical Pathology Laboratory

Specimens processed	34,044
Special stains	28,896
Frozen sections	913

Cytopathology Laboratory

FNAC (out patient)	7517
Exfoliatives routine	6745

Cervical smears (PAP smears)	4069
Immunocytochemistry	550
Autopsies performed	17
Electron microscopy	
Specimens processed	359
<i>Immunohistochemistry laboratory</i>	
Diagnostic	22,944
Research	3,632
Neuropathology services	
Neuropathology Surgical Specimens	2106
Frozen Sections	403
Muscle biopsies	
Total number received	384
Muscle enzyme histochemistry	977
Muscle immunohistochemistry	1710
Immunohistochemistry	4745
Myelin stain	156
Diagnostic Fluorescent in situ hybridization	95
Tissue Culture laboratory	
H&E staining	2045
Special Stains	346
Immunohistochemistry	755
Frozen Sections	835
Unstained	12965
Renal pathology services	
Urine microscopy	850
Immunofluorescence of kidney biopsy	650
Electron Microscopy of kidney biopsy	48
<i>Skin Biopsy Cutting</i>	150
Cardiac Pathology Services	
Specimens	
Routine	237
Research	98
Slides Coated Poly. L Lysine	20256 slides

Others

Immunohistochemistry	102
Reference blocks	29
Frozen	5
H&E	127
Special stains	6

Hepatic Pathology Services

Markers for hepatitis viruses

HBsAg	1472
HBeAg	3120
HBc-IgM	120
HEV IgM	248
HAV IgM	60
Anti-HCV IgG	705
HEV RNA	95
HCV RNA	50
HBV DNA	80

AWARDS, HONOURS AND SIGNIFICANT EVENTS

The department organized workshop for faculties from different medical colleges on 'How to set up a Diagnostic Immunofluorescence Laboratory', 23 May 2010, AIIMS. It also organized Mid-ear Teaching Programme 2010 of the IAP-ID on Fluorescence in Pathology held on 22–23 May 2010.

Professor S. K. Panda Awarded Fellow, Indian National Science Academy, 2010.

Professor Chitra Sarkar Awarded ICMR international fellowship for Senior Biomedical Scientist 2010–11; elected Vice President, Indian Society of Neuro-Oncology for 2010-11; nominated member, Committee formed by Neurological Society of India to frame National Guidelines for the Diagnosis and Management of Gliomas, Research Committee of SGPGI, Lucknow, 2010–13; DST—Swarnajayanti Fellowship Committee; Sectional Committee (Medical Sciences), Indian Academy of Sciences, Bangalore; Ethics committee of Dr BR Ambedkar Centre for Biomedical Research, University of Delhi; Faculty Assessment Committee, NBRC; selection committee, ICMR Institute of Pathology, New Delhi.

Professor Rajni Safaya, invited Member, selection committee for faculty and senior residents, University College of Medical Sciences (UCMS) and GTB Hospital 2010.

Dr AK Dinda, nominated member of Academic Council of Center for Molecular Medicine at Jawhar Lal University (JNU) for 2010–2012.

Dr Aanchal Kakkar received the Ramalingaswami First Prize for oral paper entitled 'Loss of Heterozygosity on Chromosome 10q in Glioblastoma Multiforme' in the Annual Conference of IAPM, Delhi Chapter, 11 April 2010.

Visiting Scientists: Nil

9.28 Pharmacology

Professor and Head

Y. K. Gupta

Professors

V. L. Kumar
Kamal Kishore

N. R. Biswas (On deputation)
S. K. Maulik

Additional Professor

D. S. Arya

Associate Professors

Jatinder Katyal

K. H. Reeta

Surender Singh

Assistant Professors

Jagriti Bhatia

EDUCATION

The Department of Pharmacology is engaged in the teaching programme of MBBS, BSc Nursing (Hons), MSc (Pharmacology), MD, PhD and DM (Clinical Pharmacology) courses. Additionally short term training was imparted to 12 postgraduate life science students from other universities.

Lectures delivered in CME/National and International conferences: 24

RESEARCH

Funded Projects

Ongoing

1. Pharmacological Evaluation of plant extracts and their medicinal products. Dr YK Gupta. Funded by Ranbaxy Research foundation for 4 years (2006–2010). Funds: Rs 14 lakhs.
2. Reversal of mercury induced toxicity in rats by combination therapy: a novel approach. Research associate Varsha Singh under Dr YK Gupta. Funded by ICMR for 3 years (2008–2011). Funds: Rs 8.5 lakhs.
3. Training module in clinical research. Dr Y.K. Gupta. Funded by the Department of Biotechnology for 3 years (2008–2010). Funds: Rs 9 lakhs.
4. Effect of traditionally used ayurvedic rasa aushadhies on renal and hepatic functions: Clinical and experimental study. Dr Y.K. Gupta. Funded by Department of AYUSH, MOHFW, Government of India for 3 years (2009–2012). Funds: Rs 27.6 lakhs.
5. Quantitative Detection of heavy metals and Phthalates in toys. Dr Y.K. Gupta. Funded by ICMR for two years (2009–2011). Funds: Rs 6.3 lakhs.
6. Scientific Study to determine the Quality of Medicines Being Sold at Jan Aushadhi Drug Stores. Dr Y.K. Gupta. Funded by Ministry of Chemicals and Fertilizers, Department of Pharmaceuticals under Pharma promotion scheme for one year (2010–2011). Funds: Rs 13.6 lakhs.
7. Pharmacological Evaluation of Herbomineral Ayurvedic Formulations (AFYs) used in the Prophylaxis of Migraine. Dr Y.K. Gupta. Funded by IPCA Laboratories for two years (2011–2013). Funds: Rs 29.6 lakhs.

8. Phyto-therapeutic development of latex of the medicinal plant *Calotropis procera*. Indo-Brazil project. Dr V.L. Kumar. Funded by Department of Science and Technology for 3 years (2009–2012). Funds: Rs 10 lakhs.
9. Evaluation of the efficacy of polyherbal formulation in models of age-related ocular diseases. Dr N.R. Biswas. Funded by Dey's Pharmaceuticals for 1 year (2009–2010). Funds: Rs 4.9 lakhs.
10. Study of placenta for oxidative stress status in pregnant women on daily versus weekly iron supplementation: An ICMR Task Force Study. Dr S.K. Maulik. Funded by ICMR for 2 years (2009–2011). Funds: Rs 8 lakhs.
11. Double-blind, randomized placebo controlled clinical trial to study the add-on efficacy of a standardised preparation of the water extract of *Terminalia arjuna* in patients with Left Ventricular Dysfunction, already receiving standard drug regimen. Dr S.K. Maulik. Funded by the Department of Biotechnology for 2 years (2010–2012). Funds: Rs 48 lakhs.
12. Evaluation of protective potential of atorvastatin and coenzyme Q10 in doxorubicin-induced cardiomyopathy in rats. Dr. SK Maulik. Funded by AIIMS for 2 years (2010–2012). Funds: Rs 2 lakhs.
13. Studies on pharmacological and molecular mechanism to investigate an angiotensin type I receptor blocker Irbesartan in experimental model of myocardial ischemia reperfusion injury. Dr D.S. Arya. Funded by Indian Council of Medical Research for 3 years (2008–2011). Funds: Rs 22 lakhs.
14. Effect of different doses of pioglitazone and cyclooxygenase-2 (Cox-2) inhibitor etoricoxib in pentylenetetrazole kindled rats. Dr Jatinder Katyal. Funded by AIIMS, New Delhi. (2010– 2011). Funds: Rs 1 lakh.
15. Standardization and Pharmacological studies of widely practiced antiarthritic Unani formulation "Majoon Suranjan" based on classical Unani literature. Dr Surender Singh. Funded by Indian Council of Medical Research (ICMR), Government of India for 3 years (2007–2010). Funds: Rs 28.62 lakhs.
16. Evaluation of anti-arthritic activity of plant lipids containing omega-3 fatty acids in experimental models "Majoon Suranjan" based on classical Unani literature. Dr Surender Singh. Funded by Indian Council of Medical Research (ICMR) for 3 years (2009–2012). Funds: Rs. 18.48 lakhs.
17. Effect of Bioactive Phytoconstituents in Experimental Metabolic Syndrome. Dr K.H. Reeta. Funded by Indian Council of Medical Research (ICMR) for 3 years (2010–2013). Funds: Rs 29.1 lakhs.
18. In vitro Assessment of DNA Damage as Predictor of Response to Chemotherapy in Acute Myeloid Leukemia. Dr K..H Reeta. Funded by AIIMS for 1 year (2010–2011). Funds: Rs 1 lakh.
19. Assessment of liver fatty acid binding protein as a predictor of cisplatin induced nephrotoxicity in paediatric patients. Dr Jagriti Bhatia. Funded by AIIMS for one year (2010–11). Funds: Rs 1 lakh.

Completed

1. Assessment of Awareness of Environmental Mercury Pollution in Healthcare System: Solutions and Strategies for Prevention. Dr YK Gupta. Funded by Ministry of Environment and Forests, Government of India for 2 years (2008 –2010) Funds: Rs 21.1 lakhs.
2. Efficacy and Safety Evaluation on Antiepileptic activity of selected Indian Herbs. Dr.Y.K. Gupta. Funded by Department of Science and technology for 3 years (2007–2010). Funds : Rs 8.04 lakhs.
3. Safety study of PUV Asol and Unani medicine (UNIM-401 oral and UNIM-403). Dr Y.K. Gupta. Funded by CCRUM for one year (2009–2010). Funds: Rs 8.02 lakhs.
4. Study of the effects of genistein in experimental cardiac hypertrophy. Dr S.K. Maulik. Funded by Indian Council of Medical Research (ICMR) for 3 years (2007–2010). Funds: Rs 6 lakhs.
5. Randomized Double Blind Placebo-Controlled Study to Compare the Efficacy of Riboflavin versus Propranolol in Prophylaxis of Migraine. Dr K.H. Reeta. Funded by AIIMS for one year (2009–2010). Funds: Rs1 lakh.
6. Development and standardization of model of drug resistant seizures in mice. Dr Jatinder Katyal. Funded by AIIMS, New Delhi for one year (2009–2010). Funds: Rs 1 lakh.

Departmental Projects

Ongoing

1. Pharmacokinetic interaction of herbal medicines and antiepileptic drugs: the molecular mechanisms.
2. An explorative prospective open-labelled pilot study for evaluation of safety and efficacy of the nutraceutical S-adenosyl-L-methionine (SAME) in patients with osteoarthritis of knee.
3. Evaluation of antiepileptic property of selected Indian plants and their mechanism of action.
4. To study the effect of immunosuppressive agents on transient ischemia model in rats.
5. Adverse effects of antiepileptics and their interactions with an Ayurvedic formulation Panchgariya Ghrita: An experimental and clinical study.
6. Evaluation of potential of *Clitoria ternatea* and *Evolvulus alsinoides* extracts for cognitive impairment in rats.
7. Effect of therapy on plasma Apelin levels in patients of chronic heart failure.
8. Development and validation of experimental animal model for diabetic retinopathy.
9. Evaluation of topical COX-2 inhibitors for corneal angiogenesis .
10. Corneal metabolism of drugs and their relation with endothelial toxicity in amide class of local anesthetics.
11. Pharmacokinetic and Toxicity profile of High Dose Methotrexate and its Relationship with Serum Creatinine in Indian Children.
12. Detection and Estimation of Steroids using LCMS/MS in Unlabelled Medications.
13. Intensive adverse drug monitoring in early renal transplant recipients.
14. Study of cardioprotective effect of naringin in ischemia reperfusion injury model in rat heart model.
15. Evaluation of the effect of febuxostat, a novel xanthine oxidase inhibitor on doxorubicin induced cardiomyopathy in rats.
16. Evaluation of nephroprotective effect of *Emblica officinalis* in cisplatin induced nephropathy in rats.
17. Efficacy in *Lawsonia inermis* in streptozotocin induced hypoglycaemia rats.
18. Effect of hydroalcoholic extract of *Bacopa monnera* and *Withania somnifera* in phenobarbitone tolerant mice.

Completed

1. Effect of S-adenosyl-L-methionine (SAME) on pentylenetetrazole induced seizures in rats.
2. Study on the cardioprotective effect of pitavastatin in ischemia reperfusion injury model in rat heart model.
3. Study the antipyretic and anti-inflammatory properties of protein fraction of *calotropis procera* latex.
4. Study of ardioprotective effect of combination of ramipril and irbesartan in experimental model of ischemia reperfusion injury model in rat heart model.
5. Efficacy and safety of aqueous and alcoholic extract of *Rosa centifolia* in experimental arthritis in rats.

PUBLICATIONS

Journals: 21

Abstracts: 7

PATIENT CARE

Clinical Pharmacology Facility

The Clinical Pharmacology wing of the department has been equipped to conduct a range of studies on healthy volunteers. Recently acquired facilities include instruments for neurocognitive testing, exercise pharmacodynamics, cardiovascular parameters assessment, platelet function testing, comet assay, drug dissolution and disintegration testing facilities, DNA sequencing, and a cell culture laboratory.

Estimation of metals

The department has standardised methods for estimation of lead, cadmium, copper, zinc, iron, arsenic, mercury and magnesium in biological samples using Inductively coupled plasma – Atomic Emission spectrophotometer (ICP-AES).

Therapeutic drug monitoring facility

The department provides facilities for estimation of blood levels of drugs with narrow therapeutic index like methotrexate and antiepileptics (Phenytoin, Phenobarbitone, Carbamazepine and Sodium valproate). In addition standardized methods are available for estimation of Vitamin A and E.

National Poison Information Centre

National Poisons Information Centre (NPIC) provides 24 hour service. Information on management of poisonings is provided to treating physicians, general public and also to governmental and non-governmental organizations.

Information on various poisonings and treatment protocols on telephone, Fax, e-mail and in person. The NPIC has the back-up of latest literature on poisoning due to a variety of products that include household items, agricultural and industrial chemicals, drugs, environmental toxins including plants, animal bites and stings and other miscellaneous products. The data received by centre is compiled and analysed for knowing the trend of poisonings.

Total poisoning calls received at NPIC during 2010: 1492.

Quality check laboratory for medicines

A quality check lab for medicines has been set up and minimum pharmaceutical tests, as per Indian Pharmacopoeia requirement are being carried out for drugs being sold at Jan Aushadhi Stores, all over the country.

Pharmacovigilance Programme of India – National Coordinating Centre

Department of Pharmacology is the National Co-ordinating centre for the Pharmacovigilance Programme of India under the Central Drugs Standard Control Organization (CDSCO), Ministry of Health, Government of India. This centre receives adverse drug reaction data from the ADR monitoring centres across the country. The data are collated and analysed for causality assessment of the adverse drug reactions and submitted to CDSCO. Department has conducted Workshop on operationalising Pharmacovigilance programme of India and Advance training workshop in Vigiflow™.

Urinary Catecholamine test

Urinary catecholamines estimation is routinely performed in the department for the diagnosis of Pheochromocytoma. Patients from different clinical departments are coming for assessment of catecholamine levels.

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Conferences, Seminars, Workshops organized by the Department

1. Workshop on Operationalising Pharmacovigilance Programme of India, 24–25 November 2010 at AIIMS, New Delhi. Organized in collaboration with Central Drugs Standard Control Organization (CDSCO) and sponsored by World Health Organization (WHO).
2. Advance training workshop in Vigiflow™, 23 February 2011. Organized in collaboration with Central Drugs Standard Control Organization (CDSCO) and Upsala Monitoring Center (UMC), Sweden.
3. National Consultation Meeting for revision of National Essential Medicines List, 3–4 December 2010. Organized in collaboration with Central Drugs Standard Control Organization (CDSCO).
4. National Workshop on Research Methodology, 16–21 August 2010. Sponsored by Department of Science and Technology (DST).
5. National Workshop on Research Methodology for Women Scientists, 23–28 August 2010. Organized in collaboration with Department of Science and Technology (DST).

Professor Y. K. Gupta was Elected President, Society of Toxicology, India, 2010–12; Chairman, Working Group of High Powered Inter-Ministerial Coordination Committee to look into the matters of implementation of government commitment to provide quality medicine at affordable prices. Department of Pharmaceuticals, Ministry of Chemicals and Fertilizers; Expert core committee on National list of Essential Medicines, DGHS, Ministry of Health and Family Welfare; Scientific Advisory Committee: National Institute of Occupational Health, Ahmedabad, ICMR; Institutional Ethics Committee, Institute of Nuclear Medicine and Allied Science (INMAS), DRDO, Ministry of Defence; National GLP Technical Committee, DST; Expert committee on Clinical Medicine and Pharmacology, Indian Pharmacopoeia Commission, Ministry of Health and Family Welfare; Institutional Animal Ethics Committee. AIIMS; Equivalence committee, Medical Council of India (MCI); Editor (Pharmacology), Indian Journal of Physiology and Pharmacology; Member, Board of Specialty in Pharmacology. MCI; Co-opted member, Board of Studies, Department of Clinical Research. Faculty of Allied Health Sciences, Jamia Hamdard; Institutional Review Board, National Institute of Health and Family Welfare; Board of Studies, Department of Medical Education and Toxicology, Jamia Hamdard; Dean's Committee, AIIMS; Scheme under XI Five Year Plan for Studies on Identification and Characterization of Drugs, Fibres, Paints and Poisons, LNIN National Institute of Criminology and Forensic Science; Expert Group on Prevention, Abatement and Control of Pollution, Ministry of Environment and Forests; Expert Group of Safety of consumption of vegetable juices with special reference to lauki (white gourd) juice, ICMR; High Powered Committee on Global Environment Change and Health, ICMR; Committee for Examining Alleged irregularities in conduct of studies using HPV vaccine, Ministry of Health and Family Welfare; Governing Body: Central Council of Research in Ayurveda and Siddha. Dept of AYUSH, Ministry of Health and Family Welfare; Governing Body: Central Council of Research in Homeopathy. Department of AYUSH, Ministry of Health and Family Welfare; Scientific body of Indian Pharmacopoeia Commission; Scientific Advisory Committee. CCRAS, Department of AYUSH, Ministry of Health and Family Welfare; Institutional Ethics Committee for Human Research. AIIMS; ICMR-NIF (National Innovation Foundation) Initiative Committee for Planning commission in 11th five year plan. Indian Council of Medical Research; National Committee of IUNS-IUPS-IUPHAR, Indian National Science Academy; Core Group for National Guidelines on Chemical Disaster Management, National Disaster Management Authority; Group to advise Regulation of Manufacture and Import of Multi-use Insecticides, Group on Simplification of Registration Procedure of Multi-use Insecticides, Central Insecticides Board and Registration Committee, Directorate of Plant Protection, Quarantine and Storage, Department of Agriculture and Cooperation, Ministry of Agriculture; Advisory Committee: ICMR for preparing medicinal plants monographs on selected diseases of public health importance; The Project Review Committee: DST of Indo-Foreign Collaboration; Project Review Committee, ICMR; Project Review Committee, Centre Council for Research in Ayurveda and Siddha. Department of AYUSH, Ministry of Health and Family Welfare; Project Review Committee, Centre Council for Research in Homeopathy, Department of AYUSH, Ministry of Health and Family Welfare; Project Review Committee: for Centre Council for Research in Unani Medicine, Department of AYUSH, Ministry of Health and Family Welfare; Management Committee of Vishram Sadans, AIIMS; Institutional Ethics Committee (IEC), Indian Council of Medical Research; Expert Committee to examine continued marketing of certain drug formulations reported to be prohibited or restricted in other countries, Director General of Health Services, Central Drugs Standard Control Organization, Government of India.

Dr S.K. Maulik is Fellow of Pulmonary Vascular Research Institute, UK

Dr Jatinder Katyal is Editorial Board Member, Asian Journal of Medical Sciences.

Dr Surender Singh is Associate Editor, Indian Journal of Physiology and Pharmacology; Member, Pharmacopoeia's Committee (Unani) and Project Evaluation Committee, CCRUM, Department of AYUSH, Ministry of Health and Family Welfare, Government. of India; Inspector, National GLP Monitoring Compliance Authority, DST, Government of India

VISITING SCIENTISTS

1. Prof. Socorro Vanesca Frota Maderia, Brazil delivered a lecture on “Anti-hypertensive effects of latex proteins of *Calotropis procera*” on 28 October, 2010.
2. Prof. Cristina Paiva da Silveira Carvalho, Brazil delivered a lecture on “Anti-inflammatory properties of latex proteins and Callus proteins of *Calotropis procera*” on 30 October, 2010.

9.29 Physical Medicine and Rehabilitation

Professor and Head

U. Singh

Professor

Sanjay Wadhwa

Additional Professors

S. L. Yadav

Gita Handa

EDUCATION

The 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. The department provides MD (PMR) training to PG students, besides orientation training of MHA, MD (Community Medicine, Paediatrics, Medicine), MS (Orthopaedics), DM (Neurology and Pediatric Neurology) students, WHO Fellows and postgraduate Nursing students.

Lectures delivered by Faculty and Staff in CME/Conferences: 9

RESEARCH

Collaborative Projects

1. Skeletal muscle strength including its energy metabolism, bone mineral homeostasis and Th1/Th2 cytokines expression in Asian Indians with chronic hypo-vitaminosis D before and after oral cholecalciferol supplementation (Endocrinology and Metabolism).
2. Synergy based Adaptive Prosthesis for Transfemoral Amputee. (Indian Institute of Technology, Delhi)

PUBLICATIONS

Journals : 4

PATIENT CARE

Facilities available

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, electro physiology lab, minor OT, etc.

New Cases

OPD	14922
Prosthetic and Orthotic	4159
Total	19081

Old Cases

OPD	12044
OPD visits – PT section	21687

OPD visits – OT section	23584
OPD visits- MSW	7285
OPD visits-Vocational Counselor	1523
Disability Evaluation Clinic	173
Railway Concession certificates	457
Prosthetic and Orthotic	15758
Minor OT procedures	2358
Total	84869

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Faculty and residents participated in different camps at Srikrishna Janambhumi Mandir at Mathura.

Professor U. Singh is Member, Sub-Committee on Locomotor, Leprosy Cured, etc., of Rehabilitation Council of India, Ministry of Social Justice and Empowerment; Executive Council and Academic Committee, National Institute for the Orthopaedically Handicapped, Kolkata; BIS, Rehabilitation Appliances and Equipment for Disabled Sectional Committee (MHD 10); Advisory Committee to monitor upgradation of facilities in the departments of PMR in medical colleges, DGHS, Ministry of Health and Family Welfare; Research Committee, Guru Nanak Dev University, Amritsar; Curriculum committee, PMR, Medical Council of India; monitoring committee for implementation of Disability related schemes of MOSJE; Prevention Committee for Spinal Cord Injuries, International Spinal Cord Society; Chairman, Expert Committee, Upgradation of facilities in Departments of Physical Medicine and Rehabilitation in Medical Colleges, DGHS, Ministry of Health and Family Welfare; Scientific Committee, 4th Annual Conference of IPARM, AIIMS, 11 April 2010; Organizing Chairperson and Chair, CME Session I, Rheumatic Musculoskeletal Disorders, 39th Annual National Conference of IAPMR, New Delhi, 4–6 February 2011; Specialty Board, Physical Medicine and Rehabilitation, Medical Council of India; Scientific sessions during the 49th Annual Scientific Meeting of the International Spinal Cord Society, ISIC, New Delhi. Consulting editor and reviewer, Journal of Rehabilitation Council of India Locomotor and Associated Disabilities; Indian Journal of Physical Medicine and Rehabilitation; Editorial Board Member, Indian Journal of Physiotherapy and Occupations Therapy; Honorary member, editorial board, International Journal of BioSciences and Technology (IJBST). Inspector, Medical Council of India and National Board of Examinations; Expert for live phone in programme on ‘Arthritis’ and ‘Paralysis’ in ‘Total Health’, 1 August 2010 and 20 February 2011, DD News Channel.

Dr Sanjay Wadhwa is Honorary Secretary, National Academy of Medical Sciences (India); Nominated Member of the Faculty of Medicine, Baba Farid University of Health Sciences, Faridkot, February 2011–January 2012; Member, Faculty of Sports Medicine and Physiotherapy, Guru Nanak Dev University, Amritsar, 4 August 2010; Publication Advisory Committee, NAMS (India); Academic Council, Saket College of Physiotherapy, Chandimandir; Faculty, Indo-US Stroke Conference, PGIMER, Chandigarh, 9–10 December 2010; Member, Selection Committee for recruitment of Principal and Associate Professor, 11 February 2011, Saket College of Physiotherapy, Chandimandir, Panchkula; Selection Committee, External Expert, for appointment to post of Assistant Professor in Physical Medicine and Rehabilitation, PGIMER, Chandigarh, 28 February 2011; President, Indraprastha Association of Rehabilitation Medicine (IPARM), 2011–2013; Editor, IAPMR Bulletin, 2011–2013; Annals of the National Academy of Medical Sciences; Chairman, Organizing Committee and Reception Committee, 4th Annual Conference of IPARM, AIIMS, New Delhi, 11 April 2010; Venue Medical Officer, Awarded Medal and Certificate of Appreciation for contributions towards Medical Care during Commonwealth Games 2010; Leader of a Team of Experts at Gorakhpur in preparation of comprehensive Rehabilitation Plan for JE/AES disabled, March 2011; Vice-President, Indraprastha Association of Rehabilitation Medicine, till mid-March 2011; delivered Public Lecture on ‘Back Pain’, AIIMS, New Delhi, August 2010.

Dr Gita Handa filed 2 provisional patents at Stanford as a part of the working team and 1 provisional patent as a part of team at Stanford India Biodesign programme; Awarded Stanford India Biodesign Fellowship 2010; attended Stanford University as Visiting Associate Professor, January 2010–June 2010; Worked on a project from above patents as a team member which won First Prize at a Business competition at Stanford; Advisor, UPSC Interview Board; Executive Committee member, IPARM, 2011–2013. Organising committee member, IAPMRCON 2011, RML Hospital 4–6 February 2011; Chairperson, Prevention of SCI- Road Traffic Crashes, 30 October 2010, 49th International Spinal Cord Society (ISCoS), 9th Asian Spinal Cord Network (ASCoN), and 10th Spinal Cord Society Annual Scientific Meeting, New Delhi, 29–31 October 2010.

9.30 Physiology

Professor and Head

J. Sengupta

Professors

R. Mathur

K. K. Deepak

H. N. Mallick
(on leave till 16.9.2010)

D. Ghosh

S.C. Mahapatra

Additional Professors

K.P. Kochhar

S. Jain
(w.e.f.1.7.2010)

A. K. Jaryal
(w.e.f.1.7.2010)

Associate Professors

R. Sharma
R. K. Yadav

N. Mehta
A. Talwar

Assistant Professor

S. K Sood
(on leave till 23 August 2010)

EDUCATION

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.

The department provided short-term training for 7 days (7 March 2011 to 13 March 2011) to a PhD student, Department of Biochemistry, Postgraduate Institute of Medical Education and Research, Chandigarh; 6 months (3 February 2011 to 30 June 2011) to a MSc. (Biotech) student, Mewar Institute of Management, Ghaziabad; 2 weeks (27 September 2010 to 8 October 2010) to two doctors from Myanmar sponsored by World Health Organization, New Delhi; 10 days (6 December 2010 to 16 December 2010) to Associate Professor, Sinhgad Dental College and Hospital; one month (1 July 2010 to 30 July 2010) to Biotechnology III year student, Jacob School of Bioengineering and Biotechnology, Allahabad; 2 months (21 May 2010 to 20 July 2010) to a student, Department of Biochemistry, Jamia Hamdard University, New Delhi; 1 month (21 May 2010 to 20 July 2010) to a student, Department of Biochemistry, Jamia Hamdard University, New Delhi; one month (18 June 2010 to 17 July 2010) to a student, Career Institute of Technology and Management; 1 month (16 June 2010 to 15 July 2010) to a student, Career Institute of Technology and Management; 1½ months (17 May 2010 to 30 June 2010) to a student, Calcutta University; 4 weeks (8 June 2010 to 7 July 2010) to a student, Jaypee University of Information Technology, Khandaghat; 1 month (1 June 2010 to 30 June 2010) to a B. Tech (Biotechnology) student from Sam Higgin Bottom Institute of Agriculture, Technology and Science, Allahabad; 4 weeks (3 May 2010 to 29 May 2010) to Associate Professor, Department of Physiology, SMS Medical College, Jaipur; and 2 months (19 January 2010 to 17 March 2010) to a student, Pramukhswami Medical College, Karamsad, Gujarat.

Lectures delivered CME/Workshop/National and International Conferences: 37

RESEARCH

Funded Projects

Ongoing

1. Understanding endometriosis – proteomics strategy J. Sengupta. Department of Science and Technology, Ministry of Science and Technology, 31 March 2010–30 March 2013. Rs 35,00,000.

2. Modulation of the activity of barosensitive and chemosensitive neurons in nucleus tractus solitarius by medial preoptic area stimulation in rats. A.K. Jaryal. Funded by Department of Science and Technology, Ministry of Science and Technology, 29 December 2009–28 December 2012. Rs 34,83,000
3. Endometrial receptivity for blastocyst implantation in the primate: Systems biology approach. D. Ghosh. Ministry of Science and Technology, Department of Science and Technology, 18 December 2009– 17 December 2012. Rs 34,10,000.
4. Role of human chorionic gonadotropin in endometrial receptivity for pregnancy establishment. J. Sengupta. Department of Science and Technology, Ministry of Science and Technology, 28 November 2008–27 November 2011. Rs 33,89,400.
5. Event related evoked potential studies in dyslexics. S. K. Sood, Department of Science and Technology, Government of India, January 2009–December 2011. Rs 32,45,600.
6. Motor and cognitive behaviour in 6-hydroxydopamine (6-OHDA) adult rat model of Parkinson's disease following magnetic field exposure and implantation of ferromagnetic nanoparticles. S. Jain. Department of Science and Technology, August 2009–August 2012. Rs 26,18,920
7. Efficacy of Yoga and dietary management in sedentary overweight subjects with regard to markers of endothelial dysfunction, obesity and diabetes. R.K. Yadav. Central Council for Research in Yoga and Naturopathy, Ministry of Health and Family Welfare, Government of India, December 2009–December 2012. Rs. 23,00,000.
8. To study the effect of repeated magnetic stimulation on sensori-motor recovery in spinal cord injured patients. R. Mathur. Department of Science and Technology, 19 January 2009–18 January 2011. Rs. 19,88,140.
9. Effect of bone marrow stromal cells transplantation and magnetic stimulation in the sensory-motor functional recovery of spinalised rats'. R. Mathur. Indian Council of Medical Research, 1 January 2008–9 January 2011. Rs. 16,05,952 .
10. The role of proteomic approach and biomarkers in the diagnosis of endometriosis. R.K. Yadav. by Council of Scientific and Industrial Research, January 2008–January 2011. Rs. 16,00,000.
11. Immunomodulatory effects of Tulsi (*Ocimum sanctum* Lin) extracts on healthy human subjects. S.C. Mahapatra, Central Council of Research in Ayurveda and Siddha, New Delhi, August 2007–January 2011. Rs. 14,92,419.
12. Psychoneuroimmune effects of meditation: an evaluation by PET and biochemical markers R.K. Yadav. Funded by Department of Biotechnology, February 2008–February 2011. Rs. 14,00,000.
13. Effect of prenatal chronic auditory stimulation on expression of synaptic proteins in the visual wulst of domestic chicks (*Gallus domesticus*.) S. Jain. Institute research grant, May 2010–March 2011. Rs. 1,00,000.
14. Cognition induced changes in brain oscillations. R. Sharma. Institute research grant, April 2009–March 2011.: Rs. 1,00,000.
15. To study the effect of *Ocimum sanctum* (Tulsi) leaf extract on Event related potentials in healthy adults. A. Talwar. Funded by Institute research grant, April 2009–March 2011. Rs. 1,00,000.
16. Cognition induced changes in brain oscillations. R. Sharma. Institute research grant, April 2009–March 2011. Rs. 1,00,000.

Completed

1. Elucidating endometriosis using genomic strategy. J. Sengupta. Department of Biotechnology, 29 March 2008–30 September 2010. Rs. 1,66,94,000.
2. Development of blood flow variability (BFV) software using impedance plethysmography technique and derivation of BFV–BPV relationship. A. K. Jaryal. Department of Information Technology (DIT), Ministry of Communication and Information Technology, 5 November 2008–5 November 2010. Rs. 29,00,00.

3. Prenatal auditory sound stimulation: effect on spatial memory and expression of synaptic proteins in chick hippocampus. S. Jain. Council of Scientific and Industrial Research, August 2006–August 2009. Rs 14,34,398.
4. 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. H.N Mallick. Indian Council of Medical Research, 2007–2010 Rs 5,00,000.
5. Behavioural development of visual system following prenatal chronic auditory stimulation in chicks (*Gallus domesticus*). S. Jain. AIIMS research grant, May 2009–March 2010. Rs 1,00,000.

Departmental Projects

Ongoing

1. Study of chronic exposure to magnetic field on pain status of fibromyalgia patients.
2. Effect of magnetic field on behavioural, electrophysiological and neurochemical correlates of pain in rats exposed to 3G frequency band.
3. Influence of spinal cord injury on ventromedial hypothalamic functions: role of magnetic field.
4. Respiratory modulation of cardiac and vascular oscillations using breathing maneuvers based on pranayama.
5. Study of antimicrobial properties and immunomodulatory effects of Tulsi (*Ocimum sanctum* Linn.) extract.
6. Effect of trace amounts of dietary gluten on nutritional, clinical, serological, biochemical and histological parameters of pediatric patients with celiac disease.
7. Respiratory modulation of cardiac and vascular oscillation using patterned breathing maneuvers based on pranayama.
8. Assessment of vascular function before and after renal transplantation.
9. Evaluation of reflexology as an adjunctive therapy in children with west syndrome.
10. Evaluation and correlation of cerebrovascular reactivity and systemic vascular reactivity with insulin resistance in type- diabetics.
11. Study of serial changes in heart rate variability in children between 2 to 15 years of age presenting with Guillain Barre syndrome.
12. Assessment of vascular functions before and after renal transplantation.
13. Assessment of arterial stiffness indices in obese children.
14. Assessment of arterial stiffness indices in women with Polycystic ovarian disease.
15. A RCT to determine a gluten threshold for paediatric patients with celiac disease.
16. Effect of magnetic field exposure and enriched environment on 6-hydroxydopamine rat model of Parkinson's disease.
17. Effect of selective and automatic attention on prepulse modulation of startle reflex.

Completed

1. A study of heart rate variability, blood pressure variability, baroreflex sensitivity and arterial stiffness in chronic kidney disease stages 4 and 5 in Indian population.. (Nephrology, AIIMS).
2. Non-invasive assessment of vascular function in patients with chronic endogenous hypercortisolism (Endocrinology).
3. Effect of chronic endogenous hypercortisolism on vascular endothelial function in cushing Syndrome patients.

Collaborative Projects

Ongoing

1. Purglautation of human adult retinal pigment epithelial (GRPE) cells in the 6-OHD and lesioned rat model of Parkinson's disease (PD) (Neurology).
2. Requirement of isoflurane and vecuronium in diabetic patients with and without autonomic neuropathy undergoing elective surgery; as determined by entropy and neuromuscular monitor respectively. (Anesthesiology).
3. To study the effect on glycemic control, oxidative stress markers quality of life in patients of diabetes mellitus with sudarshan kriya yoga and pranayama. (Endocrinology).
4. Influence of prenatal chronic noise exposure on brain stem auditory nuclei, hippocampus and spatial memory in chicks (Anatomy).
5. Isoflurane and vecuronium dose requirement in diabetic patients with and without diabetic auto neuropathy undergoing elective surgery; as determined by entropy and neuromuscular transmission (NMT) monitoring – blinded study. (Anaesthesia).
6. Psychoneuroimmune effects of meditation: an evaluation by PET and biochemical markers (Nuclear Medicine)
7. The role of proteomic approach and biomarkers in the diagnosis of endometriosis (Obstetrics and Gynaecology).
8. Evaluation of Masseter and Temporalis muscle EMG activity in a group of children having midface deficiency during maxillary protraction therapy (Orthodontics, Centre for Dental Education and research (CDER)).
9. Prospective study to evaluate the impact of bariatric surgery on glucose metabolism: Comparison of Laproscopic RouX en Y gastric bypass and laproscopic sleeve gastrectomy (Surgical disciplines).
10. Evaluation of dehydroepiandrosterone (DHEA) therapy as an adjunct to gonadotrophins for ovulation induction in premature ageing (Obstetrics and Gynecology).
11. Prediction of preterm delivery by detection of fetal fibronectin in cervicovaginal secretions (Obstetrics and Gynecology)
12. Assessment of exercise capacity in Chronic obstructive pulmonary disease (Medicine).
13. Assessment of endothelial function in overlap syndrome (Medicine).
14. Effect of priming on stroop task performance using event related functional magnetic resonance imaging (Nuclear Magnetic Resonance).
15. Effect of deep brain stimulation of the subthalamic nucleus on Bereitschafts Potential in Parkinson's disease (Neurology).

Completed

1. Study of eye movement abnormalities in patients of young onset Parkinson's Disease, Neurology, AIIMS.
2. Assessment of cognitive functions, pre and post renal transplantation in patients of chronic kidney disease on maintenance hemodialysis, Nephrology, AIIMS.

PUBLICATIONS

Journals: 25

Abstracts: 13

Chapters in books: 4

Books: 2

PATIENT CARE

1. Neurophysiology Research Laboratory offered objective assessment of pain and pain modulation status by a battery of electro physiological and biochemical tests for select, referred patients of chronic pain. 32 patients (fibromyalgia) were assessed during the year. Relief in pain was successfully provided by transcranial magneto therapy.

2. Cytokine assays for VEGF and total protein from follicular samples of 47 subjects undergoing IV-ET treatment in the Department of Obstetrics and Gynecology, AIIMS, were performed using EIA technique at the departmental biochemistry laboratory. The data were returned to the referring department for subsequent analysis and management.
3. Autonomic function lab and vascular function lab provide diagnostic facility for referred patients. The laboratory provides routine test of autonomic reactivity along with autonomic tone quantification and non-invasive recording of gastric motility (electrogastrography, EGG). A total number of 765 humans have been tested for autonomic function test this year, which included 687 patients.
4. Intra-operative monitoring of spinal cord: The department of physiology is providing support to the orthopedic department for monitoring of integrity of spinal cord during corrective surgeries for kypho-scoliosis. (15 patients)
5. Integral Health Clinic (IHC) is a centre of mind body medicine. IHC is an outpatient facility which is used not only for therapeutic gains but also as part of a developing health consciousness. A total of 318 (three hundred and eighteen) subjects (including patients of chronic diseases and healthy subjects) were enrolled and benefited at IHC during the year 2010–2011. Additionally, the IHC facility was regularly used by the department of lab medicine, AIIMS, for their research project.

The department provides central facilities for the following.

- i) Autonomic Function and Vascular Function;
- ii) Confocal Imaging;
- iii) Biochemistry;
- iv) Molecular Biology;
- v) Pain modulation status;
- vi) Transcranial magneto therapy for chronic pain patients;
- vii) Integral Health Clinic;

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Professor J. Sengupta was Expert, 11th DST Programme Advisory Committee in Health Sciences Meeting, 9–10 April 2010, Bangalore, and 14th DST Programme Advisory Committee in Health Sciences Meeting, 24–26 February 2011, Chennai; Expert, DST Expert Committee Meeting, 27 July 2010, V.P. Chest Institute, New Delhi, for evaluating the DST research proposal; Expert member and Organized DST Programme Advisory Committee in Health Sciences on 28–29 June 2010, AIIMS.

Professor R. Mathur was Expert, Postgraduate Board of Studies in Physiology, Pt. B.D. Sharma University of Health Sciences, Rohtak; Member, Board of Studies, Department of Physiology, Aligarh Muslim University, Aligarh.

Professor K. K. Deepak was Member, Education Committee, International Union of Physiological Sciences (IUPS); Prof-In-Charge, KL Wig Center for Medical Education and Technology; Member, Advisory Committee, Central Board of Secondary Education (CBSE); Member, Committee for Undergraduate MBBS curriculum and Postgraduate (MD Physiology) curriculum of Medical Council of India (MCI); ‘Item Bank Administrator’ for IDEAL Consortium, till 14 September 2010, University of Dammam; Prepared detailed document on ‘Policies and Procedures for Examination’ for University of Dammam, Saudi Arabia; Member, Academic Council, Sports Authority of India (SAI), Netajee Subhash National Institute of Sports (NSNIS), Patiala; ‘Judge’ for poster session on ‘Cardiovascular and Respiratory’ theme, 56th National Annual Conference of Association of Physiologist and Pharmacologist of India’ (APPICON 2010), 22–24 December 2010; Ph.D thesis examiner for Biomedical Engineering for Dr Bhim Rao Ambedkar National Institute of Technology, Jalandhar, and Indian Institute of Technology, Bombay; Expert member, Peer review committee for Eleventh Five-year Plan Project ‘Human Performance Enhancement under different

Operational Environments', DIPAS, DRDO; Expert member of Search-cum Peer Review Committee in Central Council for Research in Yoga and Naturopathy (CCRYN); Member Store Purchase Committee, AIIMS; Member, advisory committee for theme meeting on advanced application of physiological variability-2010, Bhabha Autonomic Research Centre, Mumbai; Member, editorial board, International Journal of Yoga, India; Member, Advisory board of journal Health Renaissance, BPKIHS, Nepal; Editorial Board Executive, Al-Ameen J of Medical Sciences, India; Reviewer for Indian Journal of Medical Research, Journal of Postgraduate Medicine, International Journal of Yoga, Medical Education, Medical Teacher; Conducted Symposium 'Autonomic and Vascular Function Testing', 56th National Annual Conference of Association of Physiologists and Pharmacologist of India (APPICON 2010), Swangi, Wardha, Maharashtra, 22–24 December 2010.

Professor H. N. Mallick delivered a talk on Science day at DIPAS on 'Reemergence of preoptic area in sleep regulation'; Elected Chair, Scientific Committee of Asian Sleep Research Society for 2009–2012, and General Secretary of the Indian Society for Sleep research; Finance Secretary, Associations of Physiologists and Pharmacologists of India; Organized 'National Sleep Medicine Course 2010', Thiruvananthapuram, December 2010; Workshop on 'Basics of Polysomnography', AIIMS, New Delhi, 11 July 2010.

Professor S.C. Mahapatra, Chaired the XII meeting of Institutional Animal Ethical Committee, CIL, Faridabad on 28 February 2011; President, Delhi Chapter of Association of Physiologists and Pharmacologists; Paper 'Effects of *Tulsi* (*Ocimum sanctum* Linn) on immune parameter of healthy volunteers' co-authored by him received UK–India Science Bridge fellowship 2010 for oral presentation in UK-PharmSci-2010 conference, University of Nottingham.

Dr A. K. Jaryal organized workshop 'Autonomic and Vascular Function Testing' at the 56th National Annual conference of Association of Physiologists and Pharmacologist of India (2010), Swangi, Wardha, Maharashtra: 22–24 December 2010.

Dr S. K. Sood was visiting faculty at King Faisal University, KSA 24 August 2009 to 24 July 10. During his stay there, he started PBL neuroscience; established clinical neurophysiology laboratory, established student biopac laboratory; organized no smoking campaign during WHO, no smoking day, started student projects. Invited by 'IBRO-APRC School of NeuroImaging', 29 November–10 December 2010 for talk on 'Neural Correlates of Conflict: A Functional Magnetic Resonance Imaging Study'; Organised talk by Prof R.L.Bijlani for receiving 'Life Time Achievement Award' APPICON 2010 'What is life for anyway?', 23 March 2011.

Professors Sengupta and Ghosh organized workshop 'Micro-array and Gene-Regulatory Network' in School of Medical Sciences and Technology, at Indian Institute of Technology, Kharagpur; 13–14 September 2010; and. 'Workshop on Proteomics' 16–18 September 2010.

VISITING SCIENTISTS

Dr Deepak Shrivatava, Professor of Pulmonary Medicine, UC Davis, Davis, USA. Talked on 'Understanding ventilator graphics', 8 December 2010 and Dr Sunao Uchida, Professor of Sports Psychiatry, Waseda University, Japan, visited the department, 8–15 December 2010. Prof. R.L.Bijlani talked on 'What is life for anyway?' during APPI Delhi Chapter meeting, 23 March 2011, All India Institute of Medical Sciences, New Delhi.

9.31 Psychiatry

Professor and Head

Rajat Ray

Professor

S.K. Khandelwal

R.K. Chadda

Manju Mehta
Pratap Sharan

Additional Professor

Rajesh Sagar

Associate Professor

Nand Kumar

Mamta Sood

EDUCATION

The faculty takes 44 hours of lectures for MBBS students. In addition these students are posted (clinical posting) in the department for 60 days. The department also provides 38 hours of teaching for BSc Nursing students. For the department's MD (Psychiatry) and PhD (Clinical Psychology) and PhD (Addiction Medicine) scholars, the following academic programmes are held.

- 1 Journal discussion once every week
- 2 Seminar once every week
- 3 Case Conference once every week
- 4 Faculty/Staff presentation once every week besides CCR and CGR in every semester
- 5 Psychotherapy supervision for postgraduate psychiatry and doctoral level clinical psychology students.
- 6 Supervision of consultation–liaison training for junior residents in Psychiatry.
- 7 Regular undergraduate teaching and assessment of medical undergraduates in CRHSP, Ballabgarh.

Continuing Medical Education

Mid Term CME Programme, Indian Psychiatric Society – North Zone, 1 August 2010 (Dr R. K. Chadda – Chairperson, Organizing Committee)

Lectures delivered in CME/National and International conferences: 32

RESEARCH

Funded Projects

Ongoing

1. Development of pharmacogenomics SNP database for critical candidate genes involved in drug response for Schizophrenia. R.K. Chadda, M. Sood. Funded by DBT for 2 years (2008–2010). Funds: Rs 2.70 lakhs for AIIMS site.
2. Formative field studies for revision of International Classification of Diseases (Chapter V). P. Sharan. Funded by World Health Organization for 3 years (2010–2012). Funds: Rs 1.5 lakhs.
3. Cross-cultural development of a Depression Identification Instrument for SEARO. P. Sharan, R. Sagar. Funded by World Health Organization – South East Asia Regional Office for 2 years (2010–2011). Funds: Rs 10 lakhs.
4. Supervision and preparation of a technical report of the Depression Identification Instrument – Phase V. P. Sharan. World Health Organization – South East Asia Regional Office for 2 years (2010–2011). Funds: Rs 1.6 lakhs.
5. Review of Feasibility of community based project on psychosis. R. Sagar, P. Sharan. World Health Organization – South East Asia Regional Office for 2 years (2010–2011). Funds: Rs 2.3 lakhs.

- Data analysis, interpretation of data and preparation of a technical report for SEARO Depression Project—Phase III. R. Sagar. Funded by WHO-SEARO for 2 years (2010–2011). Funds: Rs 1.6 lakhs.
- Neuro-cognitive study and use of functional magnetic resonance imaging (fMRI) in patients having major depressive disorder and mania. R. Sagar. Funded by DST for 2 years (2009–2011). Funds: Rs 38 lakhs.
- Review of feasibility of community based project on wellbeing in children. R. Ray, A. Dhawan, M. Mehta, P. Sharan. Funded by WHO-SEARO for 2 years (2010–2011). Funds: Rs 2.3 lakhs.
- Effects of the breathing technique (SKY) with standard treatment on depressive disorder patients in comparison to standard treatments alone. N. Kumar, R. Sagar. Funded by Indian Council of Medical Research for 2 years (2009–2011). Funds: Rs 11 lakhs.

Completed

- Validation of Depression Identification Instrument in a primary care population. P. Sharan, R. Sagar. Funded by World Health Organization – South East Asia Regional Office for 2 years (2008–2010). Funds: Rs 3.5 lakhs.
- Supervision and preparation of a technical report of the Depression Identification Instrument – Phase III. P. Sharan, R. Sagar. Funded by World Health Organization – South East Asia Regional Office for 2 years (2008–2010). Funds: Rs 3.2 lakhs.

Collaborative Projects

Ongoing

- Multicentre study on prevalence and phenomenology of functional somatic symptoms in depression. R.K. Chadda. Funded by Indian Psychiatric Society for 2 years (2009–2011).
- Initial Tryout of Passively Received Experience Scale (PRE) on Hindi speaking population (with International Center of Mental Health Policy and Economics, Milano, Italy (P. Sharan).
- A study of neurochemistry of anterior cingulate cortex, caudate nucleus and medial thalamus by proton magnetic resonance spectroscopy in patients with OCD versus their first degree relatives and healthy controls (Department of Nuclear Magnetic Resonance) (P. Sharan).
- Phenomenology of Dhat syndrome (with Centre for Community Medicine) (P. Sharan).

Completed

- Assessment of health related quality of life after ileal pouch anal anastomosis in ulcerative colitis (with Department of Gastrointestinal Surgery) (P. Sharan).

PUBLICATIONS

Journals: 41

Books/Chapter in Books/Monographs/ Proceedings: 20

PATIENT CARE

OPD and Specialty Clinics Attendance	New Cases	Old Cases	Total
Walk in Clinic	12129	29631	41760
Detailed Assessment	1818	-	1818
Specialty Clinics			
Child Guidance	518	569	1087
De-Addiction Clinic	147	1542	1689
Total	14612	31742	46354
Grand Total	18126	97448	115574

Total Admission (Psychiatry):

323

Laboratory Investigations for Patient Care:

Total Number of Serum Lithium levels: 1262

AWARDS AND HONOURS AND SIGNIFICANT EVENTS

Professor Manju Mehta is a member of the Planning and Monitoring Board of National Institute of Mental Health and Neurosciences Bangalore. She participated in the RCI Inspection of the Department of Mental Health and Social Psychology, NIMHANS, Bangalore (7–8 April 2010), and the meetings of Academic Advisory Committee for Centre or Health Psychology of the University of Hyderabad (18 August 2010 and 11 February 2011). She served as a member and as an examiner for the Board of Studies at the Barkatullah University, Bhopal.

Professor S. K. Khandelwal chaired symposia entitled “Transcranial Magnetic Stimulation: Basic Understanding and Experience at AIIMS” and “Management of Dementias” at the Annual National Conference of Indian Psychiatric Conference (New Delhi, January 2011). He organized several workshops on Cognitive Behaviour Therapy (AIIMS, New Delhi, August 2010; Chhatrapati Sahuji Maharaj Medical University, Lucknow, November, 2010; Annual Conference of Indian Psychiatric Society – North Zone, Ludhiana; October, 2010; National Conference of Indian Psychiatric Society, New Delhi, January 2011). He is the chairman for several committees like Awards Committee of the Indian Association for Social Psychiatry; Task Force on Non-pharmacological Interventions in Psychiatry of Indian Psychiatric Society; Scientific Committee of the Annual Conference of Indian Psychiatric Society; and the National Board for the Richmond Fellowship Society for Mental Health. He is a member of the Executive Council of the Institute of Human Behaviour and Allied Sciences (IHBAS). He was the co-chair of the Organizing Committee for the 10th Biennial Conference of Indian Association for Child and Adolescent Mental Health. On behalf of the National Board of Examinations and the Medical Council of India he inspected medical institutions offering MD and DNB Psychiatry courses.

Professor R. K. Chadda is a Member of the Committee constituted by DGHS to revise the State Mental Health Rules. He was part of Consultative Group of MOH and FW to discuss amendments in MHA 1987 (Chandigarh, 12 July 2010 and 11 March 2011). He was appointed the Secretary General (Till November 2010) and then elected the President of the Indian Association for Social Psychiatry. He Co-chaired a session in Indian Psychiatric Society Task Force on Mental Health Legislation (2010–12) and served as the Awards Committee Chairperson for the Indian Psychiatric Society – North Zone (2007–2011). He is the Chairperson of the Accreditation Committee for Opioid Substitution Centres, National Accreditation Board for Hospitals and Healthcare Providers (NABH)

Quality Council of India; and was appointed the MCI Coordinator for Inspection of Medical College. He also coordination of the scientific programme of the XVII National Conference of the Indian Association for Social Psychiatry (Kochi, 19–21 November 2010) and organized the Community Awareness Symposium on ‘Mental Health Services’ on 10 October 2010 for the World Mental Health Week at AIIMS, New Delhi.

Professor Pratap Sharan served as an Advisory Board Member, WHO International Advisory Group for the Revision of ICD-10 Mental and Behavioural Disorders. He was elected as the Vice President and President Elect of the Indian Association of Child and Adolescent Mental Health (2009–2011). He has been appointed as a Working Committee Member of the National Medical Journal of India. He is a Peer reviewer for Lancet, Emotion, Comprehensive Psychiatry, Journal of Affective Disorders (International), and National Medical Journal of India (Indexed). He chaired the symposium entitled “Maternal Mental Health,” in the Mid Term CME for Indian Psychiatric Society – North Zone, (August 2010) and in the XVII National Conference of the Indian Association for Social Psychiatry, (Cochin, November 2010). He participated in a Workshop on Dialectical Behavior Therapy at the XIIth International Society for the Study of Personality Disorders Congress (Melbourne, Australia, March 2011) and in the WHO Meeting of the 2009 – 2010 Advisory Group for the Revision of ICD-10 Mental and Behavioural Disorders (Geneva, Switzerland, February 2011). He has been appointed as reviewer for PhD thesis from Calicut University, MD (Psychiatry) thesis from Delhi University and National Institute of Mental Health and Neurosciences (NIMHANS), Bangalore.

Dr Rajesh Sagar is the Editor of the Journal of the Indian Psychiatry Society – North Zone and the Associate Editor of the Journal of the Indian Association for Child and Adolescent Mental Health. He is the convener of the National Task Force on Legislation of the Indian Psychiatry Society and the Specialty Advisory Board in Psychiatry for DNB of the National Board of Examinations. He is a member of the Expert Committee for the PG Diploma on Counseling and Family Therapy of IGNOU. He was called as an Expert to various meeting, e.g., to brief Hon’ble Minister of Health and Family Welfare on parliament question on mental health (April 2010), World Mental Health Survey Consortium Annual Meeting as the India Co-ordinator (Lisbon, Portugal, July 2010, Knowledge Capture Workshop’ for Good Practices around community based mental health models in India organized by National Alliance on Access to Justice for Persons living with Mental Illness (August 2010), Million Death Study (MDS) Suicide Advisory Group meeting organized by Global Mental Health, PHFI (August 2010), National Protocol Finalization Workshop cum Technical Advisory Group Meeting for study titled ‘Neuro-developmental disabilities among children in India: An INCLEN study’ (August 2010), 8th International Human Ethics Committee Meeting of National Brain Research Centre (September 2010); 24th Scientific Advisory Committee (SAC) meeting of Regional Medical Research Centre, North Eastern Region of ICMR (October 2010), Project Evaluation Committee of Central Council of Research in Homeopathy related to extra-mural research scheme of Department of AYUSH (February and March 2011), Project Review Committee for Mental Health of Indian Council of Medical Research (ICMR) (March 2011) and National Consultation on Mental Health Care Act (MHCA) (March 2011). He conducted and organized the Annual Meeting of Central Mental Health Authority (CMHA), Government of India, as Secretary, CMHA (May 2010). He was a discussant for “Endocrinology and Psychiatry” in Mid-term CME of Indian Psychiatric Society – North Zone (August 2010). He was the Chairperson for the CME/Workshop on “Understanding Diagnosis and Management of Depressive Disorders and’ Blues of Adolescence” and the symposium on “School mental health program in Indian Scenario” in Annual National Conference of Indian Psychiatry Society (New Delhi, January 2011), and the co-chair of Forensic Psychiatry Section of the 2nd International Conference on Medical Negligence and Litigation in Medical Practice and 2nd International Conference on Recent Advances in Forensic Sciences, Medicine and Toxicology (Goa, February 2011). He is a reviewer for research projects for Indian Council of Medical Research, Department of Biotechnology and a peer-reviewer for Indian Journal of Psychiatry, Indian Journal of Medical Research, and International Journal of Social Psychiatry. He is an expert/consultant on mental health for the New Delhi Birth Cohort study and for the Multi-centric study on epidemiology of mental disorders in Nepal.

Dr Mamta Sood was awarded the GC Boral I award of the Indian Association for Social Psychiatry (IASP) in 2010. She chaired a session at the XVII Conference of Indian Association for Social Psychiatry (Cochin, November 2010); and was the Treasurer for the Mid-term CME of Indian Psychiatric Society – North Zone held at All India Institute of Medical Sciences, New Delhi (August 2010).

9.32 Radiodiagnosis

Professor and Head

Arun Kumar Gupta

Professors

Deep Narayan Srivastava

Raju Sharma

Additional Professors

Sanjay Thulkar (IRCH)

Sanjay Sharma (RPC)

Ashu Seith Bhalla

Associate Professors

Smriti Hari

Shivanand Gamanagatti (Trauma Centre)

Atin Kumar (Trauma Centre)

Scientist

Shashi B. Paul

EDUCATION

BSc (Hons) Medical Technology in Radiography (MTR): A batch of 5 students was admitted to this 3-years course in 2009-2010. One short term trainee was present in the year 2009-10.

MD (Radiology): There are a total of 21 junior residents (3 sponsored candidates).

Continuing Medical Education

“Pediatric Radiology,” 3rd AIIMS-MAMC-PGI Imaging Course Series, AIIMS, New Delhi, 15-16 November 2010.

Lectures delivered in CME/National and International conferences: 65

RESEARCH

Funded Projects

Ongoing

1. Evaluation of trans-rectal ultrasound, elastography and contrast enhanced sonography in detection of prostate cancer. Sanjay Sharma. Funded by AIIMS (2010-2011). Funds: Rs 1.0 lakh.

Departmental Projects

Ongoing

1. Intra-arterial chemotherapy (neoadjuvant) in patients with advanced laryngeal and hypo-pharyngeal cancer.
2. Evaluation of trans-rectal ultrasound, elastography and contrast enhanced sonography for detection of prostate cancer.
3. Comparative evaluation of endovenous LASER ablation, radiofrequency ablation and surgery in the treatment of symptomatic lower limb varicosities.
4. Comparative evaluation of outcome of conservative management vis-à-vis interventional radiological management for discogenic low back pain.
5. Evaluation of vertebral pathology using MR imaging.
6. Role of dual energy CT in assessment of renal calculi.
7. MDCT evaluation of solid retroperitoneal organ injuries in blunt abdominal trauma with limited MRI correlation.
8. Role of CT perfusion in mild head injury.

9. Role of diffusion weighted MRI in carcinoma endometrium.
10. Clinical utility of breast ultrasound as an adjunct to mammography in diagnostic breast imaging.
11. Percutaneous radiofrequency ablation of painful benign bone tumors and metastasis.
12. Role of CT in management of patient with carcinoma of cervix.

Completed

1. A prospective study on radiological evaluation in patients with vascular malformations of extremities.
2. Cysts, tumours and tumour like lesions of the jaw: evaluation by panoramic radiographs and multi-detector computed tomography with limited MRI correlation.
3. MDCT evaluation of splenic injuries with endovascular management.
4. MDCT and MR evaluation of renal masses.
5. Ultrasound and CT evaluation of the neck for the assessment of metastases in clinically N0 patients with squamous cell carcinoma of upper aero-digestive tract.
6. Comparison of CT & MRI including diffusion weighted MRI in renal mass lesions.
7. Evaluation in changes in the dimensions of Masseter muscle during various stages of twin block appliance therapy using MRI.
8. Magnetic resonance evaluation of chronic internal derangements of knee.
9. Comparative evaluation of image guided and palpation guided core biopsy of palpable breast masses.
10. Role of MRI in characterisation of sonographically indeterminate adenexal masses.

Collaborative Projects

Ongoing

1. Use of CT as an adjunct to pre-operative planning and monitoring for osteo-odonto-keratoprosthesis in patients with end-stage Steven Johnson syndrome (with Department of Ophthalmology).
2. Study of efficacy of bioresorbable plates in the osteosynthesis of mandibular fractures without post operative maxillomandibular fixation: a prospective study (with Department of Dental Surgery).
3. A comparative study to measure the condylar guidance by the radiographic and clinical methods (with Department of Dental Surgery).
4. A clinical study to evaluate structural and functional respiratory parameters after distraction osteogenesis in retrognathic tempero-mandibular joint ankylosis patients with obstructive sleep apnoea syndrome (with Department of Dental Surgery).
5. Role of clinical, radiological and genetic evaluation in patients with Blepharophimosis Ptosis Epicanthus Inversus Syndrome (with Department of Ophthalmology).
6. Evaluation of adjuvant chemotherapy in stage 2 and neoadjuvant chemotherapy in stage 3 retinoblastoma as per the international retinoblastoma staging system (with Department of Ophthalmology).
7. Study of duration of anticoagulation in patients with deep venous thrombosis based on compression ultrasound (with Department of Surgery).
8. Clinical correlation of imaging findings in congenital neuropathic strabismus (with Department of Ophthalmology).
9. Long term changes in the Masseter muscle dimensions following twin block appliance therapy (with Department of Dental Surgery).

10. Assessment of APBDU in patients of Choledochal cyst (with Department of Gastroenterology).
11. MRCP in patients with portoenterostomy for biliary atresia (with Department of Pediatric Surgery).
12. Prospective and retrospective evaluation of duration of anti-tubercular treatment in spinal tuberculosis – A clinico-radiological study (with Department of Medicine).
13. Cognitive dysfunction in hypoparathyroidism (with Department of Endocrinology).
14. Comparing the role of MRI & Gray scale and Doppler Ultrasound in evaluating neoadjuvant chemotherapy response in locally advanced breast cancer (with Department of Surgery).
15. Randomised control study of laparoscopic sleeve gastrectomy with and without staple line reinforcement in morbidly obese patients (with Department of Surgery).
16. Image guided lung biopsies in immune-compromised patients with probable fungal pneumonia and its clinical implications (with Department of Hematology).
17. Effect of atorvastatin in hyperlipidemia and progression of carotid intima media thickness in steroid resistant nephrotic syndrome (with Department of Pediatrics).
18. Comparison of ultrasound elastography, mammography and sonography in the diagnosis of breast masses (with Department of Surgery).
19. Evaluation of serum VEGF and Diffusion Weighted MRI locally advanced carcinoma cervix undergoing neoadjuvant chemotherapy followed by chemoradiation (with Department of Medical Oncology).
20. Comparison of calculated dose approach versus fixed dose to success of radioiodine ablation in patients with autonomously functioning thyroid nodules (with Department of Nuclear Medicine).
21. Measurement of depth of terminal ductolobular unit preoperatively by breast ultrasound and by histological assessment postoperatively (with Department of Surgery).
22. Effect of progressive resistance exercise training on hepatic fat in Asian Indians with non-alcoholic fatty liver disease (NAFLD) (with Department of Medicine).
23. Oncology adequacy and functional outcome of transoral laser microsurgery (TLM) for early and moderately advanced laryngeal and hypopharyngeal cancers (with Department of ENT).
24. Immuno-histochemical characterization of JNA (Juvenile nasopharyngeal angiofibroma) and radiological and histological evaluation of involvement of Vidian canal in JNA (with Department of ENT).
25. Study of mycobacteremia in miliary and disseminated tuberculosis (with Department of Medicine).
26. Study of association of adipocyte size with anthropometric and biochemical parameters (with Department of Medicine).
27. Assessment of clinical, radiological profile and role of sialendoscopy in patients with salivary gland obstructive pathology (with Department of ENT).
28. Estimation of the prevalence of metabolic syndrome in patients with chronic obstructive pulmonary disease (with Department of Medicine).
29. Diagnostic utility of FDG-PET/CT in pyrexia of unknown origin (with Department of Medicine).
30. Delineation of molecular etiology underlying skeletal dysplasia and establishing a genotype -phenotype correlation (with Department of Orthopedics).
31. Assessment of site directed surgical treatment by nasal, oropharyngeal, palatal, or retroglossal advancement surgery in the management of obstructive sleep apnea syndrome (with Department of ENT).

32. Study of the effect of cricoids split with or without rib grafting in cases of subglottic stenosis for laryngotracheal stenosis (with Department of ENT).
33. Evaluation of injury pattern and results of medical and surgical treatment in cases with traumatic and iatrogenic facial nerve injury (with Department of ENT).
34. Retrospective and prospective evaluation of magnitude, severity and outcome of traumatic hepatobiliary and pancreatic injuries in a level 1 trauma centre (with Department of Surgery).
35. Clinico-pathological study of antral mucosal changes in patients with ethmoidal polypi (with Department of ENT).
36. Effect of N-acetylcysteine on oxidative stress, endothelial dysfunction & carotid intimal media thickness in chronic peritoneal dialysis patients – an open labeled randomized trial (with Department of Nephrology).
37. A prospective randomized controlled trial comparing laparoscopic and endoscopic drainage of pseudocyst of pancreas (with Department of Surgery).
38. Comparison of single stage versus two stage treatment of patients with common bile duct stones and gall stones – a randomized controlled study (with Department of Surgery).
39. Study of non-alcoholic fatty liver disease in coronary artery disease in Asian Indians (with Department of Medicine).
40. Comparative study of foot pressure force analysis in patients with plantar fasciitis treated with diclofenac alone and diclofenac with ultrasonic therapy (with Department of Physical Medicine and Rehabilitation).
41. Optic nerve sheath diameter measurement for raised intra-cranial pressure in severe head injury patients (with Department of Neurosurgery).
42. Effect of continuous positive airway pressure on cardiovascular biomarkers in patients with obstructive sleep apnoea (with Department of Medicine).
43. Evaluation of testicular blood flow and volume in patients undergoing laparoscopic inguinal hernia repair (with Department of Surgery).
44. Role of contrast enhanced ultrasound in the diagnosis of hepatocellular carcinoma in patients of cirrhosis (with Department of Gastroenterology).
45. Trans-arterial chemoembolization (TACE) in patients with unresectable hepatocellular carcinoma: results at a tertiary care centre (with Department of Gastroenterology).
46. Contrast enhanced ultrasound for the assessment of therapeutic response following locoregional therapy in patients of hepatocellular carcinoma (with Department of Gastroenterology).
47. Assessment of response of hepatocellular carcinoma following transarterial chemoembolization by magnetic resonance imaging (with Department of Gastroenterology).
48. Surveillance of patients of cirrhosis for detection of hepatocellular carcinoma - a cohort study (with Department of Gastroenterology).
49. Randomized controlled trial of N-acetylcysteine in prevention of renal failure in hepatocellular carcinoma patients undergoing transarterial chemotherapy and transarterial chemoembolisation (with Department of Gastroenterology).
50. MDCT evaluation of spinal trauma: preoperative and post operative evaluation (with Department of Surgery).
51. Randomized controlled trial of radiofrequency ablation versus percutaneous acetic therapy for the treatment of small hepatocellular carcinoma (with Department of Gastroenterology).
52. Randomized control trial of transarterial chemoembolisation (TACE) versus TACE plus oral chemotherapy in the treatment of unresectable hepatocellular carcinoma (with Department of Gastroenterology).

53. Randomized control trial of transarterial chemotherapy (TAC) versus oral chemotherapy in the treatment of unresectable hepatocellular carcinoma (with Department of Gastroenterology).
54. Randomized control trial of N-acetylcysteine in prevention of renal failure in hepatocellular carcinoma patients undergoing transarterial chemotherapy and transarterial chemoembolisation (with Department of Gastroenterology).
55. Randomized control trial of oral chemotherapy versus supportive therapy in the treatment of unresectable hepatocellular carcinoma (with Department of Gastroenterology).
56. Liver stiffness estimation by transient elastography in cirrhosis and non-cirrhotic portal hypertension (with Department of Gastroenterology).
57. MRI based protocol for the management of infected pancreatic necrosis (with Department of Gastroenterology).
58. Ultrasound evaluation of cervical lymph nodes in patients with carcinoma of esophagus (with Department of GI surgery).
59. Plain radiograph and MR imaging of patients with tennis elbow (with Department of Orthopedics).
60. Safety and efficacy of autologous stem cells in prevention of amputation in patients with chronic critical limb ischemia (with Department of Surgery).
61. Minimally invasive necrosectomy in pancreatitis (with Department of GI surgery).
62. Role of magnetic resonance imaging and spectroscopic methods in the evaluation of early prostate cancer (with Department of Urology).
63. Role of non alcoholic fatty liver disease in adult population in a rural community living in Haryana (with Department of Medicine).
64. Randomized study comparing upfront 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 Department of Medical Oncology and Obstetrics & Gynecology).
65. Prevalence of vitamin D deficiency and rickets in patients of congenital ichthyosis and keratinizing disorders in age group less than 21 years (with Department of Dermatology).
66. Role of magnetic resonance imaging and spectroscopic methods in evaluation of prostate cancer (with Department of NMR).
67. Assessment of therapeutic response of radiolabelled anti CD20 antibodies ¹³¹Iodine rituximab and /or ⁹⁰Yttrium rituximab in diffuse large B cell non Hodgkin lymphoma (with Department of Nuclear Medicine).
68. Comparison of early clinical outcome in carcinoma cervix after radiotherapy: conventional versus intensity modulated radiotherapy (with Department of Radiotherapy).
69. A comparative study of surgery and postoperative radiotherapy versus surgery and postoperative chemoradiotherapy as the treatment modality for the squamous cell carcinoma of the oral cavity (with Department of Radiotherapy).
70. Phase II randomized study comparing concurrent chemoradiation versus neoadjuvant chemotherapy followed by chemoradiation in locally advanced squamous cell carcinoma of esophagus (with Department of Radiotherapy).
71. Phase II/III randomized controlled trial of accelerated fractionation radiotherapy (6 fractions per week) versus concurrent chemoradiotherapy in locally advanced head and neck squamous cell carcinoma (with Department of Radiotherapy).

Completed

1. Clinical and radiographic hand abnormalities in patients with systemic sclerosis and their correlation with systemic features of the disease (with Department of Medicine).

2. Gastrointestinal involvement in systemic sclerosis - A cross-sectional study (with Department of Medicine).
3. Role of PET-CT in diagnosing unknown primary of head and neck cancer with cervical metastases (with Department of ENT).
4. Plastination of brain sections by silicone (S-10) and polyester (P-40) techniques (with Department of Anatomy).
5. Structural and functional abnormalities in lungs in achalasia cardia patients - Pre and Post treatment evaluation (with Department of Surgery).
6. Study of carotid intima media thickness (CIMT) as a marker of atherosclerosis and its correlation to insulin resistance in children with obesity in the age group of 4-18 years (with Department of Endocrinology).
7. Comparison of various imaging modalities in the diagnosis and staging of periampullary tumors and to study the role of various perioperative factors in predicting the outcome of patients with periampullary tumors (with Department of Surgery).
8. Study of the efficacy and safety of glossopharyngeal nerve block in the management of glossopharyngeal neuralgia (with Department of Anesthesiology).
9. Abdominal fat estimation in patients of obstructive sleep apnoea (with Department of Medicine).
10. Study of the clinical and neurodevelopmental profile in children with tuberous sclerosis (with Department of Pediatrics).
11. Incremental role of F-18 FDG PET-CT in evaluating response to primary treatment in advanced epithelial ovarian cancer patients (with Department of Nuclear Medicine).
12. Hodgkin's lymphoma: analysis of treatment outcomes and prognostic factors (with Department of Medical Oncology).
13. Oral voriconazole vs. intravenous low dose amphotericin B for primary antifungal prophylaxis in pediatric acute leukemia induction: a prospective, randomized, clinical trial (with Department of Medical Oncology).
14. Prothrombotic factors in patients with newly diagnosed multiple myelomas: an observational study (with Department of Medical Oncology).
15. Validation of gel dosimetry as 3D verification tool in highly conformal radiotherapy techniques (with Department of Neurobiochemistry and Radiotherapy).
16. A study of angiogenesis, proliferative activity and DNA ploidy in squamous cell carcinoma of larynx and their correlation with lymph node metastasis (with Department of Pathology).
17. Comparative study of radiation therapy dose, volume evaluation for 3D conformal radiotherapy (3D CRT) vs. image guided radiotherapy (IGRT) and analysis of early response in head and neck squamous cell carcinoma (with Department of Radiotherapy).
18. Prospective comparative evaluation of 3D CT based treatment planning and 2D radiography based treatment planning for intracavitary brachithery in carcinoma cervix (with Department of Radiotherapy).
19. Role of MRI in evaluation of pelvic organ prolapse and its relationship with POPQ classification (with Department of Obstetrics and Gynaecology).
20. Relationship of fetal Doppler velocimetry to biophysical profile and fetal outcome in normal pregnancies and in pregnancies with intrauterine growth retardation (with Department of Obstetrics and Gynaecology).
21. Evaluation of PET Scan in preoperative assessment of cases of endometrial carcinoma (with Department of Obstetrics and Gynaecology).
22. Correlation of stage and imaging of endometriosis with fertility outcome (with Department of Obstetrics and Gynaecology).
23. Evaluation of the efficacy of thrice weekly DOTS regimen in TB pleural effusion at six months (with Department of Medicine).

24. Endothelial dysfunction in rheumatoid arthritis (with Department of Medicine).
25. Comparison of the clinical outcome after a fixed dose versus dosimetry-based radioiodine treatment of Grave's disease: a randomized controlled trial (with Department of Nuclear Medicine).
26. Study of visual function and fundus findings in orbital tumours and their alterations after surgery (with Department of Ophthalmology).
27. Study of non alcoholic fatty liver disease and atherosclerosis in Asian Indians (with Department of Medicine).

PUBLICATIONS

Journals: 83

Books: 2

Chapters in books: 19

PATIENT CARE

Name of Investigations / Special procedures	Number
Routine X-rays	
OPD	85972
Indoor	21221
Casualty	41175
Portable	29596
Total	1,77,964
Special Investigations	
Barium studies	2429
Intravenous pyelography	1471
Micturating cystourethrography	1715
Hysterosalpingography	248
Operation theater studies	80
Others contrast studies	1016
Total	6,959
Mammography	
Ultrasound	
Routine	23986
Emergency	15233
Doppler (Routine + Casualty)	3016
Total	42,235
CT	
Body	8957
Head	4221
Total	13,178

Vascular Studies

Digital subtraction angiography(DSA)	841
Venography	37
Total	878
MRI	3,285
Interventional Procedures	
Ultrasound–guided	2552
CT–guided	297
Vascular	899
Total	3,748
Total Special Investigations	71,753
Grand Total (Routine + Special)	2,49,717

New Equipment:

1. Somatom definition flash (high end multidetector CT with dual energy capability)
2. Sterrad 100S (low temperature hydrogen peroxide gas plasma sterilizer)
3. Upgradation of Xray film and standard video acquisition station
4. Endovenous laser system
5. Mobilett XP digital Xray machine (Siemens)
6. Definium 8000 (direct digital flat panel radiography unit)
7. Discovery 650 (direct digital flat panel radiography unit)
8. Robotic tool positioned for Ct
9. 3D digital mammography system
10. Multi parameter monitors – 2 nos.
11. Mobile Xray system with built-in CR system – 2 Nos.
12. Axiom luminous DRF (Direct digital flat panel fluoroscopy system) – 2 nos.
13. Drug storage cart (E600 C) – 2 nos.

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Dr Sanjay Sharma was awarded the prestigious Dr. JC Bose Memorial Oration of the Indian Radiological and Imaging Association, and the Second prize for the paper “Endovascular Management of Paediatric Budd Chiari Syndrome” at the 20th Annual Conference of the Pediatric Gastroenterology, Hepatology and Nutrition (Chandigarh, October 2010). He is the National Joint Secretary of the Indian Society of Vascular and Interventional Radiology (IRIA) and the Vice President of the Delhi State Chapter of IRIA. He supervised the process of modernization of XRay section at the Dr R P Centre.

Dr Shashi Paul was invited as a “Visiting Scientist” to the department of Radiodiagnosis, John Radcliffe Hospital, Oxford, London (June 2010) and she is a reviewer for the journal of European Radiology.

9.33 Reproductive Biology

Professor and Head

Anand Kumar

Additional Professor

Ashutosh Halder

Associate Professors

Narendra Nath Sarkar

Pradeep Kumar Chaturvedi

EDUCATION

Undergraduate/Postgraduate Training

PhD/DM/MD/MS: 06 candidates

Postgraduate: MD Laboratory Medicine and MD Biochemistry students in Central RIA facility.

Short and Long term Training

Short-term training was provided to 1 student

Continuing Medical Education

Organized National Workshop on Molecular Cytogenetics: Cancer Cytogenetics (hematological malignancy) by FISH, November 29 to December 4, 2010 to at AIIMS

National & International Conferences/Workshops

Organized International Symposium on “Cross-talks/Conversations on Human Reproduction, Fertility and Sexuality: Evaluation and Science, Philosophy, Art, Myths and Literature” February 12-14, 2011, AIIMS

Lectures delivered in CME/ National and International conferences: 9

RESEARCH

Funded Projects

Ongoing

1. Spermiation defect: role of AMH, Vitamin A and heavy metal. SRF project. ICMR
2. Quality control for hCG kits procured by HLL Lifecare Limited, Gurgaon done by the department under Dr P K Chaturvedi, PI.
3. Mediatory role of hypoxia inducible factor 1 alpha on vascular endothelial growth factor expression in an immortalized mouse leydig cell line. Dr Anand Kumar; DST 3 years, 17,69,990/- lakhs approx.
4. Development of native 2D electrophoretic system for the functional evaluation of seminal plasma proteins. SRF project, ICMR.

Departmental Projects

Ongoing

1. Regulation of proliferation of prostatic cancer cell line LNCaP.
2. Regulation of granulosa cell steroidogenesis.
3. Genetic and endocrine factor in primary testicular failure.
4. Role of cobalt chloride induced hypoxia on MA-10 cells.
5. An investigation on underlying etiology on primary testicular failure.
6. Dynamics of Sex Ratio
7. Analysis of differential expression of proteins in motile and non motile spermatozoa.

8. Evaluation of the impact of intimate partner violence on woman's reproductive health and pregnancy outcome.
9. The evaluation of emergency contraceptive drug, levonorgestrel: post-coital oral versus peri-coital vaginal administration for prevention of pregnancy
10. The evaluation of the Reproductive Health and contraceptive use in India
11. The assessment of the-state-of-the-art of emergency contraception with the cutting edge drug

Completed

1. Evaluation of the end of reproductive phase of the woman's life (Dr. N N Sarkar).
2. Evaluation of the use of emergency contraception by the adolescents and young adult women (Dr. N N Sarkar).
3. Prevalence of 22q11 deletion syndrome in children with structural cardiac malformation in tertiary care referral hospital-based study in Delhi (ICMR)
4. Rapid Detection of Chromosome X,Y,21,18&13 Aneuploidy by Primed In Situ Labeling (intramural/AIIMS)
5. Use of letrozole versus clomiphene citrate combined with gonadotropins in superovulation and IUI cycles.

Collaborative Projects

Ongoing

1. Serum alpha-fetoprotein and albumin level in fanconi anemia (Hematology, AIIMS)
2. Comparison of chronic groin pain, testicular functions and quality of life after open and laparoscopic inguinal hernia repair – A prospective randomized controlled trial (Surgical Disciplines, AIIMS)
3. Adrenal functions in patients with severe sepsis and septic shock (Medicine, AIIMS).

Completed

1. Characterization of chromosomal anomalies in multiple myeloma patients using cytogenetics and FISH (Medical Oncology)

PUBLICATIONS

Journals: 8

Chapters in books: 1

PATIENT CARE

Name of Assay	Number
FSH	3312
LH	2920
Prolactin	2565
T3	7049
T4	8324
TSH	13749
Testosterone	1318
Estradiol	757
Progesterone	97
AFP	3139
PSA	1506
Beta hCG	860
CA-125	1321
Cortisol	246
Total	47215

Number of tests performed has increased from 39495 last year to **47215** this year.

Andrological Examinations: Semen Examination: 406, Seminal Fructose: 359

Genetic investigations and counseling: About 100 cases were referred for reproductive genetic investigations and counseling.

Installation of laboratory information software has led to increased efficiency in reporting (urgent reports can be collected in 2 hours).

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Professor Anand Kumar is member of the following bodies: Advisory Committee of the UGC-SAP programme in Zoology, ML Sukhadia University, Udaipur; Editorial Board of the Open Andrology Journal (Bentham); Faculty Selection Committee of Sanjay Gandhi Postgraduate Institute of Medical Sciences, Lucknow; the Committee for the Purpose of Control and Supervision of Experiments on Animals (CPCSEA), Dr BR Ambedkar Centre of Biomedical Research, University of Delhi. He is a reviewer for the following journals: Sterility, International Journal of Andrology, Indian Journal of Medical and Pediatric Oncology. He attended meeting of experts at IIT Kharagpur (10 April 2010) and interviewed a leading Indian poet on Prasar Bharti (5 August 2010). He evaluated research proposals for University of Delhi and ICMR. He was nominated as an expert to examine continued marketing of Letrozole for induction of ovulation in anovulatory infertility by the Drugs Controller General (India).

Dr Ashutosh Halder reviewed manuscripts for the Indian Journal of Medical Research, Indian Journal of Pediatrics, Indian Pediatrics and Dove Medical Press (publishes journals like International Journal of Women's Health; Pharmacogenomics and Personalized Medicine, etc.). He reviewed projects for ICMR and served as a member for MCI Board for Medical Genetics that drafted the DM & MD curriculum for medical genetics. He was invited to the brain storming session for future international collaboration by the Indo French Centre, Hyderabad (21–23 March 2011).

Dr N.N. Sarkar is a member of the Institutional Ethics Committee and Independent Review Board of Jeevan Jyoti Hospital and Research Centre, Allahabad, UP. He is a reviewer for the following journals: Public Health Nutrition and International Journal of Gynaecology and Obstetrics.

Dr P.K. Chaturvedi is a reviewer for research projects of Department of Biotechnology (DBT). He was the Organising Secretary for the International Symposium on “Cross-talks/Conversations on Human Reproduction, Fertility and Sexuality: Evaluation and Science, Philosophy, Art, Myths and Literature” held at AIIMS (12–14 February 2011).

VISITING SCIENTISTS

Amal K. Mukhopadhyay (Germany)

Christopher Elton Macann (France)

C.V. Rao (USA)

Ralph N. Martins (Australia)

9.34 Surgical Disciplines

Professor and Head		
M. C. Misra		
Professors		
Anurag Srivastava Sandeep Guleria	Arvind Kumar	Sunil Chumber Rajinder Parshad
Additional Professors		
V. Seenu	Sandeep Agarwal	Virinder Kumar Bansal
Associate Professors		
Anita Dhar Maneesh Singhal	Amit Gupta Subodh Kumar	Biplab Mishra Sushma Sagar

EDUCATION

Short term and elective training

Six doctors were given short-term training for 1–6 months in various surgical techniques. In addition 19 students (6 from Singapore, 5 from China, 2 from USA, 2 from Austria, and 1 each from Canada, Czech Republic, Germany and UK) were provided elective training lasting from 7 to 28 days. A student from Nepal received elective training for 3 months. One scholar from Germany (27 September 2010 to 16 January 2011) and one from Saudi Arabia (12 October 2010 to 11 April 2011) were received as observers in the department.

Continuing Medical Education

Organized by the Department

- **Training course in Operative Laparoscopy–Basic and Advanced** at Minimally Invasive Surgery Training Centre, AIIMS, New Delhi (**Course Director: MC Misra, Course Co-ordinator: VK Bansal**) on the following dates: 26–30 April 2010, 10–14 May, 2010, 5–9 July 2010, 19–23 July 2010, 13–17 September 2010, 18–22 October 2010, 25–29 October 2010, 15–19 November 2010, 22–26 November 2010, 6–10 December, 13–17 December 2010, 3–7 January 2011, 17–21 January, 2011, 14–18 February 2011, 21–25 February 2011, 21–25 March 2011, and 28 March–1 April 2011.
- **Training course in Laparoscopic Suturing Skills** at Minimally Invasive Surgery Training Centre, AIIMS, New Delhi (**Course Director: MC Misra, Course Co-ordinator: VK Bansal**) on the following dates: 3–5 May 2010, 13–15 July 2010, 6–8 September, 2010, 10–12 August 2010, 30 November–2 December 2010 and 31 January–2 February 2011.
- **Training course in Laparoscopic Hernia Surgery** at Minimally Invasive Surgery Training Centre, AIIMS, New Delhi (**Course Director: MC Misra, Course Co-ordinator: VK Bansal**) on the following dates: 27–29 July, 2010, 9–11 November 2010, and 11–13 January 2011.
- **Training course in Laparoscopic Colorectal Surgery** at Minimally Invasive Surgery Training Centre, AIIMS, New Delhi (**Course Director: MC Misra, Course Co-ordinator: VK Bansal**) on the following dates: 16–18 August 2010, and 7–9 February 2011.
- Monthly Meeting of Delhi State Chapter, Association of Surgeons of India, AIIMS, New Delhi (**Convener: MC Misra**), 19 February 2011.

- Training workshop on Current Issues in Conduct and Analysis of Randomized Clinical Trials, BP Koirala Institute of Health Sciences, Dharan, Nepal (**Chairperson: A Srivastava**), 26–27 December 2010.
- Surgical CME comprising Theoretical Deliberations by the National Faculty and Operative Workshop on Diseases of the Breast and Thyroid, AIIMS, New Delhi (**Chairperson: A Srivastava**), 11 March 2011.
- Pre-Conference Operative Workshop cum CME on Obesity Surgery as part of Annual Conference of Delhi Chapter of Society of Endoscopic and Laproscopic Surgeons of India, AIIMS, New Delhi (**Organising Secretary: S Agarwal**), October 2010.
- Workshop on Hospital Preparedness in Mass Casualty in Trauma 2010, International Conference, CME cum Live Workshop and 3rd Annual Conference of the Indian Society Trauma and Acute Care, New Delhi (**Course Director: A Gupta**), 26–28 November 2010.
- Maxillofacial Workshop in Trauma 2010, International Conference, CME cum Live Workshop and 3rd Annual Conference of the Indian Society Trauma and Acute Care (**Course Director: M Singhal**), 26–28 November 2010.
- 1st Basic Plastic and Reconstructive Surgery course (BPRS), JPNATC, AIIMS (**Course Director: M Singhal; Course co-ordinator: S Sagar**), 31 July–1 August 2010.
- ABCDE Workshop in Trauma 2010, International Conference, CME cum Live Workshop and 3rd Annual Conference of the Indian Society Trauma and Acute Care (**Course Director: S Kumar**), 26–28 November 2010.
- Maxillofacial Workshop in Trauma 2010, International Conference, CME cum Live Workshop and 3rd Annual Conference of the Indian Society Trauma and Acute Care (**Course Director: S Sagar**), 26–28 November 2010.

Conferences organized by the Department

- International Conference and Live Operative Workshop on Minimally Invasive Surgery (Fifth AIIMS Surgical Week, ENDOSURG 2011), AIIMS, New Delhi (**Organizing Chairman: MC Misra, Co-organizing Chairman: A Srivastava, R Parshad, Organizing Secretary: VK Bansal, Co-Organising Secretary: S Guleria, V Seenu, S Agarwal, Joint Secretary: A Gupta, M Singhal, S Kumar, S Sagar**), 11–13 March 2011.
- Annual Conference of the Association of Surgeons of India, New Delhi (**Co-organizing Secretary: S Guleria**), 15–20 December 2011.
- Trauma 2010, International conference, CME cum Live Workshop and 3rd Annual conference of the Indian Society Trauma and Acute Care, New Delhi, 26–28 November 2010.

Lectures delivered in CME/National and International conferences: 111

RESEARCH

Funded Projects

Ongoing

1. Cost effectiveness analysis and comparison of single stage vs two stage management of patients with concomitant gall stone disease and common bile duct stones—a randomized controlled trial. VK Bansal, MC Misra, P Garg, CS Pandav. Funded by: Society of American Gastrointestinal and Endoscopic Surgeons for 3 years (July 2009 to July 2012). Fund: 30,000 US dollars.
2. A prospective randomized controlled trial comparing chronic groin pain and quality of life after laparoscopic inguinal hernia repair using heavy weight vs light weight meshes. VK Bansal, MC Misra, R Sagar. Funded by: AIIMS Research Grant for 1 year (2010-2011). Funds: Rs 1 lakh.

3. Induction of therapeutic angiogenesis in limb ischemia by intra-arterial delivery of autologous bone marrow derived stem cells. S Sharma, Priya, G Singh, B Bhargava, Sujata, S Guleria, VK Bansal. Funded by Department of Biotechnology (with Department of Cardiac-Radiology, Cardiology and Surgical Disciplines).
4. A multi-center study on treatment of abdominal tuberculosis (intestinal or peritoneal): A randomized controlled trial of 6-months and 9 months of directly observed therapy under Revised National Tuberculosis Control program. G Makahria, S Agarwal. Funded by: Central TB Division, MOHFW for 4 years (2008-2012). Funds: Rs 57 lakhs.

Department Projects

Ongoing

1. A detailed ultrastructural study of major mammary ducts in women with periductal mastitis/mammary duct ectasia.
2. A randomised controlled trial of early versus late tracheostomy in critically ill trauma patients.
3. A randomized trial comparing limited length ductal cone excision with 3 cm ductal cone excision in women presenting with mammary duct discharge.
4. A study of the causes and pathologic features of traumatic deaths in Department of Surgery, JPNATC, AIIMS.
5. The feasibility of management of occult pneumothoraces without intercostal drainage tube.
6. Ascertaining the depth of the terminal ducto-lobular unit from skin by pre-operative magnetic resonance scan and post-operative histological measurement.
7. Breast reconstruction using muscle sparing latissimus dorsi flap for volume replacement following breast conservative surgery: A study of cosmesis and resected margin status.
8. Cleft lip and palate anomaly in India: clinical profile, risk factors and current status of treatment—a hospital based survey.
9. Clinical co-relation of ER, PR, HER2 neu expression and BRCA1 gene mutations in Indian breast cancer patients.
10. Comparative evaluation of endovenous laser ablation, radiofrequency ablation and surgery in treatment of symptomatic lower limb varicosities.
11. Comparison of USG elastography, sonography and mammography in breast masses.
12. Correlation of lymphovascular invasion with sentinel and non sentinel node involvement in breast cancer.
13. 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.
14. Epidemiological study in the pathway of maxillofacial fractures seen at a tertiary care hospital of North India.
15. Evaluation of cox-2 and lox levels and the role of peptide inhibitors in breast cancer.
16. Feasibility and outcome of minimal invasive surgery in colorectal cancers.
17. Immunological changes in patients of shock due to trauma.
18. Lipomodelling of breast following breast conservative surgery.
19. Prevalence of occult contra lateral inguinal hernia during laparoscopic hernia repair.
20. Prospective cohort evaluation of cosmetic and functional outcome of muscle sparing latissimus dorsi flap in breast reconstruction.
21. Prospective randomized control trial of early versus late tracheostomy in critically ill trauma patients.

22. Radical duct excision for nipple discharge (benign breast disease)–its long term follow up.
23. Randomized controlled trial to compare short term morbidity following sentinel lymph node biopsy alone vs axillary lymph node dissection in clinically node negative breast cancer.
24. Retrospective and prospective evaluation of magnitude, severity and outcome of traumatic hepatobiliary and pancreatic injury in a level 1 trauma center.
25. Role of cilastazole in treatment of chronic ischemia of the lower limb.
26. Role of F18 FDG-PET-CT in predicting early response to neo adjuvant chemotherapy in breast cancer.
27. Role of free fat transfer in breast remodeling following breast conservation surgery.
28. Role of muscle sparing latissimus dorsi flap in breast reconstruction.
29. Safety and efficacy of autologous stem cells in prevention of amputation in patients with chronic critical limb ischemia.
30. Study of human breast cancer by magnetic resonance techniques.
31. To study the epidemiology and trauma scoring in patients presenting in a level 1 trauma center.
32. Validation of different techniques in physical examination of the breast.

Completed

1. A prospective cross-sectional study of validation of findings of different techniques of physical examination with breast imaging, operative findings and histology.
2. A randomized trial comparing limited length ductal cone excision with 3 cm major mammary ductal cone excision (Modified Hadfield operation) in woman presenting with periductal mastitis.
3. A study to assess the marital relationship of women and their psychosocial status after surgical treatment of carcinoma breast.
4. Comparative evaluation of different dyes and different techniques of sentinel node mapping in operable breast cancer.
5. Detailed ultra-structural study of major mammary ducts in women with periductal mastitis/mammary duct ectasia.
6. Laparoscopic suturing skills acquisition—a comparison between trained and novice surgeons.
7. Prospective randomized controlled blinded study to evaluate the effect of short term focused training program in laparoscopy on operative room performance of surgery resident.
8. Role of CECT and splenic artery embolization in management of blunt splenic injury.
9. Role of radio frequency ablation in treatment of symptomatic lower limb varicosities.
10. The correlation of WEGF and TGF Beta 1 expression to clinic-pathological response, ER, PR and HER 2/NEU status in locally advanced breast cancer: A pilot study.
11. To study the pattern of peripheral arterial disease in tertiary care surgical practice: Indian scenario.

Collaborative Projects

Ongoing

1. A randomised controlled trail of early versus late tracheostomy in critically ill trauma patients (with Department of Anaesthesiology).
2. A study of quality of life in patients before and after successful renal transplantation in India (with Department of Psychiatry).

3. Breast reconstruction using muscle sparing latissimusdorsi flap for volume replacement following breast conservation surgery: A study of cosmesis and resected margin status (with Department of Anatomy).
4. Chronic groin pain and quality of life after laparoscopic inguinal hernia repair using heavy weight vs light weight meshes (with Departments of Anaesthesia and Psychiatry).
5. Comparing the role of MRI and grey scale and color Doppler ultrasound in evaluating neoajduvant chemotherapy response in locally advanced breast cancer (with Departments of Radiology and NMR).
6. Comparison of chronic groin pain and quality of life after laparoscopic inguinal hernia repair–TEP vs TAPP (with Departments of Anaesthesia and Psychiatry).
7. Comparison of long term outcome and quality of life after laparoscopic incisional and ventral hernia repair with suture or tacker mesh fixation (with Departments of Anaesthesia and Psychiatry).
8. Development of a hyperbaric oxygen device for performance of blood-less surgery (with Department of Medical Physics and Bioengineering, School of Medicine, Cardiff University, UK).
9. Development of a stapling device for abdominal wound closure (with Department of Biomedical Engineering, IIT, Delhi).
10. Evaluation of axillary nodes by Fluoroscein and Raman Spectroscopy in women with operable breast cancer at Tata Memorial Centre, Mumbai.
11. Multidetector CT scan evaluation of retroperitoneal solid organ injury with limited MRI correlation (with Department of Radiodiagnosis).
12. Pilot study comparing symptomatic outcome of patients undergoing laparoscopic cardiomyotomy with angle of His accentuation v/s laparoscopic cardiomyotomy with anterior dors-fundoplication for achalasia cardia (with Departments of Gastroenterology, Radiology and Biostatistics).
13. Prospective study to evaluate the impact of bariatric surgery on glucose metabolism–comparison of laparoscopic roux en y gastric bypass and laparoscopic sleeve gastrectomy (with Departments of Endocrinology, Pharmacology, Nuclear Medicine and Dietetics).
14. Prospective study to evaluate the impact of laparoscopic sleeve gastrectomy on type 2 diabetes mellitus in patients with BMI 30-35 kg/m² (with Departments of Endocrinology, Pharmacology, Nuclear Medicine and Dietetics).
15. Prospective, randomised comparison of efficacy and safety of thoracic epidural analgesia with bupivacaine and opioid in two different concentrations versus intravenous two drug analgesia in thoracic trauma (with Department of Anaesthesiology).
16. Randomized controlled trial comparing laparoscopic and endoscopic drainage of pseudocyst of pancreas (with Departments of Gastroenterology and Radiology).
17. Randomized study of outcome of laparoscopic sleeve gastrectomy with and without staple line reinforcement in morbidly obese patients (with Departments of Dietetics, Anaesthesiology, Medicine and Endocrinology).
18. Retrospective and prospective study of magnitude, severity, and outcome of traumatic hepatobiliary and pancreatic injury in a level I trauma centre (with Departments of Gastroenterology and Radiology).
19. Retrospective and prospective study of magnitude, severity, and outcome of chest trauma in a level I trauma centre (with Departments of Anaesthesiology, Emergency Medicine, Radiology and Forensic Medicine).
20. Safety and efficacy of transxemic acid in patients undergoing surgery post trauma (with Department of Anaesthesiology).

21. Study of effects of hypothermia and hyperbaric oxygen on the growth of mammary tumours in SCID and C3H JAX mice at advanced centre for treatment research and education in cancer (with Tata Memorial Centre, Navi Mumbai).
22. Symptomatic outcome evaluation of patients undergoing treatment for achalasia cardia (with Departments of Gastroenterology and Radiology).
23. To study the role of virtopsy (postmortem CT scan) in predicting the cause of death in trauma patients by comparing the findings of postmortem CT scan and conventional autopsy (with Departments of Radiology and Forensic Medicine).

Completed

12. A randomized controlled study of comparison of single stage vs two stage treatment for patients with gall stones and common bile duct stones (with Departments of Gastroenterology and Community Medicine).
1. Chronic groin pain, testicular function and quality of life after laparoscopic and open inguinal hernia repair (with Departments of Anaesthesia, Radiology, Reproductive Biology and Psychiatry).
2. Comparison of accuracy of image guided v/s palpation guided core needle biopsy in palpable breast masses (with Departments of Radiology and Pathology).
3. Comparison of chronic groin pain, testicular functions and quality of life after open and laparoscopic inguinal hernia repair- a prospective randomized control trial (with Departments of Anaesthesia, Radiology, Reproductive Biology and Psychiatry).
4. Comparison of various imaging modalities in the diagnosis and staging of the periampullary tumors and study of various perioperative factors in predicting the outcome of the patients with periampullary tumors (with Departments of Gastroenterology and Radiology).
5. Evaluation of endovenous laser ablation in the treatment of varicose veins (with Department of Cardiac Radiology).
6. Major trauma outcome study in a level-I trauma centre (with Departments of Orthopedics, Neurosurgery and Forensic Medicine).
7. Retrospective analysis of surgical and neurological outcome in patients of myasthenia gravis with or without thymoma following extended thymectomy (with Department of Neurology).
8. Role of ¹⁸F fluorodeoxyglucose positron emission tomography-computed tomography (¹⁸F FDG PET-CT) as a staging modality in locally advanced breast cancer (with Departments of Nuclear Medicine and Radiology).
9. Role of computed tomography and splenic artery embolisation in blunt splenic trauma (with Department of Radiology).
10. Structural and functional abnormalities in lungs in achalasia cardia patients—pre and post treatment evaluation (with Departments of Gastroenterology, Medicine and Radiology).
11. Study of outcome of laparoscopic sleeve gastrectomy in morbidly obese patients (with Departments of Anaesthesiology, Endocrinology, Medicine, Gastroenterology and Dietetics).

PUBLICATIONS

Journals: 37

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Professor M. C. Misra is Chairperson, Technical Expert Committee of the Drug Controller General of India; Member, Cell for Medical Ethics and Health Policy Research (MCI) and Specialty Board in General Surgery for drafting/ updating the curriculum for MS courses (MCI); President, Society of Endoscopic and Laparoscopic Surgeons of India; Assisted in selection/examination of personnel for Standing Selection Committee of the PGIMER, Chandigarh

(faculty position in General Surgery), the Royal College of Physicians and Surgeons (Glasgow, UK) (MRCS Examination), and Aligarh Muslim University (MS, General Surgery); Inspected Renal Transplant facilities at Max Super Specialty Hospital, Saket, New Delhi under THOA-1004; Delivered the SELSI Oration on “Laparoscopic Adrenalectomy”, 3rd National Conference of Society of Endoscopic and Laparoscopic Surgeons of India, Patiala, 4–5 September 2010; Presidential Oration, Indian Hernia Society, “Training in Laparoscopic Repair of Groin Hernia”, 3rd Biennial National Conference of Indian Hernia Society, Imphal, 8–10 October 2010; Keynote Speaker, Inaugural Conference of Delhi State Chapter of Society of Endoscopic and Laparoscopic Surgeons of India, spoke on “The Future of Laparoscopic Surgical Training in India”, New Delhi, 23 October 2010; Member, National Advisory Committee, 6th World Organ Donation Day and Organ Donation Congress, DGHS, 12–13 November 2010; Invited to participate in a Joint Group meeting of the Indo (ICMR)–Australian (George Institute, Sydney) team to discuss concept proposals on Injury Surveillance and Preventive Strategies, 25 November 2010; Fourth Annual 2010 Indian MedTech Summit of the Stanford–India Biodesign, 10–11 December 2010; Invited by Lok Sabha TV for programme ‘Amnae Samne’, 5 May 2010 and Live Phone-in programme ‘Healthy India’ on ‘Medicolegal Issues’, 23 October 2010 and ‘Bariatric Surgery in Morbid Obesity’, 4 December 2010; by Doordarshan News for programmes regarding ‘Health Care Delivery Issues related to Ongoing Strike of Medical Students at Safdarjung Hospital’ (2 June 2010) and ‘Common Entrance Test (CET) for admission to MBBS and postgraduate courses in medicine as ruled by supreme court of India’ (14 December 2010), and “Health Care Reforms” (16 March 2011); Invited as technical expert by Doordarshan News for programmes on ‘Breast Cancer’ (8 January 2011) and ‘Curtain Raiser for Breast Cancer Exhibition and Seminar’ (10 March 2011); by Doordarshan News, New Delhi as Expert for Live Phone-in programme ‘Total Health’ for discussions on ‘Hernia’ (11 July 2010), ‘Breast cancer’ (17 October 2010 and 13 March 2011) and ‘Organ Donation’ (5 December 2010).

Professor Anurag Shrivastava delivered an oration at ASIMANICON 2010 on “Advances in Management of Breast Cancer”, Imphal, 8–10 October 2010.

Professor Sandeep Guleria was awarded FRCS (England) Fellowship ad eunideum by the Royal College of Surgeons of England and the FRCP (Edinburg) by nomination by the Royal College of Physicians of Edinburgh; Appointed core committee member of Undergraduate curriculum committee of the Medical Council Of India; Chairperson for the Abstract Section on Transplantation for the World Conference of Nephrology held at Vancouver; Vice President and a member of the Scientific Committee of the Indian Society of Organ Transplantation, Co-Editor of the Indian Journal of Transplantation, Key Opinion Leader and a member of the ethics committee of the Transplantation Society; Member, Expert Committee to grant recognition for Liver and Kidney transplantation; Assisted the selection/examination process as a member of the standing selection committee of PGI Chandigarh, as an examiner for the MRCS examination for the Royal College of Surgeons and Physicians (Glasgow) and Royal College of Surgeons (Edinburgh); Member, Selection Committee for Senior Research Associates of CSIR; Organising Secretary, Annual Conference of the Indian Society of Organ Transplantation, New Delhi 2011; Given the “Himachal Gaurav Award” by Himalayan Jagriti Manch; Reviewer for The Lancet, Indian Journal of Urology, Indian Journal of Nephrology, and Indian Journal of Transplantation; Invited to chair/moderate sessions on “Single Incision Laparoscopic Surgery (Fortis Hospital, NOIDA, 23 May 2010), “Use of ATG in Live related Transplantation” (AUDIOCON with Prof. Simin Goral, 30 June 2010), “Infections in the Immuno-compromised” (Annual conference of ICOPA, New Delhi, 30 September 2010, “ATG in transplantation” (Delhi Nephrology Society, 4 September 2010), the M Patel Oration of the ISOT (Annual Meeting of ISOT, Hyderabad, 21 October 2010), the RVS Yadav Oration of the ISOT (Annual Meeting of ISOT, Hyderabad, 22 October 2010), Guest Lecture by Prof Nady Hakim (ASICON 2010, New Delhi, 16 December 2010), “Safe Surgery Saves Lives” (ASICON 2010, New Delhi, 18 December 2010), “Kidney Disease” (South Delhi IMA, 30 January 2011), “Role of Once-a-day Tacrolimus” (STAR Summit, 27 March 2011); Invited by Doordarshan News, New Delhi for programme ‘Total Health’ for discussion on ‘Vascular Disease’ (16 May 2011).

Dr V. Seenu delivered the Dr SubbaRao Oration 2010 of the Department of Surgery, Gandhi Medical College, Hyderabad; Reviewer for Tropical Gastroenterology, The National Medical Journal of India and Oman Medical Journal; Reviewer for Cochrane Hepatobiliary Group.

Dr Sandeep Aggarwal is Executive Member, Obesity and Metabolic Surgery Society of India (OSSSI); Moderated a panel discussion on “Management of Leaks after Sleeve Gastrectomy” (Pre-Conference Operative Workshop cum CME on Obesity Surgery, AIIMS, New Delhi, October 2010).

Dr V. K. Bansal was awarded Fellowship of the American College of Surgeons (FACS) in October 2010; Honorary Secretary, Indian Hernia Society and Society of Endoscopic and Laparoscopic Surgeons of India; Editor, Indian Hernia Society News Letter; Reviewer for Surgical Laparoscopy Endoscopy Percutaneous Techniques, Tropical Gastroenterology, Indian Journal of Gastroenterology, and Saudi Journal of Gastroenterology; Member, Curriculum Revision Committee for undergraduates for Medical Council of India; Chaired the Indian Hernia Society Oration and IHS Presidential Oration (Annual Conference of Indian Hernia Society, Imphal, 8-10 October 2010).

Dr Anita Dhar received **certificates of appreciation as team leader and certificate of merit for Commonwealth Games 2010 (3–14 October 2010)**; Delivered a talk and conducted a workshop on Breast Awareness during the Breast Cancer Awareness Month, Breast Cancer Society of India and Saket Society, New Delhi, 30 October 2010.

Dr Amit Gupta is Member, CBRN Co-ordination Committee of National Disaster Management Authority; Executive Member, International Society of Surgery/Societe' Internationale' de Chirurgie (ISS/SIC) and the International Association of Trauma Surgery and Surgical Intensive Care (IATSIC), Academic Council for Emergency and Trauma of the Indo-US Emergency and Trauma Collaborative.

Dr Subodh Kumar was awarded scholarship by National Institute of Health, USA to attend a Workshop on Observational Studies organized by GS Seth Medical College, Mumbai (15–17 March 2010); Member, Editorial Board, Journal of Society for Wound Care and Research (JWSCR); Reviewer for Tropical Gastroenterology and an examiner for Delhi University.

Dr Sushma Sagar is Co-Editor, Journal of Society for Wound Care and Research (JWSCR); Reviewer for Journal of Medicine and Medical Sciences (JMMS).

Residents of the department received the following awards:

- First prize: Oral presentation by Albert V, Arulselvi S, Sagar S, Kumar S, Agarwal D, Misra MC. Elective blood ordering schedule for general surgery and neurosurgery departments in a tertiary trauma care center in India. Trauma 2010, JPNATC, AIIMS, New Delhi, 26-28 November 2010.
- First prize: Oral presentation by Albert V, Kapoor N, Arulselvi S, Kumar S, Sagar S. Evaluation of amylase and lipase estimation in blunt trauma abdomen patients: A prospective study in a tertiary trauma care hospital, North India. Trauma 2010, JPNATC, AIIMS, New Delhi, 26-28 November 2010.
- First prize: Oral presentation by Kilambi R, Bansal VK, Tamang T, Misra MC, Kumar S. Laparoscopic suturing skills acquisition—a comparison between trained and novice surgeons. Delhi State Chapter of ASI, RML Hospital, New Delhi, February 2011.
- Second prize: Oral presentation by Kataria K, Kumar S, Gupta A, Mishra B, Sagar S, Singhal M, Misra MC. The Diagnostic laparoscopy in abdominal trauma- experiences of a level I trauma center. Fifth AIIMS Surgical Week and Endosurg-2011, International CME cum Live Workshop, AIIMS, New Delhi, 11–13 March 2011.

9.35 Transplant Immunology and Immunogenetics

Professor and Head

N.K. Mehra

Additional Professor

D.K. Mitra

Scientists

Uma Kanga

Gurvinder Kaur

Sunil Kumar
Sanjeev Goswami

EDUCATION

Short term training: One virologist from the Institute of Public Health, Mohakhali, Bangladesh, six doctors from B.P. Koirala Institute of Health Sciences, Dharan, Nepal, and 20 students and doctors from various universities and institutions in India received short term training in laboratory techniques of HLA testing and other immunological investigations. Further, five students underwent training in various aspects of cellular immunology.

Long term training: One doctor from the Armed Forces Medical Services completed her training (3 years) in clinical immunogenetics as a part of her PhD training requirement.

Training to MD/DM students: Several MD/DM students from various departments of AIIMS, viz. Pathology (10), Nephrology (2), Medical Oncology (1), Laboratory Medicine (2) and Haematology (2) underwent training in HLA tissue matching technologies and other immunological investigations.

Four **Kishore Vaigyanik Protsahan Yojana (KVPY)** students were trained on various aspects of transplant immunology and infectious diseases. Two of these students (Supervisors: Dr D. K. Mitra, Dr Uma Kanga) were awarded ICMR scholarship based on their projects. Prof. Mehra also delivered three lectures under the DST-INSPIRE (Innovation in Science Pursuit for Inspired Research) programme of the DST for bright high school students of Delhi. A special lecture on transplant immunology and immunogenetics were organized for M.Sc. students of the B.R. Ambedkar Centre for Biotechnology and Research, University of Delhi.

A quality control exercise for DNA typing of HLA genes is in progress at the national level. Students and visiting scientists have been trained on various cell culture assays, including flow cytometry based immunophenotyping.

Lectures delivered in CME/ National and International conferences: 28

RESEARCH

Funded Projects

Ongoing

1. Type 1 diabetes genetics consortium: An international effort. PI: N.K. Mehra. Funded by NIH, USA for 3 years (2005–08 extended upto 2011). Funds. \$ 25,000.
2. Asian Indian Donor Marrow Registry: novel technologies, genome diversity and transplant monitoring. PI: N.K. Mehra. Funded by DBT for 3 years (2010– 2013). Funds: Rs 82 lakhs.
3. A comprehensive understanding of the nasopharyngeal carcinoma (NPC) in the North Eastern region of India. PI: N.K. Mehra. Funded by DBT for 3 years (2010–2013). Funds: Rs 69 lakhs.

4. MICA and NKG2D ligand in renal transplantation. PI: N.K. Mehra. Funded by ICMR for 3 years (2010–2012). Funds: Rs 39.8 lakhs.
5. Implications of the interferon system and immunogenetic basis of resistance to HIV-1 infection and disease progression. PI: N.K. Mehra. Funded by ICMR for 3 years (2009–12). Funds: Rs 59.7 lakhs.
6. 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). PI: D.K. Mitra. Funded by DBT for 5 years (2007–12). Funds: Rs 89.80 lakhs.
7. Efficacy of oral vitamin D as an adjunct therapy in category I pulmonary TB along with assessment of immunological parameters. PI: D.K. Mitra Funded by DBT for 5 years (2007–12). Funds: Rs 199.42 lakhs.
8. Impact of HIV infection on latent TB among patients with HIV-TB coinfection. PI: D.K. Mitra. Funded by DBT and ICMR for 4 years (2007–2011). Funds: Rs. 379.4 lakhs.
9. Role of FoxP3+ regulatory T cells in polarized immunity among leprosy patients. PI: D.K. Mitra. Funded by ICMR for 3 years (2010-2013). Funds: Rs 75.20 lakhs (AIIMS Component).
10. CD26 mediated chemokine activation: role in suppression of immunity among visceral leishmaniasis patients. PI: D.K. Mitra. Funded by DBT for 3 years (2010–13). Funds: Rs 92.78 lakhs.
11. FoxP3+ Treg cells mediated suppression of local immunity in human tuberculosis. PI: D.K. Mitra. Funded by DBT for 3 years (2010–13). Funds: Rs 92.82 lakhs.

Completed

1. Programme support for Advanced Programme in Histocompatibility and Immunogenetics (PS-APHTI). PI: N.K. Mehra. Funded by DBT for 3 years (2005–08 extended upto March 2010). Funds: Rs 163.43 lakhs.
2. Comprehensive approach to understand streptococcal disease and their sequelae to develop innovative strategies for diagnosis, therapy, prevention and control. PI: N.K. Mehra. Funded by European Commission for 3 years (2006–09 extended upto March 2010). Funds: Rs 114 lakhs.
3. Genomic analysis of MHC region genes (HLA and Non HLA) in Type 1 diabetes in the Indian population. PI: N.K. Mehra. Funded by ICMR for 3 years (2006–09, extended upto 2010). Funds: Rs 27 lakhs.
4. Comparative study on the immunogenetic similarities between Euro Caucasians and Asian Indians: An Indo-Hungarian initiative. PI: N.K. Mehra. Funded by DST for 3 years (2007–2010). Funds: Rs 30 lakhs.
5. Genetic basis for HIV-1 transmission resistance and disease progression. . PI: N.K. Mehra. Funded by DBT for 3 years (2007–10). Funds: Rs 60 lakhs.
6. Hematopoietic stem cell transplantation and genetics of HIV infection. Funded by DBT for 3 years (October 2007–10). PI: N.K. Mehra Funds: Rs 22.20 lakhs.
7. Early detection of polarized cytokine producing alloreactive T cells and the role of chemokines in their selective homing among patients undergoing renal transplantation. PI: D.K. Mitra. Funded by DST for 3 years (2007–2010). Funds: Rs 29.78 lakhs.
8. Study of NKT cells in polarized immunity among leprosy patients. PI: D.K. Mitra. Funded by ICMR for 3 years (2007–10). Funds: Rs 51.50 lakhs.

PUBLICATIONS

Journals: 19

Chapters in books: 8

Books: 1

PATIENT CARE

Laboratory services: *Transplantation, HLA matching*

	Recipients	Donors	Total
<i>Renal Transplantation</i>	268	293	561
Bone Marrow Transplantation			
Chronic Leukemia	16	63	79
Aplastic anemia	68	215	283
Acute Leukemia	99	312	411
Thalassemia	41	122	163
Others	27	91	118
Total	251	803	1054

Cadaver Donor Organ Transplantation

Cadaver Donor	4
Kidney recipients	15

Cross-matching

Serology	623
Flowcytometry	158
Panel reactive antibody (PRA) screening	628
Luminex PRA	109
ELISA PRA	75

Diagnostics

Spondyloarthropathies	391
Other diseases	47
Chimerism studies in BMT	100 recipient donor pairs
Immunophenotyping of leukemia patients	22
Immune deficiency disorder	29
Unrelated donor search for BMT	235

Requests for search of unrelated HLA matched donor from the 'Asian Indian Donor Marrow Registry' for bone marrow transplantation (BMT): 235 (USA: 94, Europe: 73, India: 38, Asia: 30).

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Professor N. K. Mehra was awarded the 8th Prof. Shamer Singh Memorial Oration of the Anatomical Society of India and Madras Diabetic Research Foundation, University of Minnesota Gold Medal Oration Award and Oration of

the National Institute of Virology Foundation; First President of the Asia Pacific Federation of Histocompatibility and Immunogenetics and the Secretary General of Asia-Pacific Federation of Inflammation and Regeneration; 'Transmitting Editor' for the journal, Inflammation and Research; Chairperson for the following committees: Committee for establishment of Satellite Centre for Sickle Cell and Thalassemia at Chandrapur (Maharashtra); Scientist Selection Committee of the National Institute of Immunohematology, Mumbai; DBT Expert Group-cum-Monitoring Committee on Immunomodulation; ICMR Scientific Advisory Committee for Centre for Excellence in Primary Immunodeficiency diseases; and as a Co-Chair of the Career Development Committee of the International Union of Immunological Societies; Expert/member to the following bodies: Ethics Committee of the Dr B.L. Kapoor Memorial Hospital; the DBT Expert Committee on Tuberculosis; Faculty Selection Committee of the Sher-i-Kashmir Institute of Medical Sciences, Srinagar; Scientist Selection Committee of the Institute of Life Sciences, Bhubhaneswar; IND Panel of Experts on 'Cellular Biology based Therapeutic Drug Evaluation Committee of the MOHFW, GOI; Postgraduate Committee of the Medical Council of India; Scientific Advisory Committee of the National AIDS Research, Pune; Scientific Advisory Committee of the Institute of Pathology, Safdarjung Hospital, New Delhi; ICMR Selection Committee for Scientists B and E; ICMR Core Committee for Multi-disciplinary Research Lab establishment in Medical Colleges; Faculty Selection Committee of the Postgraduate Institute of Medical Education and Research, Chandigarh; Chairperson for the following scientific sessions: Organ Transplantation, International Conference on Opportunistic Infections, New Delhi (29 September 2010); 6th National Thalassemia Conference, New Delhi (22 November 2010); 1st International Conference on Primary Immunodeficiency Diseases, New Delhi (5 March, 2011); and the session on MHC Polymorphism and Disease', 14th International Congress of Immunology, Kobe, Japan (22–27 August 2010); Visiting Professor for 6 weeks at the Riyadh Military Hospital, Riyadh, Saudi Arabia (1 June–10 July 2010).

Dr D. K. Mitra is a member of Research Advisory Committee of the Camel Research Institute, Bikaner.

Dr Uma Kanga is a Councillor for the Asia Pacific Histocompatibility and Immunogenetics Association; and is a Editorial Board member of two journals: Case Reports in Immunology and Medicinal Chemistry Research; Member of selection committee for Research Fellows at the ICMR Institute of Cancer and Preventive Oncology; Chaired a session on 'Modern Population Genetics in the Asia Pacific Region' at the International Conference of the Asia Pacific Histocompatibility and Immunogenetics Association, Queenstown, New Zealand (16–19 November 2010).

Dr Gurvinder Kaur is the Secretary and Councillor of the Asia Pacific Histocompatibility and Immunogenetics Association.

VISITING SCIENTISTS

Dr Veena Taneja, Department of Immunology and Rheumatology, Mayo Clinic, USA visited the Department and delivered a lecture on "Humanized mice as models of inflammatory arthritis" on 30 July 2010.

9.36 Urology

Professor and Head

P. N. Dogra

Professor

Amlesh Seth

Additional Professor

Rajeev Kumar

EDUCATION

The Department imparted lectures for the undergraduates and nursing students. The department trains 11 postgraduates for the degree of MCh in Urology over a 3 year period.

The department had observers and post graduate students in Urology from various Indian/ Foreign Medical Universities to observe and learn Robotics, Endourology, Laparoscopy, Open surgery and Microsurgery in Urology.

The faculty of the department continues to be examiners for NBE and M.Ch. Urology in various universities and Inspector for the Medical Council of India and National Board for recognition of standard of examination and facilities for Urology postgraduate courses. The department also took active part in restructuring and reframing the curriculum for M.Ch. and DNB training courses in Urology.

Continuing Medical Education

Uro-Oncology Workshop (Laparoscopic, Robotic and Open), Jointly organized by AIIMS, Rajiv Gandhi Cancer Institute & Research Centre, Dr. RML Hospital & PGIMER at New Delhi, 1-3 October 2010

Lectures delivered in CME/ National and International conferences: 36

RESEARCH

Funded Projects

Ongoing

1. Evaluation of oxidative stress as a cause for idiopathic male infertility and the role of 'Addyzoa' in its treatment' Randomised, double blind placebo controlled trial. PI: Dr Rajeev Kumar. Funded by: *M/S Charak Pharmaceuticals, Mumbai for 3 years (2009-12). Funds Rs. 5.7 lakhs.*

Departmental Projects

Ongoing

1. A post marketing surveillance study of intra-vesical BCG vaccine (Serum Institute of India Ltd- ONCO-BCG) in Ca-in-situ and in intermediate and high risk Ta, Ta1 transitional cell carcinoma of urinary bladder.
2. Urethroplasty for anterior and posterior urethral strictures: different techniques.
3. Core through urethrotomy for traumatic obliterative urethral stricture.
4. Evaluation of robotic radical prostatectomy.
5. Evaluation of Robotic pyeloplasty, ureteroneocystostomy and repair of urinary fistula.
6. Evaluation of robotic radical cystectomy.
7. Pre peritoneal vs transperitoneal radical prostatectomy.

8. Bipolar TURPVs KTP.
9. Robotic assisted inguinal lymphnode dissection for carcinoma penis.
10. Discordant clinical and FNAC findings in suspected obstructed azoospermia: surgical and pathological correlation.
11. Causes of negative surgical explorations in men with obstructive azoospermia.
12. Stone analysis by infrared spectroscopy.
13. EMT for stress urinary incontinence.

Collaborative Projects

Ongoing

1. Cholesterol homeostasis and expression of cell cycle proteins (Cyclin E & CDK2) in normal prostate, benign prostatic hyperplasia & carcinoma prostate cases: a pilot study (with Department of Biochemistry).
2. 3-dimensional chemical shift imaging and diffusion weighted imaging using proton MRS in the diagnosis of carcinoma prostate (with Department of NMR).
3. Mitochondrial genes and Y chromosome microdeletions in male infertility (with Department of Anatomy).
4. Oxidative stress as a cause of male infertility (with Department of Anatomy).
5. Study of sperm molecular factors in idiopathic recurrent spontaneous abortions (with Department of Anatomy).
6. Hemodynamic changes during steep Trendelenburg position in robotic procedures (with Department of Anesthesia).
7. Paravertebral block during PCNL (with Department of Anesthesia).
8. Minimal invasive necrosectomy using a nephroscope in pancreatic necrosis (with Department of GI Surgery).

PUBLICATIONS

Journals: 24

PATIENT CARE

O.P.D and Specialty clinics	New cases	Old cases
Main hospital OPD	12775	29126
BRAIRCH Uro-malignancy Clinic	486	1537

Admissions: 5282

Surgical procedures

1. Main O.T.	1373
a. Open procedures:	183
b. Endourology:	761
i. Lower tract:	293
TURP:	109
TURBT:	184
ii. Upper tract:	468
Percutaneous:	215
URS	100
RIRS:	03
DJS:	150

c. Robotic surgery:	128
i. Radical prostatectomy:	31
ii. Radical cystectomy:	07
iii. Pyeloplasty:	61
iv. Radical nephrectomy:	10
v. Others :	19
d. Laproscopic surgery:	61
i. Lap nephrectomy:	36
ii. Lap pyeloplasty:	08
iii. Others:	17
e. Microsurgery:	60
i. VEA:	50
ii. MVL:	05
iii. Vasectomy reversal:	05
Others :	180
2. Minor OT:	
a. Cystoscopy, DJ Stent Removal, etc.	2119
b. Open cases (Orchidectomy, etc.)	128
c. Minor cases (Catheter change etc)	3955
Extracorporeal shock wave lithotripsy:	978
New cases	320
Re-do cases	658
Urodynamic procedures:	
Uroflowmetry	3329
Cystometrogram (CMG)	259
Ultrasound procedures	212
a. TRUS/ Prostate biopsies:	141
b. SPC	42
c. PCN	09
d. Ultrasound KUB	20
Stone analysis:	98
EMT (Electromagnetic therapy):	34

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Professor P. N. Dogra was invited as the Guest of Honour at the inaugural function and was the judge for the poster session at AISMOC in Bokaro, Jharkhand (4 February 2011); Department of Urology of the General Hospital in Hall I.T. Innsbruck, Austria for knowledge exchange programme (6-10 September 2010) and for the SITUS workshop (9-10 September 2010); Awarded “Glory of India Award” by India International Friendship Society; Organising Chairman for the

Uro-Oncology Workshop (Laparoscopic, Robotic and Open), jointly organized by AIIMS, Rajiv Gandhi Cancer Institute & Research Centre, Dr. RML Hospital & PGIMER, at New Delhi (1-3 October 2010) and a Advisor to the organizing committee of 20th Annual Conference of North Zone Chapter of USICON 2010 (Gurgaon, 12-14 November 2010); Chaired the following sessions in various academic forums: “Controversies in PCNL,” (4th International Workshop on Basic & Advanced Techniques of PCNL, PERCON 2010, New Delhi, 2-3 April), Live Operative Workshop on “TURP” (Sir Ganga Ram Hospital, New Delhi, 2 May 2010), Live Operative Workshop on “Implants in Andro-Gynecology” (Andrology, India, New Delhi, 4 May 2010), Symposium on “Management of hyperuricemia beyond Allopurinol” (Zydus, New Delhi, 8 May 2010), Symposium on “Management of Erectile Dysfunction” (Pfizer Urology & Andrology India, New Delhi, 12 June 2010), Symposium on “Naftopidil – expecting more from an alpha blocker” (North Zone USICON, Gurgaon, 12-14 November 2010), Symposium on “Challenges in the use of combination medical therapy in active men with LUTS of BPH & OAB” (Ranbaxy, New Delhi, 21 November 2010), Live operative workshop on “Minimal invasive treatment of prostate” (New Trends in EndoUrology, Gurgaon, 10-11 December 2010), session on “Haematuria-Red alarm” (CME on Managing Common Emergencies, Delhi Medical Council, 20 February 2011), “Best Video” (USICON, Kolkata, 22 January 2011), and “SIU session on targeted therapy in the Renal cell carcinoma” (USICON, Kolkata, 22 January 2011); Moderator for the debate on “Medical versus surgical treatment of BPH” (AISMOC, Bokaro, Jharkhand, 4 February 2011), session on “OAB syndrome: controversies & insights” (Cipla UroNet, New Delhi, 22 June 2010) and the session on “Laparoscopic pyelolithomy” (SELSICON 2010, New Delhi, 23 October 2010). Participated in the Debate on “The surgical management of localized carcinoma of prostate: open, laproscopic, robotic” (Robotic Urology Workshop, FORTIS Hospital, New Delhi, 4-5 December 2010).

Professor Amlesh Seth was Chairperson for “Live Operative Workshop on TURP” (Sir Ganga Ram Hospital, New Delhi, 2 May, 2010); “Laparoscopic Pyeloplasty” (SELSICON 2010, New Delhi, 22-24 October, 2010); “Retrograde Intra-renal Surgery” (Medicity, 12-14 November 2010); podium paper session on “Infectious Diseases in Urology” (44th Annual Conference of Urological Society of India, Kolkata, 21-24 January, 2011); Participant for the workshops on “Introduction to Clinical Trials and Good Clinical Practices” and “Observational Studies (Case-control, cohort and cross-sectional)” organised by FHI wing of National Institute of Health, USA (Trivandrum, 3-5 December 2010).

Dr Rajeev Kumar is Secretary for the North Zone Chapter of the Urological Society of India; Chief Editor of Asian Urology, Associate Editor of the International Journal of Urology, and Regional Editor of the Journal of Men’s Health; Co-opted member of Executive Committee of Urological Association of Asia; Awarded the Outstanding Young Urologist Award, 2010 by Urological Association of Asia, and the DUSCON Award and Gold Medal for contributions to Basic Research in Urology by the North Zone Chapter of the Urological Society of India; Awarded an International Guest Scholarship by the American College of Surgeons; Chaired the following sessions in academic forums: “Live operative session” (Uro-oncology Workshop, RGCI&RC, New Delhi, 1-3 October 2010), “Andrology” (10th Asian Congress of Urology, Taipei, Taiwan, 26-31 August 2010), “Marudhara Jodhpur Best Paper session” (20th Annual Conference of the North Zone USICON, Gurgaon, 12-14 November 2010), “Global status of men’s health” (7th World Congress of Men’s Health, Nice, France, 28-30 October 2010). In addition, he moderated the “Live operative session on New Trends in Endourology” (AIIMS, New Delhi, 10-11 December 2010); and convened the SAARC Symposium (44th Annual Conference of the Urological Society of India, Kolkata, 21-24 January 2011).

10.1 Cardiothoracic Science Centre

Chief

Balram Airan

CARDIO-THORACIC VASCULAR SURGERY

Professor and Head

Balram Airan

Professors

S.K. Choudhary

U.K. Chowdhury

A.K. Bisoi

Additional Professors

V. Devagourou

Milind Hote

Sachin Talwar

CARDIOLOGY

Professor and Head

V.K. Bahl

Professors

Anita Saxena
K.C. Goswami

S.S. Kothari
R. Juneja

Balram Bhargava
R. Narang

Additional Professors

S. Mishra
N. Naik

S. Seth
G. Karthikeyan
S. Singh

Rakesh Yadav
Gautam Sharma

Associate Professors

Ambuj Roy

S. Ramakrishnan

CARDIAC ANAESTHESIA

Professor and Head

Usha Kiran

Professor

Sandeep Chauhan

Associate Professor

Neeti Makhija

Poonam Malhotra

Minati Choudhury

Assistant Professor

Shambhu Nath Das

Parag Gharde

Vishwas Malik

BLOOD TRANSFUSION SERVICES

Chief Medical Officer and In-charge

Anjali Hazarika

CARDIAC RADIOLOGY

Professor and Head

Sanjiv Sharma

Additional Professor

Gurpreet Singh Gulati

Associate Professor

Priya Jagia

NUCLEAR MEDICINE

Additional Professor

Chetan D. Patel

STEM CELL FACILITY

Associate Professor

Sujata Mohanty

CARDIAC PATHOLOGY

Professor

Ruma Ray

CARDIAC BIOCHEMISTRY

Additional Professor

R Lakshmy

ORGAN RETRIEVAL BANKING ORGANISATION (ORBO)

Additional Professor

Aarti Vij

EDUCATION

CARDIOTHORACIC VASCULAR SURGERY

Training

Eight cardiac surgeons, and 13 Physiotherapists and Cardiac Operation Theatre (Technician) underwent short term training in the department

Lectures delivered in CME/ National and International conferences: 8

The following papers were presented at the 57th National Conference of The Indian Association of Cardiothoracic and Vascular Surgeons at Mamallapuram, Chennai, 16–19 February 2011. (a) Robotic ASD closure at AIIMS (b) Atrial Fibrillation prophylaxis in patients undergoing CABG – Role of Magnesium and Vitamin C. (c) Study of protective role of remote ischemic preconditioning in adults undergoing coronary artery bypass surgery in terms of postoperative Troponin I level. (d) Tubercular pseudoaneurysm of ascending aorta; rare case in an 8 year old child. (e) Fungal trap in neonatal airway; an unusual cardiac mass.

CARDIOLOGY

Lectures delivered in CME/ National and International conferences : 32

CARDIAC ANAESTHESIA

Training

9 DM candidates including three sponsored from Indian Army and 8 MD (Junior residents) from Anesthesia department have undergone training in Cardiac Thoracic Anesthesia. One candidate from Shree Chitra Tirunal Institute of Medical Sciences, Trivandrum and 3 MD candidates from Lady Harding Medical College were imparted short term training in the specialty. Short term training was imparted to a PDCC candidate from Banaras Hindu University.

Lectures delivered in CME/ National and International conferences : 26

BLOOD TRANSFUSION SERVICES

Training

In-house training sessions held in the department for technical staff on (i) Introduction to Leucoreduction for patient safety and (ii) automation in red cell grouping, antibody screening and compatibility testing

Lectures delivered in CME/ National and International conferences : 2

CARDIAC RADIOLOGY

Lectures delivered in CME/ National and International conferences : 24

CARDIAC NUCLEAR MEDICINE

Eight postgraduate students are being trained (training of MD and MSc. students on rotational basis in Nuclear Cardiology)

Lectures delivered in CME/ National and International conferences : 4

STEM CELL FACILITY

The department participates in the PhD, MD and DM programmes. It is involved with the work of 17 PhD students, 5 MD students and 2 MS students. One graduate student received short term training.

Lectures delivered in CME/ National and International conferences : 7

CARDIAC BIOCHEMISTRY

Three students are pursuing PhD in the department. The department provided hands-on training in laboratory methods to two MSc students and three MLT students.

RESEARCH

CARDIO-THORACIC VASCULAR SURGERY

Funded projects

1. Role of prognostic markers in complex congenital cardiac surgery. ICMR Project, Started 20 March 2009.
2. Study of serum osteopontin level as a marker of severity of coronary artery disease in patients undergoing CABG.
3. Study of serum osteopontin levels in patients with severe LV dysfunction undergoing CABG.
4. Stem cell therapy for the ischemic myocardium – in CABG patients.
5. Study of DAPI labelled mesenchymal stem cells in a rat model of myocardial infarction and heart failure.

Departmental projects

Completed

1. Thyroid hormones and Pediatric Cardiac Surgery

Ongoing

1. Comparison of clinical and angiographic outcome in patients undergoing on pump CABG with radial artery graft pretreated with phenoxybenzamine vs. papaverine.
2. Histopathology and morphometry of the pulmonary vasculature in patients undergoing bi-directional Glenn and total cavopulmonary connection.
3. Mitral valve replacement using bioprosthetic valves in patients with rheumatic heart diseases aged below 40 years.
4. Specific issues after pericardiectomy for chronic constrictive pericarditis: Actuarial survival, fate of preoperative mitral and tricuspid regurgitation, ventricular function, freedom from reoperation and other events.
5. The fate of the aortic root after intracardiac repair of tetralogy of Fallot.
6. Serial non-invasive hemodynamic monitoring in patients undergoing pericardiectomy for chronic constrictive pericarditis: a comparative intraoperative and postoperative evaluation of two surgical approaches.
7. Brain natriuretic peptide, stroke volume variation and E/A ratio as non-invasive markers of diastolic dysfunction in patients undergoing pericardiectomy.
8. A comparative study of lactate, pyruvate and lactate pyruvate ratio as markers of myocardial ischemia in patients undergoing cardiac surgery.
9. Does semi-invasive method replace invasive and non invasive methods of cardiac output monitoring?
10. A comparative study of lactate, pyruvate and lactate pyruvate ratio as markers of myocardial ischemia in adult patients undergoing open heart surgery.
11. Efficacy of lactate concentration gradient from right atrium to pulmonary artery in goal-directed haemodynamic management in cardiac surgical patients.
12. Study of Clinical and Histopathologic profile of patients with atrial fibrillation undergoing mitral valve replacement surgery.
13. Histopathological study of extent of degenerative changes in ascending aorta of patients with bicuspid aortic valve.
14. Neurological study of patients with aortic arch replacement surgeries without hypothermic circulatory arrest.

Collaborative projects

1. Trial – International multicentric clinical trial comparing Onpump CABG vs. Offpump CABG.
2. STITCH trial.

CARDIOLOGY

Funded projects

Ongoing

1. CVD Biomarker profiling in Acute coronary events by antibodies and antigen array. Funded by – ICMR.
2. RHEUMATIC study. Funded by – ICMR.
3. Utility of Pulse oximetry in diagnosing congenital heart disease. Funded by – ICMR.

4. Intravascular Ultrasound for severe pulmonary artery hypertension in congenital heart diseases. Department of science and technology.
5. Stem cell therapy in dilated cardiomyopathy DBT.
6. Global registry of rheumatic heart disease. Canadian network of clinical trials.
7. Rest-stress MIBI-SPECT compared to coronary CT angiography in the assessment of patients at intermediate risk of coronary events International atomic energy agency.
8. Morphology and function of platelets in Idiopathic pulmonary artery hypertension Department of science and technology.

Completed

1. Non-invasive detection of sub-clinical disease activity in patients with established rheumatic valvular heart disease. Funding source – DBT.

Departmental projects

Ongoing

1. Propranolol in children with VSD and Heart Failure (VSD PHF Study).
2. 3D Echo during acute rheumatic fever.
3. Comparison of 3D echo and MRI parameters in Ebstein's anomaly.
4. Anti streptococcal antibodies as predictor of success of prosthetic heart valve thrombosis.
5. Pacemaker lead placement in RVOT versus RV apex – a validation by CT.
6. Balloon dilatation of coarctation of aorta – a retrospective analysis.

Completed

1. Tissue Doppler imaging in mitral stenosis pre and post PTMC.
2. 3D echo study of rheumatic mitral regurgitation.
3. 3D echo parameters as a predictor of immediate outcome of PTMC.
4. Strain and Tissue Doppler Imaging in normal neonates.
5. Prosthetic heart valve thrombosis in children – predictors and management.
6. Initial study of safety and Efficacy of Betablockers in Eisenmenger Syndrome.

Collaborative projects

1. RED HF study – A double blind randomized placebo-controlled, multicenter study to assess the efficacy and safety of Darbepoetin alfa treatment on mortality and morbidity in heart failure (HF) subjects with symptomatic left ventricular systolic dysfunction and Anemia. Funded by – Amgen Technology Pvt. Ltd.
2. INDICOR Trial Funded by – B Braun.
3. STITCH (Surgical Treatment of Ischemic Heart Failure) trial. Funded by – NIH, Bethesda, MD, USA.
4. RELEASE T Study.
5. FREEDOM trial: Future Re-vascularization Evaluation in patients with Diabetes mellitus: Optimal management of Multivessel disease (FREEDOM) Trial. Clinical trial comparing multi-vessel DES versus CABG in diabetics, Funded by NIH, Bethesda, MD, USA.

6. VISION Registry International registry of patients undergoing non-cardiac surgery which is looking at the incidence and predictors of perioperative ischemic cardiac events in the first 30 days after surgery. The registry has participants from over 10 countries around the world.
7. Coronary CTA – VISION study Funded by Canadian Institutes of Health research.
8. Steroids in cardiac surgery trial (SIRS) Funded by Canadian Institutes of Health research.
9. A collaboration of Imperial College London and Department of Cardiology AIIMS – Inflammatory and novel biomarkers in untreated heart failure. Funded by UKIERI initiative.

CARDIAC ANAESTHESIA

Funded projects

1. ICMR funded project entitled “Role of prognostic markers in complex congenital cardiac surgery” Poonam Malhotra Kapoor. Funding – Rs.24 lakhs.
2. Pentoxifylline in reducing neurocognitive decline and inflammatory response in patients of CABG under cardiopulmonary bypass. Dr Sambhunath Das. AIIMS Research Fund
3. Association between Inflammation and Osteopentin in coronary artery disease. Dr Minati Choudhury. AIIMS Research Fund
4. Comparison of epsilon aminocaproic acid and tranexamic acid in aneurismal surgery: Safety and clinical efficacy. (AIIMS Research grant) Dr Neeti Makhija.

Departmental projects

1. Role of Coenzyme Q10 in patients undergoing surgery for Tetralogy of Fallot.
2. Comparison of three doses of epsilon aminocaproic acid in patients undergoing corrective surgery in Tetralogy of Fallot.
3. Comparison of induction with etomidate and propofol on adrenocortical suppression in patients undergoing coronary artery bypass graft surgery.
4. Effect of phenoxybenzamine in patients undergoing arterial switch operation during cardiopulmonary bypass. Effect of phenoxybenzamine in patients undergoing arterial switch operation during cardiopulmonary bypass.
5. Haemodynamic effect of intranasal dexmedetomidine in comparison to dexetomidine plus ketamine or midazolam in congenital heart disease pediatric patients.
6. Cognitive function in patients undergoing Bi-directional Glenn surgery ‘Off pump’ versus ‘On pump’.
7. Comparison of etomidate and sevoflurane on induction of anaesthesia in patients of left ventricular dysfunction undergoing coronary artery bypass grafting.
8. Sonoclot Analysis in Tetralogy of Fallot patients undergoing corrective surgery: Role of Tranexamic acid – completed March 2011.
9. Neurological outcome and haemodynamic parameters with use of two doses of dexmedetomidine in CABG patients.
10. Parasternal intercostals block ropivacaine for pain management after cardiac surgery: A double blind randomized controlled study trial of sevoflurane and etomidate induction for CABG patients with severe LV dysfunction.
11. Anterior Mitral leaflet length: Predictor for mitral valve repair in a rheumatic population.
12. Role of Magnesium in the prevention of post operative arrhythmias in neonates and infants undergoing arterial switch operation.

13. Is euro score applicable to Indian patients undergoing cardiac surgery?
14. Short and long term prognostic value of coronary sinus derived serum cardiac troponin 1, creatinine MB, Lactate, Pyruvate and lactate pyruvate ratio in adult patients undergoing open heart surgery.
15. Serial Hemodynamic Assessment following Pericardiectomy for constrictive pericarditis.

BLOOD TRANSFUSION SERVICES

Collaborative projects

1. Safety and efficacy of autologous stem cell in preventing amputation in patients with chronic critical limb ischaemia.(Department of Surgery, AIIMS).
2. Production and characterization of site selected human monoclonal antibodies against the envelope glycoprotein of HIV-I (clade-C) (Department of Biochemistry).
3. SDF-1 and DC-SIGNR polymorphism and expression in HIV-I infection Department of Biochemistry).
4. Immunological characterization of HIV-1 infection in children – (Department of Biochemistry).
5. Functional characterization of Dendritic cells in HIV-I infection.(Department of Biochemistry, AIIMS).
6. Dendritic cell count and cytokine levels in HIV-I infection (Department of Biochemistry).
7. Establishing normal reference range of serum Free light chains in healthy Indian adults (Lab oncology, BRA, IRCH, AIIMS) (Non-funded).

CARDIAC RADIOLOGY

Funded projects

Ongoing

1. Induction of therapeutic angiogenesis in critical limb ischemia by intra-arterial delivery of autologous bone-marrow derived stem cells. Funded by: DBT, Ministry of Science and Technology, Government of India.
2. MRI for in vivo tracking of iron oxide labeled Mesenchymal stem cells in rat model of heart failure. Funded under the Center of Excellence Proposal, 25 March 2008, DBT, Government of India.
3. Utility of 3 Tesla MRI in evaluating response to immunosuppressant therapy in Takayasu's arteritis. Funded by AIIMS research funds 2010–2011.

Departmental projects

Ongoing

1. Role of magnetic resonance imaging in evaluation and surgical planning of Ebstein anomaly.
2. Coronary CT angiography to predict vascular events in non-cardiac surgery patients cohort evaluation study (Coronary CTA VISION).
3. Volumetric analysis and dynamic assessment of aortic aneurysm size with Gated CT angiography.

Completed

1. Value of Dual Source Computed Tomography in Assessment of Chronic Total Occlusion of Coronary Arteries.
2. The effect of Renal Transplantation on coronary artery calcification and carotid intima-medial thickness in renal recipients.
3. Study of clinical characteristics and MRI features of restrictive cardiomyopathy (RCMP) and to devise MRI criteria for diagnosis of EMF.

4. Clinical spectrum, etiology and outcomes of percutaneous angioplasty in HVOTO- Cohort prospective follow-up study.

CARDIAC NUCLEAR MEDICINE

Ongoing

1. Detection of myocardial ischemia in asymptomatic diabetes' with Tc99m MIBI myocardial perfusion scintigraphy'. (2006–ongoing) Funding agency: International Atomic Energy Agency. Duration: 4 years, Funding: \$30,000.

Departmental projects

Completed

1. Role of F-18 FDG PET/CT in prognostication and restaging of locally recurrent cancer cervix.
2. Comparison of Emory, Cedar Sinai, 4D-MSPECT, Myometrix softwares for the assessment of left ventricular ejection fraction using Tc99m Tetrofosmin gated SPECT; Validation with equilibrium radionuclide angiocardiology.

Ongoing

1. Myocardial perfusion abnormalities in children with cyanotic congenital heart diseases, more than one year after successful univentricular repair (Fontan operation) and biventricular repair (Total correction of Tetralogy of Fallot).
2. Equilibrium Radionuclide angiography in evaluation of left ventricular synchrony and function in patients with permanent pacemaker: comparison between right ventricular outflow tract septum vs apical pacing.
3. Role of F-18 FDG in staging of Renal cell carcinoma and its post operative surveillance.
4. Detection of perfusion abnormalities in patients with pacemakers on stress-rest Tc99m Tetrofosmin Myocardial Perfusion SPECT: comparison between right ventricular outflow tract septum vs apical pacing.
5. Role of Phase Analysis on Equilibrium radionuclide angiocardiology in assessment of ventricular dysynchrony in patients of dilated cardiomyopathy. Comparison with Echocardiography.
6. PET–CT in treatment response evaluation in patients with primary NSC lung cancer.
7. PET-CT in treatment evaluation of recurrent cervical cancer.
8. Variable patterns of myocardial uptake of F-18 FDG in fasting patients.

Collaborative projects

1. Non invasive detection of Coronary artery disease: Comparison of 64 sections multidetector CT angiography and stress myocardial perfusion imaging in patients with chronic angina (Nuclear Medicine, Cardiology, Cardiac Radiology) (2010–ongoing).
2. 'Use of autologous bone marrow stem cells for myocardium regeneration'. (2006–ongoing). Funding agency – Department of Biotechnology
3. Labelling of stem cells with Technetium-99m hexamethylene propylene amine oxine (Tc99m HMPAO) and to detect the homing of stem cells in the myocardium after intra-coronary injection. (2007–ongoing) Institute funded.
4. 'Efficacy of stem cells in improvement of left ventricular function in patients with acute myocardial infarction' (2008 – ongoing). Funding agency – Department of Biotechnology.
5. 'Role of SECT-MPI and CT angiography in the assessment of Patients at intermediate risk of coronary events – A Pilot randomized controlled trial. (2010–ongoing). Funding agency – International Atomic Energy Agency.
6. Role of PET/CT in initial staging of locally advanced breast cancer and comparison with conventional modalities (submitted in Dec 2010).

STEM CELL FACILITY

Funded projects

Ongoing

1. Transplantation of Mesenchymal Stem Cell in animal models of Myocardial infarction and Parkinson's disorder, Sujata Mohanty, DBT, Rs 44.45 lakhs.
2. "3D Expansion and differentiation of mesenchymal stem cell into osteoblast for bone tissue engineering on Biocomposite scaffold", Dr Sujata Mohanty, ICMR, Rs 59,12,346.
3. Isolation, Expansion and Characterization of Oral Mucosal Epithelial Stem Cells, Sujata Mohanty, Institute Project, Rs. 1,00,000. (30 May 2010).

Completed

1. Isolation and expansion of MSC from human bone marrow umbilical cord blood and evaluation of its cardiomyogenic and neurogenic differentiation potential, Sujata Mohanty, ICMR, Rs 29.05 lakhs.

Collaborative projects

1. Use of autologous bone marrow stem cells for myocardium regeneration (with CTVS)
2. Efficacy of stem cell in improvement of left ventricular function in patients with acute myocardial infraction (with Cardiology)
3. DBT Centre of Excellence for Stem Cell Research: Basic and Transplantation (with CTVS)
4. Evaluation of efficacy of cultivated oral mucosal cells transplantation in patients with acute ocular burns as compared to amniotic membrane (with RP Centre)
5. Induction of therapeutic angiogenesis in critical limb ischemia by intra-arterial delivery of autologous bone marrow derived stem cells (with Cardiac Radiology)
6. Use of Autologous Bone Marrow Derived Stem cells For Rehabilitation of patients with Dry Age Related Macular Degeneration and Retinitis Pigmentosa: A Phase-I Clinical Trial (with RP Centre)
7. Intravenous autologous bone marrow stromal or mononuclear cells for patients with acute ischemic stroke: A Multi Institutional Project (with Neurology)
8. Safety and Efficacy of Autologous Stem Cell in prevention of amputation in patients with chronic critical limb ischemia (with Surgery)
9. To study the role of bone marrow derived pluripotent cells in peripheral nerve repair in adult rats (with Pathology)
10. Effect of bone marrow stromal cells transplantation and magnetic stimulatiosory in the secondary motor functional recovery of spinalised rats (with Physiology)
11. MRI for in – vivo tracking of iron oxide labeled Mesenchymal stem cells in a rat model of heart failure (with Cardiac Radiology)
12. Development of a potential biopolymer to serve as an alternative substrate of human amniotic membrane for ex–vivo expansion of corneal epithelial cell (with RP Centre)
13. Exploring the role of MHC and co-stimulatory molecules in the immune evasion mechanism of glioma stem cells (with Neuro-biochemistry)
14. Study of stem cell therapy in patients with myocardial infarction and persistent total occlusion of infarct related artery [Cell therapy in Occluded Arteries Treatment (COAT)] (with Cardiology)

15. Study of feasibility and efficacy of intravenous infusion of autologous bone marrow derived mononuclear stem cells in chronic ischemic stroke. Clinico-radiological correlative study with biomarkers of stroke recovery (with Neurology)
16. Comparison of bone marrow mononuclear cells in combination with melatonin versus BMMNCs alone in middle cerebral artery occlusion model of stroke in rats (with Neurology)
17. Comparison of hair follicle stem cells to melanocytes from grey and pigmented hair follicle (with Dermatology)
18. Labelling of stem cells with Technetium-99m hexamethylene propylene amine oxine (Tc99m HMPAO) and to detect the homing of stem cells in the myocardium after intra-coronary injection (with Cardiology)
19. A study of the genetic profile of chronic immune thrombocytopenic purpura patients at a North Indian tertiary care center (with Hematology)
20. Detection of cancer stem cell markers in retinoblastoma by flow cytometry (with RP Centre)
21. Correlation between clinical features, imaging characteristics and histopathological findings in Advanced Intraocular Retinoblastoma (with RP Centre)

CARDIAC PATHOLOGY

Departmental projects

1. Histopathological and morphometric evaluation of surgically excised specimens of thoracic aortic aneurysms
2. Histopathological analysis of light microscopical and ultrastructural features of surgically excised left atrial appendage in patients with atrial fibrillation due to rheumatic heart disease

CARDIAC BIOCHEMISTRY

Funded projects

Ongoing

1. Evaluation of HDL₂, HDL₃ and apolipoprotein A1 levels in a large Indian industrial population: Association with genetic variants in CETP, LCAT, hepatic lipase and LPL gene. Funded by DST for 3 yrs (2008-2011) Total funds: Rs 65 lakhs.
2. Effect of trans fatty acids on expression of transcription factors, PPAR α and SREBP1c. Institute funded for 2 yrs. Total fund: 1.80 lakhs.
3. Estimation of trans fatty acid content in selected common Indian fast food items. SRF fellowship funded by ICMR

Completed

1. Relation of APOA-V gene variants to serial changes in childhood body mass index and coronary artery disease risk factors in young adulthood. Funded by ICMR for 5 years (2005–2010) Total funds: Rs 35 lakhs.
2. Role of Telomere shortening and Telomerase activity on EPC senescence in premature CAD patients and controls (2008–2010) DBT Rs 28 lakhs.

Departmental projects

Ongoing

1. Association between adipose tissue trans fatty acid and non fatal myocardial infarction- case control.
2. Comparison of epsilon aminocaproic acid and tranexamic acid in aneurismal surgery: safety and clinical efficacy
3. Role of pentoxifylline in reducing neurocognitive decline and inflammatory response after coronary artery bypass grafting using cardiopulmonary bypass.

4. UKEIRI project on heart failure.
5. Induction of therapeutic angiogenesis in critical limb ischemia by intra arterial delivery of autologous bone marrow derived stem cells.

Completed

1. Development of long acting penicillins for rheumatic fever prophylaxis: preliminary evaluation of the current 3 weekly schedule in terms of disease control.
2. Role of Homocysteine in Coronary Artery Disease: Genetic and Epigenetic studies.

Collaborative projects

Ongoing

1. Oxidative stress, Carotid intima media thickness and endothelial dysfunction in renal transplant recipients and effect of therapy with N-Acetyl cystiene. Nephrology.
2. Adiponectin, C-reactive protein and interleukin-6 in overweight children and adolescents and their relationship with dyslipidemia and insulin resistance. Paediatrics.
3. Study of oxidative stress risk factors in Alzheimer's disease and vascular dementia. Lab Medicine.
4. Prevalence of coronary heart disease and its risk factors in residents of urban and rural areas of NCR-A repeat survey. Community Medicine.
5. Effect of atorvastatin in hyperlipidemia and progression of carotid intima media thickness in steroid resistant nephrotic syndrome. Paediatrics.

Completed

1. Relationship of Growth in Infancy and Childhood to Adult Endothelial Function and Body Composition; The New Delhi Birth Cohort. Endocrinology.
2. Prevalence of Metabolic Syndrome in OSA and Effect of Treatment With Auto-CPAP (Continuous Positive Airway Pressure) on Metabolic Syndrome. Medicine.
3. Paraoxonase and its gene variants in relation to coronary artery disease. Biochemistry

ORGAN RETRIEVAL BANKING ORGANISATION (ORBO)

Departmental projects

1. Equipment of management system of sophisticated electromedical equipment with reference to utilization at AIIMS.
2. To study customer satisfaction in post operative wards of AIIMS hospital.
3. Incidence of Ventilator Associated Pneumonias in Medical ICU in AIIMS.
4. Costing of CTVS ICU.
5. To study job profile and utilization of hospital administrators acquiring MHA training from AIIMS.
6. Costing of OT services at JPNATC, AIIMS.
7. A comparative study of operation theatre disinfection and sterilization practices in select hospitals in Delhi.
8. A study of factors affecting tissue and organ donation in Medico-legal cases at a tertiary care hospital.
9. A study to assess the knowledge attitude and belief of nursing working in critical care unit of AIIMS regarding organ and tissue donation and transplantation.

PUBLICATIONS

Journal : 126

Abstracts : 12

Chapters in Books : 1

PATIENT CARE

CARDIO-THORACIC VASCULAR SURGERY

Total operations performed from 1 April 2010 to 31 March 2011

Open Heart Surgery	2898
Closed Heart Surgery	1080
Total	3978

37,532 patients were attended and were seen in the Cardiothoracic and Vascular Surgery out patient department.

New facilities were added to strengthen patient care including two new surgical operating rooms, one of which is a hybrid operating room which combines surgery and interventional therapy; A 10-bedded neonatal intensive care unit to take care of extremely small babies and a new CT6 ward. However, only seven operation theatres (out of a total of nine) and five beds are functional in the neonatal ICU and the CT6 ward is partially functional, pending additional manpower. A new outpatient clinic (Aortic Clinic) has been started on Wednesday and Thursday morning to cater to patients suffering from diseases of the aorta under one roof.

CARDIOLOGY

New OPD cases 26,774

Old Cardiology cases 71,679

Patient Services

TMT	2,048	Holter	2,331
Echocardiography	27,810	Fetal Echocardiography	268
ECG (OPD)	30,527	Ambulatory BP	24
Event Recorder	18	Head up tilt test	113

Cath Lab Services

Diagnostic

Coronary angio and Cath 3571

Interventions

Coronary interventions	812	Mitral valve dilatations	284
Device closures	79	Pacemakers	204
ICD/BiV/Combo	57	Other interventions	92

BLOOD TRANFUSION SERVICES

Workload 1 January 2010 to 31 December 2010

Blood Units Collected

Replacement donors	17,228
Voluntary donors in the department	222
Voluntary donors through blood mobiles	739
Blood received from IRCS	90
Family voluntary donor	3,263
Blood received from Blood Bank, AIIMS	140
Blood received from other hospitals	405
Autologous	Nil
Total number of blood units collected	22,087

Blood Units issued to

CTVS/NS	26,053
Blood Bank, AIIMS	1,432
JPNATC	180
IRCS	86
Other hospitals	452
HIV/HBV/HCV/VDRL reaction unitsdiscarded	598
Total number of blood units issued	28,801

Lab. Procedures

Blood grouping (ABO)	69,885
Rh grouping	46,590
Crossmatching done	98,426

Infection markers

HIV Testing	25,854
HBV Testing	25,894
HCV Testing	27,234
VDRL Testing	23,739
MP testing	23,527
CMV Testing	,Nil
HBV confirmatory Testing	468
Total	126,716

Total number of blood components

Fresh frozen plasma (FFP)	17,503
Platelet concentrate	18,024

Recovered plasma	3,824
Cryoprecipitate	1,055
Packed red blood cells	19,342
Total	59,748

Special procedures

Single donor plateletpheresis	28
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CARDIAC RADIOLOGY

Total number of Cine-Angiography done from 1 April 2010 To 30 March 2011

Cine Fluoroscopy	8,152	Vascular catheter procedures	7,211
Ultrasound/Doppler	2,415	CT	1,636
MRI	540		

OPD data: Routine X-ray for CTVS and Cardiology: 8995

Portable	21,035	Ward	36,110
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CARDIAC NUCLEAR MEDICINE

Nuclear Cardiology Unit in CNC is equipped with a dual head SPECT-CT Gamma Camera. The nuclear cardiology unit caters to patients referred for cardiac studies from CN center and other departments of the hospital. 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. We also perform cardiac PET imaging with N-13 NH3 perfusion and F-18 FDG glucose metabolic studies for assessment of myocardial viability.

Total number of patients investigated in Nuclear Cardiology

Myocardial perfusion study	1239	MUGA study	1215
Cardiac PET	55	Misc (V/Q scan, 1st pass)	24
Total studies performed	2533		

STEM CELL FACILITY

S.No. Services offered

Numbers

1. Stem cell transplantations under various clinical trials	123
2. Limbal stem cell transplantation	15
3. Oral mucosal transplantation	12
4. Hair follicle – outer root sheath cells transplant in vitiligo	30
5. Transplantation of skin stem cell differentiated melanocytes in vitiligo	03
6. Cord blood stem cell cryopreservation	12
7. Bone Marrow cryopreservation for malignant disease	06
8. Bone marrow derived MNC cryopreservation	20

Facilities available

1. Stem cell isolation
2. Stem cell enumeration by Flow Cytometry
 - (a) CD 34/45 enumeration for G-CSF patients 14
 - (b) CD3/4/6/8 and CD34/45 for DCM and MI patients 29
 - (c) CD105/73/90/29, CD34/45 and HLA I andII for MSC transplant 07
3. Cryopreservation of stem cells
4. Culture and expansion of stem cells

CARDIAC PATHOLOGY

Specimens

Routine	237 cases	Research	98 cases
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Slides coated

Poly. L Lysine	20,256 slides
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Others

Immunohistochemistry	102 cases	Reference blocks	29 cases
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Frozen	5 cases	H and E	127 cases
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Special stains	6 cases
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CARDIAC BIOCHEMISTRY

The tests being done in Cardiac Biochemistry Lab for patients include:

1. Routine chemistry: plasma glucose, urea, creatinine, uric acid, Calcium, phosphorus, total protein, albumin, SGOT, SGPT, alkaline phosphatase, amylase, electrolytes).
2. Routine hematology: hemoglobin, WBC, differential counts, platelets and ESR).
3. Coagulation: PT, APTT, FDP, Protein C and Protein S, Fibrinogen.
4. Cardiac Markers: CK, CK-MB, LDH, Troponin I and BNP.
5. Lipids: Cholesterol-total, Cholesterol-HDL, Cholesterol-LDL, Cholesterol-VLDL, Triglycerides, Lipoprotein(a), Apo(a), Apo(b), small dense LDL, fatty acids.
6. Drugs: Digoxin, cyclosporine
7. Thyroid hormones-T₃, T₄, TSH
8. ASLO
9. CRP
10. Homocysteine
11. Vitamin B12 and Folate
12. RA factor
13. Catecholamines (plasma and urine), VMA
14. Glycosylated haemoglobin
15. Insulin

C.N. CENTRE

Patient care in C.N. Centre 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 and bringing quality care standards in patient care services.

- An initiative to streamline bio-medical waste management process and monitoring was started
- Various patient care areas were renovated: (i) Cardiac Cath Lab (ii) Neurosurgery ward (NS-4), (iii) Paediatric cardiology ward (CT-6), (iv) CNC OPD renovation is under process and State-of-the-art Neurosurgery Seminar Room and Telemedicine facility at Neurosciences Centre.
- Renovation of Cafeteria and Cardiac CCU is under process.
- Provision for satellite television and wi-fi internet connection in CN Tower is under process.
- Phased out Mercury based equipments etc from C.N. Centre.
- Computerization of C.N. Centre OPD is in process.
- Revision of Package charges of CTC in process.
- Member of various committees in C.N. Centre and AIIMS.
- Co-ordination for VVIP care at C.N. Centre.

ORGAN RETRIEVAL BANKING ORGANISATION (ORBO)

- Organ Retrieval Banking Organisation (ORBO) coordinates Organ and Tissue donations and transplantation. In addition, whole bodies were also donated through ORBO to facilitate medical education. In last one year 2521 persons pledged for organ donation on motivation of ORBO.
- Hon'ble Minister of Health and Family Welfare, Shri Gulam Nabi Azad felicitated the donors who donated their Organs and Tissues after death on the occasion of Celebration of 6th World and 1st Organ Donation Day on 27–28 November 2010 at Vigyan Bhawan, New Delhi.
- Published a book “A Tribute to Life” which contains the stories of organ and tissue donors.
- The 88th (M) Battalion of CRPF pledged for organ and tissue donation after death with ORBO on 8 March 2011 at New Delhi.
- Display Boards of ORBO were placed in various places of AIIMS and Trauma Centre for creating awareness.

AWARDS, HONOURS AND SIGNIFICANT EVENTS

CARDIO-THORACIC VASCULAR SURGERY

Professor Balram Airan was invited to deliver B.L. Thapa Oration during Xth International Surgical Society Conference, Kathmandu, Nepal November 25–27 2010; nominated by the Directorate General of Health Services to conduct inspection for accreditation for Heart transplant and he conducted the same at three institutes: (a) Pondicherry Institute of Medical Sciences, Pondicherry (b) Fortis Escorts Heart Institute, New Delhi and (c) Safdarjung Hospital, New Delhi; appointed by MCI to carry out the inspection of Mahatma Gandhi Medical College and Research Institute, Pondicherry, 5 March 2011; appointed as expert in Cardiology/Cardiac Surgery and attended a meeting of the selection committee on 16 November 2010 at Shastri Bhavan, New Delhi; invited to attend 6th World and 1st Indian Organ Donation Day organized by Directorate General of Health Services and Ministry of Health and Family Welfare, Government of India 27–28 November 2010, Vigyan Bhavan; appointed by MCI to carry out inspection for starting MCh (CTVS) course at Indira Gandhi Medical College, Shimla; appointed to assist selection committee to select Professor/Assistant Professor at PGIMER, Chandigarh, 26 February 2011.

Professor S.K. Choudhary was nominated as Member of Specialty Advisory Board in CTVS of National Board of Examinations.

Professor U.K. Chowdhury was appointed examiner in MCh (Cardiothoracic and Vascular Surgery) at West Bengal University of Health Sciences, Kolkata.

Dr Sachin Talwar was invited as the 56th Graham fellow to attend the Graham Reception at the 90th Annual meeting of the American Association of Thoracic Surgery at Toronto, Canada, 7–11 May 2010; invited to attend the annual Conference of the American Academy of Clinical Perfusion at Reno Nevada, US between 25–28 January 2011 and delivered the prestigious Charles Reed Memorial Lecture.

VP Gupta, Superintendent Physiotherapist, was appointed outside Expert in Board of Postgraduate Studies and research in physiotherapy; Guru Jambheshwar University of Science and Technology – Hisar, Member of Undergraduate Board of Studies in Physiotherapy; Pt. B.D. Sharma University of Health Sciences–Rohtak, Member of Selection Committee; DAV College Managing Committee for the selection of Prof. Assoc. Prof and Asstt. Prof in Physiotherapy, Member of Technical Approval Committee Institute of Human Behaviour and Allied Sciences, Delhi.

Dr Neha Nitin Goel and Dr Ruchika Tuteja, Jr. Physiotherapists were appointed External Examiners.

CARDIOLOGY

Professor V.K. Bahl was awarded Fellow of European society of Cardiology (ESC); Associate Editor of Asian Heart Journal, a publication of BMJ group.

Professor Anita Saxena was Fellow of Indian Academy of Medical Sciences 2010; Visiting professor of Pediatric Cardiology, Variety Children’s heart centre, Winnipeg.

Professor S.S. Kothari was Vice President, Pediatric Cardiac Society of India; Editor, Annals of Pediatric Cardiology; Member, Editorial board, JACC Imaging and Paediatric Cardiology; Member task force PVRI workgroup on Congenital heart disease.

Professor Balram Bhargava was awarded SN Bose Birth Centenary Award presented by the Prime Minister of India at the 98th Indian National Science Congress, Chennai 2011; International Academy of Cardiovascular Sciences FIACS 2010; IndoUS Endowment Board an Endowment for joint research, development, innovation, entrepreneurial and commercialization activities in Science and Technology; appointed by Minister of Science and Technology (India Representative Member) 2010; Wellcome Trust DBT initiative on R and D for Affordable Health Care for India. 2010

Professor K.C. Goswami was Secretary of Cardiological Society of India, Delhi branch 2010.

Dr S Mishra was Elected Member Executive Committee, Cardiological Society of India.

Dr G. Karthikeyan was CIHR – Canada Hope Scholar 2008 -12

Dr S. Ramakrishnan was awarded ‘Sujoy B Roy’ award’ for best paper at Delhi CSI 2010; Assistant editor of Annals of pediatric cardiology; appointed treasurer of Pediatric cardiac society of India

Dr B.B. Kukreti was awarded ‘Nanda Award’ for best echo paper during CSI 2010 and Dr Navreet Singh was awarded ‘Col K L Chopra award’ for best paper at Delhi CSI 2010

CARDIAC ANAESTHESIA

Professor Usha Kiran delivered Dr Keswani oration at Lady Harding Medical College on 19th December 2010; continues to be the vice president of ‘PRAN’. Parkinson disease related Awareness network; Editorial board member of J of Biosciences.

Professor Sandeep Chauhan was on Editorial board of *International Journal of Research in Anesthesia and Annals of Pediatric Cardiology*

Dr Neeti Makhija was awarded Best paper prize for Sarupriya A, Sethi BH, Makhija N, Kapoor PM, Transesophageal echocardiography: A blessing For transcatheter device closure of ruptured sinus of Valsalva, 5th Annual Perioperative and Critical Care Transesophageal Echocardiography Workshop, 25–27 February 2011, PGI, Chandigarh; Chaired session ‘Transesophageal Echocardiography In Non Cardiac Surgery Setup’, 5th Annual Perioperative and Critical Care Transesophageal Echocardiography Workshop, 25–27 February 2011, Chandigarh.

Dr Poonam Malhotra Kapoor was nominated member of Editorial Board of Journal of Anaesthesiology Clinical Pharmacology; appointed organizing secretary for 15th Annual National Conference of IACTA, to be held in February 2012, New Delhi; Chaired a scientific session on ‘Issues in elderly cardiac-patients’ and ‘Re engineering in cardiac–anesthesia, 14th Annual Conference, 18–20 February 2011, Bangalore.

Dr Minati Choudhury was Review board member of – Annals of Cardiac Anaesthesia, Indian Journal of Anaesthesia; Won Best Poster Award at 49th National Conference ISA, Delhi April-2010 for Management of Post Stenting TAPVC; Judge in award paper session at Third AOA, Shillong, September 2010.

Dr Parag Gharde conducted live workshop at ‘Shri Saibaba Hospital’ in Shirdi Oct 2010 on intraoperative use of TEE for mitral valve assessment for reparability and trained cardiac anesthesiologist and cardiac surgeons.

BLOOD TRANSFUSION SERVICES

Dr Anjali Hazarika was technical expert in technical evaluation team of State AIDS Control Society for procurement of equipment, kits/reagents and consumables for model blood bank in Delhi.

CARDIAC RADIOLOGY

Professor Sanjiv Sharma attended the Sixth Reach Monitoring Committee Meeting of ‘TIFACCORE’ in Interventional radiology under Mission REACH Programme of TIFAC, Department of Science and Technology from 17–18 July 2010; External examiner for MD (Radiodiagnosis) for Indira Gandhi Medical College, Shimla in June 2010; Nominated editor of Cardiovascular and Interventional Radiology (official journal of the European Society of Cardiovascular and Interventional Radiology); Associate editor, Journal of Vascular and Interventional Radiology (official journal of the North American Society of Interventional Radiology); National Coordinator for annual registry of Vascular and Interventional Radiological procedures under the auspices of the Indian Society of Vascular and Interventional Radiology; Chairman of the Research and Education Foundation of the Indian Society of Vascular and Interventional Radiology.

STEM CELL FACILITY

Dr Sujata Mohanty was nominated as member of Expert Committee of Biotechnology Career Advancement and Reorientation Program for women Scientist-Bio-CARE, Department of Biotechnology, New Delhi; Member of Institutional Committee for Stem Cell Research and Therapy, Medanta–The Medicity, Gurgaon; Expert Member in Project Appraisal Committee (PAC) of Indo-Australian Biotechnology Fund 2011, Department of Biotechnology, New Delhi; organized in collaboration with SYS Executive Committee lecture on “Stem Cell Therapies for Autoimmune Diseases” by Prof. Julio Voltarelli, Brazil.

ORGAN RETRIEVAL BANK ORGANISATION (ORBO)

Organized awareness activities with various NGOs, schools, and colleges, etc. Collaboration with various NGOs to promote the cause of organ and tissue donation. Training imparted to Grief counselors. Orientation Programme on Organ Donation and Transplant Coordination was imparted to MSc. Nursing students.

Dr A. Vij represented as Ministerial Delegate of Ministry of Health and Family Welfare, Govt of India for Training visit to National Transplant Organization, Madrid, Spain, 14–18 February 2011; appointed non-official part-time director on the board of HLL Life Care Ltd. by Ministry of Health and Family Welfare, Government of India; received “Plaque of Appreciation” for ORBO from Shri Ghulam Nabi Azad, Hon’ble Minister of Health and Family Welfare, Government of India, New Delhi, during the 6th World and 1st Indian Organ Donation Day (WODD) held on 27 November 2010

at India Habitat Centre, New Delhi; Letter of appreciation received from Dr RK Srivastava, Director General, Director General of Health Services, Government of India, New Delhi, for sincere efforts and contribution extended to 6th World and 1st Indian Organ Donation Day (WODD), 27–28 November 2010 at Nirman Bhawan, New Delhi; Invited Expert to examine the Transplantation of Human Organs (Amendment) Bill, 2009 by the Parliamentary Standing Committee on Health and Family Welfare on 9 June 2010; Elected Executive Member of Indian Society of Organ Transplantation (ISOT), 2010–2012.

10.2 National Drug Dependence Treatment Centre

Professor and Chief

Rajat Ray

Professors

Raka Jain

Rakesh Lal

Meera Vaswani

Additional Professor

Anju Dhawan

Associate Professors

Sonali Jhanjee

Atul Ambekar

Assistant Professor

N. Kaw

Scientist

Anita Chopra

Hem Sethi

EDUCATION

Undergraduate: During their posting in the department of Psychiatry, they are posted for a day at NDDTC.

Postgraduate: Residents doing MD (Psychiatry) are posted for 6 months during their entire course duration.

PhD and postgraduate teaching: *Journal discussion-weekly; *Seminar-weekly; *Case Conference-weekly; *Faculty/Staff presentation-weekly; *CCR and CGR two in every semester; Seminars-weekly (at NDDTC, GZB)

(*conjoint activity of the department of psychiatry and NDDTC)

Continuing Medical Education

Conferences, workshops, seminars, symposium, training courses

1. Annual Day Symposium on 'Substance Use Disorders in Prison Settings,' NDDTC, AIIMS, Ghaziabad, 13 April 2010.
2. One day orientation for Nursing students from Denmark, NDDTC, AIIMS, Ghaziabad, 20 July 2010.
3. In-house training of Nurses on 'Comorbidity in Substance Abuse,' NDDTC, AIIMS, Ghaziabad, 9 December 2010.
4. Training of General Duty Medical Officers, NDDTC, AIIMS, Ghaziabad, 28 March 2011.

In addition, the centre provided short-term training to students from Nepal, Mizoram and Punjab.

Lectures delivered in CME/ National and International conferences: 36

RESEARCH

Funded Projects

Ongoing

1. Addressing alcohol use at diverse workplace settings. PI: Rajat Ray. Funded by World Health Organization (India) for (2010 –Ongoing). Funds: Rs 4.6 lakhs.

2. Rapid situation assessment of drug and alcohol use at Digboi, Assam. PI: Rajat Ray. Funded by India Oil Corporation Ltd for (2010–Ongoing). Funds: Rs 3.5 lakhs.
3. Oral substitution treatment in Tihar prisons. PI: Sonali Jhanjee. Funded by UNODC-ROSA for (October 2008–ongoing). Funds: Rs 0.5 lakhs.
4. Effectiveness of yoga in patients of opiate dependence. PI: Anju Dhawan. Funded by AYUSH, MOH and FW (2010–ongoing). Funds: Rs 8 lakhs.
5. Molecular genetics of alcohol dependence: contribution of polymorphisms in dopaminergic and serotonergic pathway genes. PI: Meera Vaswani. Funded by ICMR for 2 years (2008–10). Funds: Rs 15 lakhs.
6. Co-ordination and convergence of Delhi District Health Services programmes and drug use intervention for the out-of-school child. PI: Rajat Ray. Funded by WHO (India) for 9 months (2010–2011). Funds: Rs 7 lakhs.
7. National capacity building of medical professionals on treatment of substance use disorders. PI: Rajat Ray. Funded by NFDAC, Ministry of Finance (2010–ongoing). Funds: Rs 228.7 lakhs.
8. Developing a network of de-addiction services from the government, NGO and private sector. PI: Rajat Ray. Funded by WHO (India) for 9 months (2011). Funds: Rs 16 lakhs.
9. Efficacy of varenicline for smokeless tobacco use. PI: Raka Jain. Funded by National Institute on Drug Abuse (NIDA), NIH, USA for (2011–Ongoing).

Completed

1. Oral substitution treatment with buprenorphine. PI: Anju Dhawan. Funded by UNODC - ROSA, New Delhi for 5 years (2005–10). Funds: Rs 13 lakhs.
2. Post marketing surveillance of Addnok-N (combination of buprenorphine and naloxone). PI: Rajat Ray. Funded by Rusan Pharma for 3 years (2007–2010). Funds: Rs 10 lakhs.

Departmental Projects

Ongoing

1. Development of a web-portal on problem alcohol use in India.
2. Effect of nitric oxide synthase inhibitor L-NNA on sensitization to the operant decrement produced by naloxone in morphine treated rats.
3. Association of ANKK1 polymorphism and nicotine dependence: a pilot study.
4. Naltrexone estimation from plasma samples of detoxified subjects.

Completed

1. Compliance of prescribed benzodiazepines in alcohol and opiate dependence subjects based on urine analysis.
2. Validity of self reported tobacco use among patients with bipolar disorder visiting the psychiatric services.

Collaborative Projects

Ongoing

1. Impact of a package of intensive smoking-cessation interventions versus recommended, basic smoking-cessation advice on outcomes in smear-positive patients with pulmonary tuberculosis; a randomised controlled trial (with Department of Medicine; Sharma S, Alladi M, Jhanjee S). Funded by the EU FP7 Programme, European Commission.

PUBLICATIONS

Journals: 8

Chapters in books: 9

PATIENT CARE

General Information

1. Total number of beds	50
2. General Ward beds	50
3. Private Ward beds	Nil
4. OPD Attendance	69220
5. Admission	754
6. Discharges	751
7. Average % of Bed Occupancy	52%
8. Admission Charges Exempted	149

OPD and Community Clinics Attendance (NDDTC)	New Cases	Old Cases	Total
OPD			
General OPD:	3286	33905	37191
Specialty Clinic			
<i>Tobacco Use Cessation Clinic</i>	31	729	760
<i>Adolescent Clinic</i>	24	103	127
<i>Dual Diagnosis Clinic</i>	22	192	214
Total OPD	3363	34929	38292
Community Clinics			
Trilokpuri Community Clinic	123	21198	21321
Mobile Clinic Sunder Nagri	28	6279	9607
Grand Total	3514	65706	69220

Biochemistry Laboratory

Biochemical tests	18111
Hematological tests	6129
HIV investigations	420 (negative: 345, Positive: 59, awaited: 60)

Drug Screen Laboratory

	Drugs	Nos.
1.	Morphine Test	3247
2.	Codeine Test	3041
3.	Buprenorphine Test	2853
4.	Proxyvon Test	2863

5.	Avil Test	2738
6.	Naltrexone Test	44
7.	Pentazocine Test	42
8.	Naloxone Test	338
9.	Diazepam Test	3092
10.	Nitrazepam Test	3092
11.	Chlordiazepam Test	3092
12.	Cannabis Test	513
13.	Cotinine Test	562
14.	Inhalents	30
Total number of drugs tested in urine		25547

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Professor Rajat Ray was nominated a member of the WHO Expert Advisory Panel on Drug Dependence and Alcohol Problems (2010–12) and the International Narcotics Control Board (INCB), and the WHO Working Group Meeting of the Project e-Health Portal and Alcohol and Drug Abuse. He chaired the session ‘Drug Abuse, Treatment and Rehabilitation’ in National Conference on Draft National Policy on Narcotic Drugs and Psychotropic Substances (1–2 February 2011) organised by Ministry of Finance, Department of Revenue, Government of India, New Delhi.

Professor Raka Jain received the NIDA International Travel Award for the ‘2010 NIDA International Forum: Drug Abuse Research Policy and the Public Good and CPDD 72 Annual Scientist Meeting at Scottsdale, USA.’ She chaired sessions ‘Alternative Matrices: Regional Thoughts and Future Direction,’ and ‘Recent Advances in Forensic Sciences, Medicine and Toxicology’ in the 2nd International Conference on Medical Negligence in Medical Practice at Goa (20–21 February 2011), and on ‘Forensic Toxicology’ in the 10th Indo-Pacific Congress on Legal Medicine and Forensic Science at NOIDA (25–30 October, 2010). She is an examiner for PhD theses for Delhi University.

Professor Rakesh Lal was a special Invitee to the International Day against Drug Abuse (24 June 2010) organized by UNODC; interacted with INCB members and officials of Ministry of Health and Family Welfare, Ministry of Social Justice and Empowerment and Ministry of Finance, Govt. of India regarding India’s efforts towards demand reduction of illicit substance use and capacity building in this regard (13–17 December 2010); nominated as Chairman of the Working Group on ‘Health Sector Response to Reduce Harmful Use of Alcohol’ of the International Society of Addiction Medicine; and chaired sessions on ‘Alcohol use in women’ and ‘Alcohol policy statement of Indian Psychiatric Society’ at the Annual National Conference of Indian Psychiatric Society, New Delhi (16–19 January 2011); ‘Medical Negligence in Medical Practice’ at the International Conference on Medical Negligence and Ethical Practice and Recent Advances in Forensic Sciences, Medicine and Toxicology at Goa (20–21 February 2011); nominated as an Expert Committee Member for scrutinizing proposals for providing treatment services to inmates of Home for Boys (OHB) and for National Policy for Narcotic Drugs and Psychotropic Substances (Ministry of Finance, GOI; 8 July 2010); coordinated the symposium on ‘International Day against Drug Abuse,’ at NDDTC (26 June 2010); examiner for DPM/MD examinations at Central Institute of Psychiatry (15–17 April 2010) and Postgraduate Institute of Medical Sciences, Rohtak (28 May 2010); actively engaged in organizing community work on substance use disorders in Districts of Moregaon and Meerut (for NDDTC), Digboi, Assam (for Indian Oil Corporation), Dadri, UP (for NTPC), and Margherita (for Coal India); resource person for training on non-pharmacological intervention for alcohol use disorders with Indian Military Base Hospital, and management of individuals with substance use for Sikkim Police.

Dr Anju Dhawan coordinated the WHO Biennium activities for developing a network of De-addiction services from the government, NGO and private sector and addressing alcohol use in diverse workplace settings. She led the

projects on 'Co-Ordination and Convergence of Delhi District Health Services Programmes' and 'Drug Use Intervention for the Out-Of- School Child.' She is a resource person for training of manpower, site mentoring and quality assurance (QA) for the Punjab OST project being implemented by DFID-AIDS-TAST in partnership with NACO, Ministry of Health, and Punjab SACS. She is the organizing secretary for the Meeting of the Five Nodal Centres for Development of Curriculum for Training of General Duty Medical Officers,' 'Annual Day Symposium on Substance Use Disorders in Prison Settings (NDDTC, 13 April 2010),' and training of General Duty Medical Officers at NDDTC (28 March 2011).

Dr Sonali Jhanjee is a resource person for the 3-months Certificate Course on De-Addiction Counselling and Rehabilitation organized by the National Institute of Social Defence (10 March 2011).

Dr Atul Ambekar was nominated as a member of the Technical Resource Group on Injecting Drug Use (NACO, GOI- Delhi IDU Forum, and Government of NCT of Delhi), and the Academic Committee of the Delhi State Training and Resource Centre, School of Social Work, Delhi University. He provided consultancy to UNODC (ROSA) and Government of Nepal for reviewing the Opioid Substitution Treatment Programme in Nepal.

The Centre has initiated and carried out the following activities as a part of WHO Biennium Activities:

- 1 Development of Manual: Minimum Standards of Care for Drug Users
- 2 Symposium on Alcohol: Revisiting the Current Situation and Planning Ahead
- 3 Two Training Programmes on Agonist Maintenance for Substance Use Disorder (2)
- 4 Management of Substance Use Disorder in Primary Care Setting: A Demonstration Project
- 5 Assessment of Substance Abuse among Out-of-School Adolescents
- 6 Drug Abuse Monitoring System: District Based Activity
- 7 Three Training of Trainers Programmes on Substance Abuse at NDDTC and Srinagar Medical College

The faculty of the centre were resource persons in various training programmes held in Delhi as well as in various states of the country.

The centre also organized a public awareness symposium on 'Drug Abuse: Extent, Consequences and Treatment' on International Day against Drug Abuse and Illicit Trafficking at NDDTC (26 June 2010).

VISITING SCIENTISTS

1. Michael J Kuhar, Chief, Division of Neuroscience, Yerkes National Primate Research Center of Emory University and Candler Professor of Neuropharmacology, School of Medicine, and Georgia Research Alliance Eminent Scholar (1 June 2010).
2. Dr Lalduhawmis Chawngthu (WHO visiting fellow) for three months (10 September 2010 to 9 December 2010).
3. Mr. Bailey, Head of AusAid (9 September 2010).
4. Delegation from Govt. of Sri Lanka to NDDTC (26 August 2010).

10.3 Centre for Dental Education and Research

Chief and Professor

Naseem Shah

Professors

O. P Kharbanda

Ritu Duggal

Additional Professor

Ajoy Roychoudhury

Associate Professors

Veena Jain
Ajay Logani

Ongkila Bhutia
Vijay Mathur

EDUCATION

Under Graduate/Postgraduate and Short Term Training

The Centre conducted the teaching programme of MBBS undergraduate students during their clinical posting. The centre is conducting postgraduate programmes in four specialties namely, Orthodontics, Prosthodontics, Endodontics cum Conservative Dentistry and Oral and Maxillofacial Surgery. Three specialists Dental Surgeons; Pediatric Dentistry, Prosthodontics and Endodontist from North Korea were trained for 3 months each at CDER. A total of 63 BDS graduates, 3 postgraduates, 4 Dental Surgeons from ITBP and BSF and 5 WHO Fellows from North Korea got training of 1–3 months' duration in various disciplines of Dentistry at CDER during April 10 - March 11

Lectures delivered

CME: 13

National and International conferences: 25

Paper and poster presented by residents under faculty's guidance: 16

RESEARCH

Funded Projects

Completed

1. Assessment of Safety Profile for Dental Procedures in India. PI: Dr Ritu Duggal; Ministry of Health and Family Welfare, GOI, 2 years, Rs 65.23 lakhs

Ongoing

1. Effect of traditional Oral Hygiene Methods on dental hard and soft tissues: A descriptive cross sectional study of Delhi Population". PI: Prof. Naseem Shah, GOI–WHO funded biennium project, 2010–11, Rs 5.95 lakhs.
2. Development of training module for oral health promotion, prevention and emergency care provision for AYUSH practitioners and medical Officers". PI: Prof. Naseem Shah, GOI–WHO funded biennium project, 2010–11, Rs 2.62 lakhs .
3. "Impact of oral health on diet, nutritional status, general health and quality of life in elderly: a community based study". PI: Dr Tanupriya Gupta, CSIR supported project.
4. "Cleft Lip and Palate anomaly in India: Clinical Profile, risk factors and current status of treatment – A Hospital based study" Adhoc task force project of ICMR. PI: Dr O.P. Kharbanda, ICMR, 25 March 2010 to 24 September 2011, Rs 3.06 lakhs,

5. Finite element study to analyse the stress distribution in human mandible following twin block therapy. PI: Dr Ritu Duggal, Dr Raju Sharma (Department of Radiology), ICMR, 2 years,
6. An evaluation of dental prosthesis need, its relation to nutritional status and quality of life of elderly population: A hospital base study". PI: Dr Veena Jain, ICMR, two years, 31 lakhs.
7. Age estimation in living adults based on aspartic acid racemization from tooth biopsy specimen. PI: Dr Ajay Logani, DBT, 2010–2013, Approx. Rs 19 lakhs.
8. The prevalence and severity of non carious cervical lesions (NCCLs) and its relationship with potential risk factors in urban India: A community based study. PI: Dr Ajay Logani, ICMR, 2009–2011, Approx. Rs 7 lakhs.
9. Cone Beam Computed Tomographic assessment of root canal morphology in an Indian population: A retrospective 3D radiographic study. PI: Dr Ajay Logani, ICMR, 2011–2013, Approx. Rs 7 lakhs.
10. Evaluation of Atraumatic Restorative Treatment (ART) for dental caries in geriatric patients in a resettlement colony of Delhi. PI: Dr Ajay Logani, Approx. Rs 1 lakh, 2009–2011.
11. Translating head and neck cancer markers into diagnostic Assays. Investigators: (Indian Team) Dr SS Chauhan, Dr Alok Takkar, Dr NK Shukla, Dr SS Dattagupta, Dr R Duggal, Dr A Roychoudhury, Dr Jatinder Kaur (Canadian Team) Dr KWM Siu, Dr T J Colgan, Dr I Witterick, Dr I Leong, Dr C MacMillan. ISTP Canada, 3 years, Rs 81 lakhs (India budget).
12. Evaluation of success of indirect pulp capping using three different materials: a clinical study using CBCT. PI: Dr Vijay P Mathur, Department of Biotechnology, GOI, 2 years, Rs 12.33 lakhs,

Collaborative Projects

1. "Micro implant generated stress on maxilla: Effect of design and placement protocols" In collaboration with Department of Biomedical Engineering and Department of Mechanical Engineering, IIT, New Delhi. PI: Dr O.P. Kharbanda, ICMR, Two years six months, Rs. 6.74lakhs/year.
2. "Computerised Cephalogram analysis for Orthodontics" in collaboration with Central Scientific Instruments Organisation (CSIO), Chandigarh. Co- Investigator: Dr O.P. Kharbanda, CSIO, three years, Rs 4.58 lakhs.
3. "A dynamic calibrated fixed dentofacial corrector to treat class II malocclusions" in collaboration with IIT, New Delhi. Guide: Dr O.P. Kharbanda, ICMR, one year, Rs 3.32 lakhs.
4. "Mechanical Properties of Orthodontic Miniscrew Implants with different length, diameter and shape" in collaboration with IIT, New Delhi. Guide: Dr O.P. Kharbanda, ICMR, One year, Rs 1.10.
5. Ocular surface reconstruction with alternative autografts of non ocular surface origin. Department of Science and Technology Project. PI: Dr Ajoy Roychoudhury.
6. With Department of Ophthalmology and stem cell AIIMS.

Departmental Projects

Completed

1. Effect of distraction osteogenesis in the blood oxygen saturation level in retrogenia patient.
2. Facial nerve morbidity in the management of mandibular condyle neck and subcondylar fracture through retromandibular transparotid approach: a prospective clinical study
3. Speech analysis in Maxillectomy patients with full bulb and reduce bulb height of hollow bulb obturator.
4. Preliminary ex vivo and animal model evaluation of Ocimum sanctums essential oil extract for its proposed use as an intracanal medicament.
5. Effect of dentin preconditioning with air abrasion on micro leakage of class V cavities restored with GIC and microfilled composite under cyclic loading: An in- vitro Study.

Ongoing

1. Bioseal: A novel non-obturation Endodontic treatment for pulp and periapically involved teeth (2008—10).
2. Study of efficacy of bioresorbable plates in the osteosynthesis of mandibular fractures without postoperative maxillomandibular fixation: a prospective study.
3. Epidemiology study in the pathway of maxillofacial fracture seen at tertiary care hospital in North India.
4. A double blind randomized placebo-controlled study of short and extended regime antibiotics in infection rates after open reduction and internal fixation of mandibular fracture.
5. A clinical study to evaluate structural and functional respiratory parameters after distraction osteogenesis in retrognathic TMJ patients with OSAS.
6. Randomized control trial of 1.5mm 3D plate versus 2mm single miniplate in the treatment of mandibular angle fracture.
7. Effect of the stability and crestal bone level in early loaded implants with different occlusal schemes – A pilot study.
8. A comparative study to measure the condylar guidance by the radiographic and clinical methods.
9. Effectiveness of mandibular advancement appliance in patients with obstructive sleep apnoea and associated changes in oropharyngeal structures – A pilot study.
10. An evaluation of the effect of shortened dental arch on bite force and masticatory efficiency – a pilot study.
11. A comparative evaluation of changes in crestal bone height around implants placed with flapless vs open flap technique.
12. Effect of bleaching on color stability and marginal fidelity of direct and indirect composite laminate veneers- an in vivo study.
13. Comparative evaluation of the efficacy of three disinfection protocols using calcium hydroxide, triple antibiotic paste and photo activated disinfection – a clinical microbiological study.
14. Effect of apical widening and clearing on apical widening and clearing on apical ramification – an ex vivo microbiological and stereo microscopic study.
15. “Evaluation of Adaptive changes in Masseter Muscle Dimension and EMG Activity following Twin Block and a phase of fixed appliance therapy”.
16. “Evaluation of changes in the Dimensions of Masseter Muscle during various stages of Twin Block Appliance Therapy using MRI”.

PUBLICATIONS

Journals: 13

Chapter in Books/Monographs: 5

PATIENT CARE

- Latest treatment in prosthodontics providing adhesive and Implant retained facial prosthesis (eye, ear, and nose).
- Distraction osseogenesis for esthetics and function such as sleep apnea.

AWARDS, HONOURS AND SIGNIFICANT EVENTS

The department organized the following CME/symposia

- Organized a symposium “Redefining treatment goals in dentistry” in collaboration with Tri-centenary SGT Dental College, Gurgaon and Deroit Mercy University, USA, as the Chairperson at AIIMS on 4 April 2011 where more than 700 dentists from Delhi and NCR region participated.

- Organized a workshop on “Tobacco Cessation” at CDER in collaboration with Ministry of Home and Family Welfare and Dr Ram Manohar Lohia Hospital in March 2011.
- Organized a workshop to frame the guidelines on Oral Health for Medical and AYUSH doctors at CDER, where 30 experts from DGHS, Ministry of Home and Family Welfare and doctors from allopathic, ayurveda, yoga, unani, sidha, and homeopathy participated.
- INDOCLEFTCON 2010, annual conference of the Indian Society for Cleft, Lip, Palate and Craniofacial Anomalies, 23–25 April 2010.
- “Orthodontic Diagnosis” CME was organized by the Department of Orthodontics in collaboration with Orthodontic Study Group of Delhi (OSGOD), 25 February 2011 at CDER, New Delhi. Prof. R.S. Nanda, Emeritus Professor, Department of Orthodontics, Dental School, Oklahoma Health Sciences Centre, Oklahoma, USA was the Speaker.
- “Interdisciplinary Orthodontics” CME was organized by the Department of Orthodontics, 22 March 2011 at CDER, New Delhi. Dr Lokesh Suri, Associate Professor of Orthodontics, Tufts Dental School, Boston, USA was the speaker.
- “Space Closure Mechanics” CME was organized by the Department of Orthodontics, 28 March 2011 at CDER, New Delhi. Dr Varun Kalra, Associate Professor, University of Pittsburgh, USA was the speaker.
- Conducted a CME on “Full Mouth Rehabilitation: Enigma Simplified” during the 38th Indian Prosthodontic Society Conference, 12–14 November 2010, Indore, Madhya Pradesh, India.
- Table clinic presentation on “Miscellaneous maxillofacial prosthesis for facial defects” during 12th IPS PG convention of Prosthodontics in 2010, Chennai.
- A full two days symposium entitled “Functional Jaw Orthopedic ” at Subharti Dental College, Meerut, 20–21 August 2010.
- CME of AO Craniomaxillofacial Trauma and reconstruction principles course Kolkata, April 22–24 2010.
- A full day symposium entitled “Pediatric Dentistry in General Practice” at Medical and Health Sciences College, University of Sharjah, UAE, 10 December 2010.

Professor N. Shah Invited by Sirte University, Libya to give 5 Scientific lectures to their dental, medical and nursing Faculty, 4-14 February 2011; Honoured as Past President of the Federation of Operative Dentistry of India (FODI) at Silver Jubilee conference of FODI, Chennai, 10–12 December 2010; invited as Country Representatives at International workshop sponsored by WHO, International Association for Dental Research (IADR) and Federation of Dentistry International (FDI) in collaboration with Dental Association of Thailand on ‘Effective use of fluoride in Asia’, 22–24 March 2011, Phuket, Thailand to provide an Indian perspective; Invited to attend the meeting of core group on “Health effects of Smokeless Tobacco”, 6 January 2011, Ministry of Health and Family Welfare, Government of India and National Institute of Health and Family Welfare, at New Delhi; Attended workshop on “Results Framework Document (RFD) organized by the Cabinet Secretariat, Government of India; Appointed external examiner to conduct practical examination in MDS Conservative Dentistry and Endodontics at various universities/dental colleges; Attended meeting of Faculty of Dental Sciences to scrutinize and evaluate the dissertation topics of postgraduate students in Conservative Dentistry and Endodontics, 27 December 2010, Rohtak; Member, core expert group for recognition by Dental Council of India and Ministry of Health and Family Welfare; Board member, Postgraduate studies, University of Maharshi Dayanand University, Rohtak; Technical expert, Selection committee for recruitment to various faculty posts at BHU, Varanasi, Dr HSJ Institute of Dental Sciences and Hospital, Chandigarh, and Government Dental College, Rohtak, 6 April 2010.

Professor O.P. Kharbanda was conferred International Clinical Dental Research Organization Research Scholar Award 2011 for significant contribution to research in orthodontics; continues to serve as member of International Editorial Board, American Journal of Orthodontics and Dentofacial Orthopaedics, British Journal of Orthodontics and

Australian Orthodontics Journal; Co-editor, Journal of Clinical Pediatric Dentistry and member of Board of Indian Orthodontic Society; Editorial Board Member of several dental specialty journals in India; Invited Guest speaker, World Implant Orthodontic Conference (WIOC), Taiwan, and at Faculty of Dentistry, Prince Philip Dental Hospital, Hong Kong; Invited by Principal Scientific Adviser to the Government of India to visit IIT, Mumbai and Non-Ferrous Materials Technology Development Centre (NFTDC), Hyderabad in connection with 'Exploring Third Dimension from Digital X-rays/Scan Data'; Special invitee, Meeting of Model Projects Evaluation Committee (MPEC), Vigyan Bhawan, New Delhi; Appointed Inspector by Dental Council of India at various Dental colleges in India; Expert member, Specially constituted committee, Ministry of Health and Family Welfare to oversee Dental Council of India related issues on Dental colleges; ICMR expert to review the research projects in Oral Health and Advisory Committee to the research grants; Expert in the field of Biomedical Engineering, Department of Biotechnology; Expert member, Selection Committee, Post Graduate Institute of Medical Education and Research, Chandigarh; Jawaharlal Institute of Postgraduate Medical Education Research, Pune; Gandhi Medical College, Bhopal; University College of Medical Sciences, New Delhi; PG Examiner at various universities; Appointed expert in Dentistry, Selection of candidates for Commonwealth Scholarship/Fellowship Plan, 2011; Invited by DD News to participate in 'Frontiers in Health Care Practices', 24 September 2010.

Dr Ritu Duggal was dental expert member for scrutinizing the documents for awarding the recognition of foreign dental qualification at DCI; appointed DCI inspector for approval of MDS courses at various Dental colleges; Expert, Postgraduate board of studies in Orthodontics, 3 March 2011, Rohtak; Organizing Chairman, 'Indocleftcon 2010', New Delhi, 23–25 April 2010.

Dr Ajoy Roychoudhury was member of technical Specification/Selection committee of Surgical Items/Disposable Items of Main AIIMS and CDER.

Dr Veena Jain is Honorary member, PG board of studies in dental Sciences, Pt. B. D. Sharma University of Health Sciences, Rohtak for two years, i.e. till 8 January 2013; External examiner to conduct MDS Prosthodontic Examination at different universities in India; Appointed DCI inspector to start the MDS in prosthodontics in various dental colleges.

Dr Ongkila Bhutia was appointed as expert member of selection committee for the recruitment of Assistant Professor, ESI Dental College, New Delhi, February 2011.

Dr Vijay Mathur was appointed a panelist during 'Holistic Approach for Tobacco Control' Haridwar, 9 April 2010, Uttarchal Government and Gayatri Parivar of Dev Sanskriti Vishwavidyalaya; Member selection committee, Faculty selection, Gandhi Medical College, Bhopal, 15 July 2010; Chief examiner, University Examination for PhD Thesis, Public Defence at Meenakshi Ammal University, Chennai, 24 November 2010; Elected as Representative to Continuing Dental Education of Indian Dental Association–South Delhi Branch for the year 2010–11.

VISITING SCIENTISTS

1. A high level delegation from Sirte University, LIBYA, led by the Vice-Chancellor of the University visited the CDER, 15 May 2010.
2. Michael Carstens Cleft Lip and Palate Surgeon St. Louis USA.
3. Prof. R.S. Nanda, Emeritus Professor, Department of Orthodontics, Dental School, Oklahoma Health Sciences Centre, Oklahoma, USA.
4. Dr Lokesh Suri, Associate Professor of Orthodontics, Tufts Dental School, Boston, USA.
5. Dr Varun Kalra, Associate Professor, University of Pittsburgh, USA. Martin Rutt Prospect Connecticut USA

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)
Lalit Kumar
(Medical Oncology)

N.K. Shukla
(Surgical Oncology)
Rajive Kumar
(Laboratory Oncology)

Vinod Raina
(Medical Oncology)
B.K. Mohanti
(Radiation Oncology)
Sidhartha Satpathy
(Hospital Administration)

Additional Professors

S.V.S. Deo
(Surgical Oncology)
Atul Sharma
(Medical Oncology)
Seema Mishra
(Anaesthesiology)

Sanjay Thulkar
(Radiodiagnosis)
Sameer Bakhshi
(Medical Oncology)
Suman Bhaskar
(Radiation Oncology)

Sushma Bhatnagar
(Anaesthesiology)
Pratik Kumar
(Medical Physics)
D. N. Sharma
(Radiation Oncology)

Associate Professors

Sushmita Pathy
(Radiation Oncology)

Ritu Gupta
(Lab. Oncology)

EDUCATION

Anaesthesiology

The following activities were conducted:

- IRCH seminar: Every Monday and Thursday at 8.15 a.m.
- Unit seminar: Every Monday at 2.30 p.m.
- Journal club: Every Saturday at 10:00 a.m.
- Radiology conference: Every Saturday at 9:00 a.m.
- Organized 10th Foundation Course on Palliative Care in Feb. 2010 for Medical Practitioners and Nursing Staff treating Cancer patients in & around Delhi.
- IAPC certificate course in Palliative Care at Dr BRA, IRCH in the month of June and Nov.

Laboratory Oncology

- Department provides training to students of MD Pathology and DM Hematology and DM Medical Oncology
- Combined clinico-pathological discussions are held with the department of pediatrics.
- Dr Ritu Gupta organized 'Advanced training course on applications of flow cytometry in hematological malignancies' at Delhi, 6-9 December 2010.

Medical Oncology

Undergraduates

Involved in undergraduate teaching (Seminars 6, Lectures 5)

Postgraduate

Collaboration and co-guides for MD thesis in the departments of obstetrics and gynaecology, nuclear medicine, biochemistry, pharmacology and ophthalmology.

DM programme

Medical Oncology is running a DM program under which there are 13 regular and one sponsored student.

PhD training

Three PhD students are pursuing their work. One PhD student has submitted his work and two have been awarded PhD in this year.

Medical Physics

The Medical Physics unit has actively participated in imparting education in the field of radiation protection, radiation physics and quality in radiological imaging to students of MD Radiology, MBBS, BSc (Hons) Nursing and BSc (Hons) Radiography.

Medical Physics Unit gave training to 2 trainees from Guru Jambeswar University of Science & Technology, Haryana for 4 months and 1 trainee from Manipal University for 3 weeks.

In addition, Medical Physics Unit has 3 Ph.D. students undergoing training.

Radiotherapy

The department is involved in Undergraduate, Post graduate, B.Sc. Nursing and PhD teaching programs. Dr GK Rath started the post graduate educational video conferencing program with the Gujarat Cancer & Research Institute (GCRI), Ahmedabad, where the residents of AIIMS interact with their counterparts in GCRI. Dr PK Julka worked as a faculty from AIIMS for the Govt. of India's Pan-African telemedicine project and conducted Telemedicine Lecture for African Countries on Update of Radiotherapy in Breast Cancer, 21st March 2011. Dr.B.K.Mohanti worked as a faculty from AIIMS for the Govt. of India's Pan-African telemedicine project on teaching course and conducted 2 sessions. Short-term training was given to 13 doctors from different centers in the country.

Surgical Oncology

Undergraduate teaching: The faculty was involved in undergraduate didactic lectures and moderating seminars on oncological topics.

Post graduate teaching: The faculty was involved in teaching and training of 12 surgical oncology senior residents, DM medical oncology residents and 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. Dr. Shukla acted as Co-guide and Co-supervisors in DM medical oncology thesis, MD radiation oncology thesis & PhD students from different dept. of BRA IRCH & AIIMS.

Para clinical teaching/training : The faculty was involved in the teaching of the B.Sc. nursing students.

Lectures delivered in CME/ National and International conferences: 95

RESEARCH

Anaesthesiology

Completed

1. **Role of Radiofrequency of mandibular in Head and Neck cancer pain patients Dr. Sushma Bhatnagar.**
2. A prospective Evaluation of the Incidence and Characteristics of Breakthrough Cancer pain episodes (BTCPE) in Head and Neck Cancer Patients. Sushma Bhatnagar
3. Psychosocial Concerns In advanced cancer Patients: An Observational Study at Dr. BRA, IRCH, AIIMS Dr. Seema Mishra

Ongoing

1. Evaluation of the effect of rhythmic breathing process-Sudarshan Kriya and Pranayam (SKP) on pain perception among advance stage cancer patients having pain.” Dr Sushma Bhatnagar Center Council for Research in Yoga & Naturopathy (Dept of Ayush)
2. Comparison of Epidural Triamcinolone and Betamethasone for lumbosacral radicular pain: a prospective randomized study. Dr Seema Mishra
3. Prospective, randomized placebo controlled, Double blind study of tranexamic acid in patients undergoing head and Neck Cancer surgery. Dr. Seema Mishra
4. Pre-emptive analgesia and response to laryngoscopy with Gabapentin, Pregabalin in patients undergoing MRM under General Anaesthesia: A Prospective Randomized Double Blind Placebo controlled Study. Dr. Seema Mishra
5. To Compare The Effect Of Radiotherapy And Vertebroplasty On Pain Relief And Quality Of Life In Cancer Patients With Vertebral Collapse Caused By Spinal Metastases. Dr. Sushma Bhatnagar

Laboratory Oncology

Funded projects

Completed

1. Reference diagnostic range for serum immunoglobulin free light chains in Indian subject. Comparison with multiple myeloma. Prof. Rajive Kumar. ICMR.

Ongoing

1. Detection of minimal residual disease (MRD) in B-cell lineage acute lymphoblastic leukemia. Co-investigator-Rajive Kumar. Funded by ICMR
2. Assessment of multi-drug resistance pattern in acute myeloid leukemia and response to therapy. Ritu Gupta. AIIMS, 1,90,000.
3. Regulatory T-cell repertoire in plasma cell myeloma. Ritu Gupta. DBT ,14,82,000
4. Molecular and immunological basis of biological heterogeneity in chronic Lymphocytic Leukemia. Ritu Gupta. DBT, 19,46,400

Medical Oncology

Funded projects

Ongoing

1. A Double-Blind, Randomized Phase 2b Study Evaluating the Efficacy and Safety of Sorafinib Compared to Placebo when Administered in Combination with Paclitaxel in Patients with Locally Recurrent or Metastatic Breast Cancer. Dr. Vinod Raina. Reliance. Rs 25 Lakhs Approx. Extended upto Dec. 2013

2. A Randomized, Double-blind Multicenter, Placebo controlled Study of Adjuvant Lapatinib in Women with Early-stage ErbB2 Overexpressing Breast Cancer Dr. Vinod Raina. GSK. Rs. 30 Lakhs Approx Extended upto Dec. 2012
3. 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. Vinod Raina. GSK Rs. 30 Lakhs Approx. 23.05.2008 to 22.09.2011.
4. Axitinib (AG-013736) as second line therapy for metastatic renal cell cancer: axis trial. Dr. Vinod Raina. Pfizer. Rs. 25 Lakhs Approx. April 2009 to May 2011.
5. Single Arm Open Label Multicenter Phase II Study to evaluate the Efficacy and Safety of P276-00 in subjects with Relapsed and/or Refractory Mantle Cell Lymphoma Dr. Vinod Raina. Piramal Life Sciences. Rs. 15 Lakhs. 22.01.2010 to 21.07.2011.
6. A Phase 3, Randomized, Open-Label, Two-Arm Study of Neratinib Plus Paclitaxel Versus Trastuzumab Plus Paclitaxel as First Line Treatment for ErbB-2-Positive Locally Recurrent or Metastatic Breast Cancer". Dr. Vinod Raina. Wyeth Pharmaceuticals limited. Rs 30 Lakhs approx. 2010 -2011.
7. Evaluation of Circulating Tumor DNA in Serum of Breast Cancer Patients. Dr. Vinod Raina. DBT. Rs. 12 Lakhs Approx. 2008 - 2011.
8. Indox Cancer Trials Network Center. Dr. Vinod Raina. Oxford University. Rs. 40 Lakhs Approx. 2006-2011
9. Standardization of response assessment in chronic myeloid leukemia (CML). Dr. Vinod Raina. DBT. Rs. 70 Lakhs. 2011- 2014
10. A Phase III, Open Label, Randomized Trial of Ofatumumab added to Fludarabine-Cyclophosphamide Vs. Fludarabine-Cyclophosphamide Combination in Subjects with Relapsed Chronic Lymphocytic Leukemia. OMB110913. Dr. Vinod Raina. GSK. 15 Lakhs approx. 2011-2011
11. A Phase III, Open Label, Randomized Multicenter Trial of Ofatumumab-Chlorambucil combination Vs. Chlorambucil Monotherapy in previously untreated patients with Chronoic Lymphocytic Leukemia. OMB110911. Dr. Vinod Raina. GSK Approx. 15 Lakhs. 2011-2011
12. A Randomized, Open Label, Multicenter, Phase II study of the combination of VELCADE, Rituximab, Cyclophosphamide, Doxorubicin and Prednisone (VR-CAP) of Rituximab, Cyclophosphamide, Doxorubicin, Vincristine, and Prednisone (R-CHOP) in subjects with newly diagnosed Non-Germinal Centre B-cell Subtype of Diffuse Large B-Cell Lymphoma. Dr. Vinod Raina. Johnson & Johnson. 20 Lakhs approx. 2011-2013
13. A Randomized, Double-Blind, Placebo-Controlled Phase 2 Trial of Bavituximab Plus Docetaxel in Patients with Previously Treated Locally Advanced or Metastatic Non-Squamous Non-Small-Cell Lung Cancer. Dr. Vinod Raina. Peregrene Pharmaceuticals Inc. 18 Lakhs approx. 2011-2012
14. To study the molecular biology of Multiple myeloma. Prof. Lalit Kumar. DBT, 2007-2011.
15. Endothelial progenitor cells as biomarker of disease activity in multiple myeloma. Prof. Lalit Kumar. DBT. 2007-2011
16. Randomized, Phase III-b, Multi-centre, Open-label, Parallel study of Enoxaparin (low molecular weight heparin) given concomitantly with chemotherapy Vs chemotherapy alone in patients with inoperable gastric and gastroesophageal cancer. Dr. Atul Sharma. Criterium, Pune. Rs 7,60,000. 2008- cuurent
17. A Phase III Study Of Erbb2 Positive Advanced Or Metastatic Gastric Or Esophageal Or Gastroesophageal Junction Adenocarcinoma Treated With Capecitabine Plus Oxaliplatin With Or Without Lapatinib." Dr. Atul Sharma. GSK. Rs 434398. 2009-2012

18. Phase III, randomized, double-blind, placebo controlled study to investigate the efficacy of a probiotic VSL#3[®], on Chemotherapy-induced diarrhea in cancer patients receiving Fluoropyrimidines /Irinotecan. Dr. Atul Sharma. CD Pharma India Pvt. Ltd. Rs 12 lacs. 2010-2013
19. Treatment and Characterization of Acute Lymphoblastic Leukemia in Children, Adolescents and Young Adults. Dr. Sameer Bakhshi. Network of Cancer Treatment and Research & Sir Ratan Tata Trust. Rs 4.5 lacs/year. 2005-current.
20. Evaluation of Prognostic Value of FDG-PET after Two Cycles of Chemotherapy in Pediatric and Adolescent High Grade Lymphomas. Dr. Sameer Bakhshi. DBT. 19.45 lacs. 2008-current.
21. Pharmacokinetic and Toxicity profile of High Dose Methotrexate: relationship with Serum Creatinine and MTHFR Polymorphisms in Indian Children. Dr. Sameer Bakhshi. JIV DAYA Foundation. Rs 7.9 lacs. 2008 – current.

Completed

1. In vitro expansion and establishment of human fetal liver hematopoietic stem cell line. Prof. Lalit Kumar. DBT.. Rs 67 Lacs. 2006-2010
2. A combination of p53, EGFR status, and tumor grading in determining the outcome of early epithelial ovarian cancers. Prof. Lalit Kumar. DBT. Rs1.5 Lacs. 2007 – 2010
3. Expansion of adult human bone marrow and cord blood stem cells for reconstituting marrow and for reprogramming into hepatocytes. Prof. Lalit Kumar. ICMR. Rs 27 Lacs. 2005-2010.
4. ‘Neoadjuvant chemotherapy followed by interval debulking surgery versus upfront surgery followed by chemotherapy in stage III-IV (pleural effusion only) epithelial ovarian carcinoma: A randomized study’. Prof. Lalit Kumar. ICMR. Rs 731,300.00. 2006-2010
5. To study chromosomal abnormalities and FLT3 Internal Tandem Duplication (ITD) mutations in acute myeloid leukemia. Dr. Sameer Bakhshi. AIIMS. Rs. 3 lacs. 2007-2010

Departmental projects

Completed

1. Analysis of triple negative breast cancer.
2. Analysis of Chronic lymphocytic leukemia patients: the clinic-hematological profile and treatment outcome.
3. Analysis of T-Cell Lymphomas. .
4. Expression of ZAP70 and CD 38 in of Chronic lymphocytic leukemia patients.
5. Role of PET-CT in staging and evaluation of early response to chemotherapy in patients of neuroblastoma and rhabdomyosarcoma.
6. Prognostic factors in the management of osteosarcoma: A clinical study. All India Institute of Medical Sciences, New Delhi
7. Analysis of High Risk Neutropenic Fever at IRCH.

Ongoing

1. Analysis of autologous transplants in IRCH
2. Clinical features, prognostic factors and outcome analysis of B cell NHL seen at IRCH.
3. T cell repertoire in plasma cell myeloma.
4. Endothelial progenitor cells as a biomarker of disease in multiple myeloma. Assessment of multi drug resistance pattern in AML and response to therapy. Expression of ZAP70 and CD 38 in patients of CLL. Immunophenotyping profile of B cell NHL

5. Randomized trial comparing carboplatin 560mg/m² with 750mg/m² for ocular salvage in groups C and D intraocular retinoblastoma.
6. Evaluation of tumor angiogenesis in locally advanced retinoblastoma..
7. Pilot study to evaluate neoadjuvant chemotherapy in stage retinoblastoma as per the international retinoblastoma staging system.
8. Assessment of Liver Fatty Acid binding Protein as a Predictor of Cisplatin Induced Nephrotoxicity in Paediatric Patients.

Medical Physics

Funded project

Ongoing

1. Development of sensitive thermo-luminescent materials for radiation dose determination and their dosimetric applications in radiological medical imaging. Dr Pratik Kumar. Indian Council of Medical Research. . 12,10,416.

Departmental projects

Completed

1. Development of quick daily quality assurance check of mammography machine
2. Optimisation of chest imaging in digital fluoroscopy

Ongoing

1. Development of protocol for quality assurance of medical image laser printer
2. Characterization of atherosclerotic plaque using CT scan
3. Continued maintenance of Microsoft Access based image reporting module.
4. Measurement of radiation dose in interventional fluoroscopy .
5. Development of new luminescence material for dosimetry purpose

Collaborative projects

Completed

1. Tumor burden estimation by FDG PET-CT using phantom and its application in pediatric lymphoma for treatment response evaluation (Medical Physics Unit, IRCH and Nuclear Medicine, AIIMS)

Ongoing

1. Patient radiation dose determination in RF ablation procedure for tachycardia (Medical Physics Unit, Deptt. of Cardiology & Deptt. of Cardiac-radiology AIIMS).
2. Impact of partial volume effect corrections in the assessment of solitary pulmonary nodules. (Medical Physics Unit & Deptt. of Nuclear Medicine)

Radiodiagnosis

Completed

1. Ultrasound and CT evaluation of the neck for assessment of lymph node metastases in clinically N0 patients with squamous cell carcinomas of the upper aerodigestive tract.

Ongoing

1. Role of CT in management of patient with carcinoma of cervix.

Collaborative projects

Completed

1. Incremental role of F-18 FDG PET-CT in evaluating response to primary treatment in advanced epithelial ovarian cancer patients (Nuclear Medicine)
2. Hodgkin's lymphoma: Analysis of treatment outcomes and prognostic factors (Medical Oncology)
3. Oral Voriconazole vs intravenous low dose Amphotericin B for Primary Antifungal Prophylaxis in Pediatric Acute Leukemia Induction: A Prospective, Randomized, clinical trial (Medical Oncology).
4. Prothrombotic factors in patients with newly diagnosed multiple myeloma: an observational study (Medical Oncology)
5. Validation of gel dosimetry as 3D verification tool in highly conformal radiotherapy techniques (Neurobiochemistry and Radiotherapy).
6. A study of angiogenesis, proliferative activity and DNA ploidy in squamous cell carcinoma of larynx and their correlation with lymph node metastasis (Pathology)
7. Comparative study of radiation therapy dose, volume evaluation for 3D conformal radiotherapy (3D CRT)) Vs. Image guided radiotherapy (IGRT) and analysis of early response in head and neck squamous cell carcinoma (Radiotherapy)
8. Prospective comparative evaluation of 3D CT based treatment planning and 2D radiography based treatment planning for intracavitary brachithery in carcinoma cervix (Radiotherapy)

Ongoing

1. 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 Medical Oncology and gynecology).
2. Prevalence of vitamin D deficiency and rickets in patients of congenital ichthyosis and keratinizing disorders in age group less than 21 years (Dermatology)
3. Role of magnetic resonance imaging and spectroscopic methods in evaluation of prostate cancer (NMR)
4. Assessment of therapeutic response of radiolabelled anti CD20 antibodies ¹³¹Iodine Rituximab and /or ⁹⁰Yttrium Rituximab in diffuse large B cell non Hodgkin lymphoma (Nuclear Medicine)
5. Comparison of early clinical outcome in carcinoma cervix after radiotherapy: conventional versus intensity modulated radiotherapy (IMRT) (Dr Ajeet Kumar, Radiotherapy)
6. Comparative evaluation of endovenous laser ablation, radiofrequency ablation and surgery in the treatment of symptomatic lower limb varicosities (Dr Deepak R, Radio-diagnosis)
7. Comparing the role of MRI and grey scale and Doppler ultrasound in evaluating neoadjuvant chemotherapy response in locally advanced breast cancer (Dr Karthik, Surgery)
8. Evaluation of transrectal ultrasound, elastography and contrast enhanced sonography for detection of prostate cancer (Dr Vishal Tambade, Radio-diagnosis)
9. Intra-arterial chemotherapy (neoadjuvant) in patients with advanced laryngeal and hypopharyngeal cancer. (Dr Pankaj Gupta, Radio-diagnosis)
10. A comparative study of surgery and postoperative radiotherapy versus surgery and postoperative chemoradiotherapy as the treatment modality for the squamous cell carcinoma of the oral cavity (Dr Bharat Bhushan, Radiotherapy)

11. Phase II randomized study comparing concurrent chemoradiation versus neoadjuvant chemotherapy followed by chemoradiation in locally advanced squamous cell carcinoma of esophagus (Dr Pritee Chaudhari, Radiotherapy)
12. Phase II/III randomized controlled trial of accelerated fractionation radiotherapy (6 fractions per week) versus concurrent chemoradiotherapy in locally advanced head and neck squamous cell carcinoma (Dr Sudeep Das, Radiotherapy)
13. Comparative evaluation of outcome of conservative management vis-à-vis interventional radiological management of discogenic low back pain (Dr Venkatesh HA, Radio-diagnosis)

Radiotherapy

Funded projects

Completed

1. 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. Quintiles. . Rs.245700.
2. Patterns of Care and Survival studies in Cancers of Head and Neck, Breast and Cervix at Dr. BRA IRCH, AIIMS (as part of National Cancer Registry Programme, funded by ICMR), I-508, Rs. 3.6 lakhs per year.

Ongoing

1. A pilot study evaluating quality of life with AYUSH QOL-2C in non metastatic breast cancer patients treated with adjuvant chemotherapy/ radiotherapy and correlating it with molecular markers Dr GK Rath Central Council for research in Ayurveda & Siddha, Ministry of Health & Family Welfare, Govt. of India, Rs. 51,45,777.
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) (ACàTH) and with Docetaxel, Carboplatin and Trastuzumab (TCH) in the Adjuvant treatment of node positive and high risk node negative patients with operable Breast cancer containing the HER2 alteration. Dr PK Julka Aventis.. Rs.162313
3. A Phase 1/2, Modified Dose Escalation, Open Label Trial to Determine the Therapeutic Effect and Safety of INCB007839 Combined with Trastuzumab in Patients with Previously Untreated HER2 Positive Metastatic Breast Cancer. Dr PK Julka. Siro. Rs 4,27,710.
4. An open Label Prospective Multicentric study to evaluate the safety and efficacy of BIOMAB-EGFR (Nimotuzumab) as induction and maintenance therapy in combination with radiotherapy plus temozolomide (concomitant and adjuvant) in Indian patients with Glioblastoma multiforme. Dr. P. K. Julka. Clingene.. Rs 3,26,800.
5. Patterns of Care and Survival studies in Cancers of Head and Neck, Breast and Cervix at Dr BRAIRCH, AIIMS (as part of National Cancer Registry Programme by ICMR) I-508 Dr B K Mohanti. National Cancer Registry Programme, ICMR. Rs3.6 Lakhs per year
6. A Randomized, Double – Blind, Placebo- controlled, Multi-centre Phase 3 Study of Denosumab on Prolonging Bone Metastasis-Free survival in Men with Hormone-Refractory prostate Cancer. Dr PK Julka, Quintiles. Rs 3,17,405.
7. Clinical Impact of PET scan in patients with pelvic recurrence from cervical cancer following radiation therapy Dr. DN Sharma., AIIMS. Rs 100000.
8. 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). ISI, Rs. 2.2 lakhs per year.

9. Clinical Impact of PET scan in patients with pelvic recurrence from cervical cancer following radiation therapy
Dr. DN Sharma.: AIIMS.

Collaborative projects

Completed

1. Ultrasound and CT evaluation of the neck for the assessment of lymph node metastases in clinically No patients with squamous cell carcinoma of the upper aero-metastases in clinically No patients with squamous cell carcinoma of the upper aero-digestive tract (Dr. Abhishek Man Bajracharya, Junior Resident, Dept of Radio-diagnosis, MD Thesis).
2. Study of Angiogenesis, Proliferative Activity and DNA Ploidy in Oral Verrucous Carcinoma: Comparision with Normal Mucosa, Verrucous Hyperplasia and Squamous Cell Carcinoma (Dr. Saumyaranjan Mallick, Junior Resident, Dept of Pathology, MD Thesis).

Ongoing

1. Randomized study of preoperative short course radiotherapy (25 Gy) Vs. preoperative concurrent radiotherapy (45 Gy) and chemotherapy followed by Surgery in rectal cancer (collaborating departments of Dr. BRA IRCH and AIIMS-Radiation Oncology, Surgical Oncology, Medical Oncology, Pathology, Radiodiagnosis).
2. National Retinoblastoma Registry-Delhi site, Dr. RP Centre, AIIMS, A collaborative study under ICMR fund, New Delhi, India.
3. Pilot Study to evaluate neoadjuvant chemotherapy in stage 3 retinoblastoma as per the international retinoblastoma staging system. (Dr. Venkatraman R, Dept of Medical Oncology, IRCH, DM Clinical thesis).
4. Phenotypic and functional characterization of CD4+ CD 25+ Foxp3+ regulatory T cells in patients with oral squamous cell carcinoma (PhD Thesis work, Dept Biotechnology)
5. Temporal assay of p-38-alpha expression and as a prognostic marker in head and neck cancer patients (PhD Thesis work, Dept of Biophysics)
6. Assessment of HPV incidence and correlation to Chemo-radiation treatment in cancer of oro-pharynx (clinical thesis work for DM, Medical Oncology)
7. Heterogeneous ribo-nucleoprotein K as a marker in squamous cell carcinoma of head and neck (M.Sc. dissertation work, Dept of Biotechnology)
8. Adjuvant Tamoxifen long against short (ATLAS) - Multi center international trial, Oxford, UK. (Surgical Oncology, Medical oncology & Radiation Oncology). Funding:-ATLAS
9. Evaluation of Curcumin in the management of advanced cancer cervix. (Departments of Radiotherapy, Gynecology, Biochemistry and Pathology)
10. Percutaneous Radiofrequency Ablation in painful bone lesions (MD Thesis work, Dept of Radiodiagnosis and Radiotherapy)

Surgical Oncology

Departmental projects

Ongoing

1. Functional assessment of Oral cancer patients after Radical surgery and Radiotherapy.
2. Oncoplastic Breast Surgery – Prospective evaluation of patient profile and outcome.
3. Assessment of Skin involvement in Breast cancer patients with T4b lesions.

4. Prophylactic antibiotics in surgical oncology patients.
5. Sentinel Lymph Node Biopsy of oral cancer patients using dye and gamma probe.
6. Study of deep vein thrombosis in patients of gynecological and lower G I cancers.
7. Study to assess the effect of prophylactic low molecular heparin in patients of pelvic malignancy.

Delhi Cancer Registry

Ongoing

1. Patterns of care and survival study in cancer breast
2. Patterns of care and survival study in cancer cervix
3. Patterns of care and survival study in head and neck cancers

Collaborative projects

Completed

1. Functional and phenotypic Characterization of Th17 cells in Oral Cancer Patients. (Department of Surgical Oncology and Biotechnology)
2. A study of Triple Negative Breast Cancer at a Cancer Institute in India. (Department of Medical Oncology, Surgical Oncology, Radiation Oncology, Pathology).

Ongoing

1. Adjuvant tamoxifen long against short (ATLAS)—Multi center International Trial, Oxford, UK. (Department of Medical oncology & Surgical Oncology).
2. Cell cycle regulatory proteins WAF-e and p 16 in human esophageal cancer. (Department of Biochemistry, Surgical oncology, Pathology).
3. Multicentric National Program on Evaluation and validation of molecular markers in oral cancer: A cross sectional study. (Department of Biochemistry and Surgical Oncology).
4. To evaluate microsatellite instabilities in different chromosomes in Indian female breast cancer patients. (Department of Surgical Oncology and Department of Biosciences, Jamila Milia Islamia, New Delhi)
5. Role of CT scan and MRI in the evaluation of locally advanced Oral cancer. (Department of Surgical Oncology & Radio Diagnosis).
6. Molecular Evaluation of p 21 WAF -1 gene in Indian Female Breast Cancer Patients (Department of Surgical Oncology and Department of Bio Sciences, Jamia Milia Islamia).
7. Molecular basis of tobacco associated oral carcinogenesis. (Department of Biochemistry & Surgical Oncology).
8. “A randomized, double -blind, placebo-controlled, multi -center phase III study to evaluate the efficacy and safety of pazopanib (GW786034) compared to placebo in patients with locally advanced and/or metastatic renal cell carcinoma” VEG105192(Department of Medical Oncology & Surgical Oncology).
9. “An open label, non randomized phase II trial of oxaliplatin, docetaxel and capectiabine in advanced esophageal and gastric adenocarcinoma” Protocol 0701(Dept. of Medical Oncology, Surgical Oncology, and Radiation Oncology).
10. “A randomized, double -blind, multicenter, placebo controlled study of adjuvant lapatinib in women with early stage ErbB2 over expressing breast cancer”(Department of Medical Oncology & Surgical Oncology).
11. “A randomized, open label multicenter study of single agent larotaxel (XRP9881) at 90 MG/M2 every 3 weeks compared to continuous administrative of 5-FU for the treatment of patients with advanced pancreatic cancer previously treated with a gemcitabine-containing regimen”(Department of Medical Oncology & Surgical Oncology).

12. Molecular Analysis of Genetic variation in Cytokinin in Female Breast Cancer patients in India (Department of Surgical Oncology & Department of Biosciences, Jamia Milia Islamia)
13. Clinical significance of TC21/R-Ras2 over expression in Oral Cancer (Department of Biochemistry & Surgical Oncology)
14. A Pivotal trial to determine the efficacy and safety of AP23573 when administered as maintenance therapy to patients with Metastatic soft tissue or bone sarcomas. (Department of Medical Oncology & Surgical Oncology)
15. An asia pacific non randomized, open-label phase II study evaluating the safety and efficacy of FOLFIRI plus cetuximab (Erbix) or FOLFOX plus cetuximab in patients with KRAS wild type metastatic colorectal cancer (APEC study). (Department of Medical Oncology & Surgical Oncology)
16. Role of computed tomography in the staging & management of carcinoma cervix (Department of Radio Therapy, Radio Diagnosis & Surgical Oncology).
17. Molecular analysis of p21 gene in Indian female breast cancer patients. (Department of Surgical Oncology, Department of Biosciences, Jamia milia Islamia)
18. EGFR & Basal cytokeratin expression in Triple negative & non triple negative breast cancer. (Department of Medical Oncology, Department of Surgical Oncology)
19. Functional & phenotypic characteristic of Natural killer T cell and dendritic cells in oral cancer. (Department of biotechnology, Department of Surgical Oncology)
20. Registration phase III study of Lucanix™ (belagenpumatucel-L) in advanced non-small cell lung cancer: an international multicenter, randomized, double-blind, placebo-controlled study. (Department of Medical Oncology & Surgical Oncology)
21. Functional characterization of differentially expressed proteins in Head and Neck cancer. (Department of Surgical Oncology and department of Biochemistry)
22. Translating Head and Neck Cancer Markers into diagnostic Assays- an INDO- CANADIAN research project (department of Surgical Oncology, department of biochemistry AIIMS and department of chemistry York University Canada).

PUBLICATIONS

Journals : 131

Abstracts : 27

Chapters in Books : 11

PATIENT CARE

1. TOTAL BED STRENGTH	182
Medical Oncology	78
Radiation Oncology	37
Surgical Oncology	61
Palliative Care Unit	06
2. TOTAL OPD ATTENDANCE	82597
New Patient's	8679
Revisit	73918

3. DESCRIPTION OF VARIOUS OPD/CLINICS

S.No.	Name of the Clinics/OPD	New patients			Revisit		
		Male	Female	Total	Male	Female	Total
1.	Adult Medical oncology clinic	494	330	824	9944	12316	22260
2.	Adult Lymphoma Leukemia	3	2	5	3934	1924	5858
3.	ALL/CML Clinic	169	82	251	1237	662	1899
4.	ALL/HL Clinic	71	33	104	556	274	830
5.	Breast Cancer Clinic	29	421	450	78	3933	4011
6.	Bone & Soft (Tissue)	174	104	278	441	290	731
7.	Gastro-Intestinal Clinic	287	221	508	707	484	1191
8.	Gynecology 'A'	0	248	248	0	834	834
9.	Gynecology 'B'	0	602	602	0	2297	2297
10.	Gynecology 'C'	0	65	65	0	38	38
11.	Head & Neck (Surgery) A	175	39	214	1137	231	1368
12.	Head & Neck (ENT) B	873	150	1023	3195	577	3772
13.	Lung cancer clinic	101	22	123	388	88	476
14.	NHL/MM/CLL Clinic	124	49	173	441	196	637
15.	Ophthalmic Tumor Clinic	8	2	10	112	60	172
16.	Pediatric medical oncology clinic	273	128	401	5044	2032	7076
17.	Pediatric Lymphoma Leu.	90	46	136	2561	853	3414
18.	Pediatric surgery	77	37	114	1357	478	1835
19.	Pain relief clinic	230	178	408	2560	1938	4498
20.	Pain & Palliative care (RT)	0	01	01	0	13	13
21.	Radiotherapy Clinic	1194	1002	2196	3862	4529	8391
22.	Surgical Oncology.	142	147	289	120	101	221
23.	Transplant Clinic	13	10	23	444	115	559
24.	Urology Malignancy cli.	213	15	228	1492	45	1537
25.	Familiar Cancer Clinic	0	05	05	0	0	0
	TOTAL	4740	3939	8679	39610	34308	73918

4. GEOGRAPHICAL DISTRIBUTION 2010–2011

S.No.	Name of the State	Total	S. No.	Name of the State	Total
1	Andhra Pradesh	5	2	Assam	28
3	Bihar	1040	4	Chandigarh	02
5	Chhattisgarh	16	6	Daman and Diu	04
7	Delhi	3034	8	Gujarat	03
9	Haryana	954	10	Himanchal Pradesh	28
11	Jammu and Kashmir	86	12	Jharkhand	94
13	Karnataka	05	14	Kerala	10
15	Madhya Pradesh	101	16	Maharashtra	09
17	Manipur	12	18	Meghalaya	01
19	Mizoram	02	20	Nagaland	08
21	Orissa	66	22	Punjab	65
23	Rajasthan	157	24	Sikkim	34
25	Tamil Nadu	05	26	Tripura	07
27	Uttar Pradesh	2452	28	Uttaranchal	338
29	West Bengal	70	30	Other Countries	43
	TOTAL	8679			

5. TOTAL ADMISSIONS **28,314**

Regular 5,461

Short/Day Care 22,853

6. TOTAL DISCHARGE **27,999**

Regular 5,435

Short/Day Care 22,564

7. TOTAL DEATHS **250**

8. OPERATION THEATRE SERVICES **6,333**

Major 706

Minor 5,627

9. ELECTROCARDIOGRAM (ECG) **2,364**

10. ANAESTHESIOLOGY

Facilities available include (i) ICU facilities for postoperative patients, (ii) PAC and Pain & Palliative Care Clinic is run 4 times in a week, (iii) Home support to patients with advanced malignancies by NGOs and monthly meetings with them to get follow up reports, (iv) Providing critical care to patients of radiotherapy, medical oncology and surgical oncology, (v) Facility for pediatric radiotherapy, (vi) anaesthesia for minor pediatric oncology procedures such as bone marrow biopsy, central line insertion, bone marrow harvesting and others, (vii) Facility for pediatric radiological procedures under anaesthesia, radiofrequency ablation for liver, lung and breast carcinoma, (viii) Vertebroplasty, and (ix) Scrambler therapy

11. LABORATORY ONCOLOGY SERVICES	TOTAL	89,941
1. Hemogram (Hb, TLC, Platelets)	51,999	
2. Peripheral blood smear (PBS)	4,986	
3. Bone marrow aspirarion and touch preparation (BM)	2,886	
4. Cyto-chemistry	631	
5. Serum protein electrophoresis (SPE)	2,284	
6. Immunofixation (IFX)	171	
7. Urine electrophoresis (UE)	489	
8. FLOW	24,214	
9. FNAC (lymph node)	160	
10. ESR	1665	
11. APAAP	321	
12. Cyto-spin	135	
TOTAL	89,941	

12. MEDICAL ONCOLOGY CLINICAL SERVICES

1. Lung cancer chemotherapy clinic is now well established with over 550 patients registered in 2 years.
2. Almost 70-80% patients are receiving various anticancer drugs from the hospital.
3. Peripheral blood stem cell transplant program is continuing with approximately 100 transplants having been performed over last 1 year.

New Cases (CTE+LL)	1366	Old Cases (CTE+LL)	42267
Total	43633		
Total Chemotherapy in Daycare	22307		
OPD Chemotherapy	18420		
Admission (Ward & Daycare)	(1462 + 22543) = 24005		
Medical Oncology Diagnostic & Therapeutic procedures			
Bone marrow Biopsy	480	Bone Marrow Aspiration	1495
Pleural Tapping	341	Intrathecal therapy with CSF	1370
Skin Biopsy	0	Catheterization	02
Other supportive services	23	Suture Removal	22
Total OPD Procedure	3711		
Medical Oncology Laboratory Services			
SDP stored	4136	Haemogram	12309
Single Donor Platelet (SDP)	2068	No. of infusions performed	132
Cytogenetics			
–detection of Philadelphia chromosome	367	–for chimerism	06

Cryopreservation of PBSC	26	Mononuclear cell count	149
Peripheral Blood Smear Count	143	Viability of stem cells	132
CD34 count of stem cells	145	CD3 count of stem cells	17
Immuno phenotyping for leukemia	23		
Polymerase chain reaction			
–RT-PCR for detection of p210 and p190 translocation in CML (qualitative)			149
–RQ-PCR for detection of p210 and p190 translocation in CML (quantitative)			35
–Screening of Flt-3 Mutations in AML			24
Storage of Peripheral blood stem cells (PBSC) at 4°C			122
ELISA for aspergillosis detection	1005	Granulocyte Harvest	5
Bone Marrow Harvest	10		

13. MEDICAL PHYSICS UNIT **TOTAL** **5,814**

14. RADIODIAGNOSIS SERVICES

1. CT Scan	5,230
2. Intervention	716
3. Mammography	1,127
4. Special investigations	65
5. Ultrasound	4,537
6. X-ray (OPD+ward+portable)	11,425
TOTAL	23,100

15. RADIOTHERAPY CLINICAL SERVICES

Total cases on radiotherapy	68143	Total fields on radiotherapy	174276
Cases on brachytherapy	1036	Treatment Planning and Simulations	4365
2D and 3D distribution	896	Compensators	373
Shielding blocks, immobilization devices, moulds	1876		
Radiation Review clinic	4261	Number of cases on chemotherapy	6116
Number of injections	37354	RFA	2

Community Service

Dr G.K. Rath wrote articles in (i) Times of India on “Breast Cancer” on 22 May 2010, (ii) DNA news on “Carcinoma of the Breast” on 25 September. 2010; and delivered a talk on “What the public need to know about Head and Neck Cancer” in Delhi Doordarshan on 4 February. 2011.

Dr P.K. Julka did Live TV Program on Cancer in Children, Lok Sabha TV, 31 March 2011, AIR Phone-in Program on Head and Neck Cancer, 21 March 2011, Live TV Program on Cancer Management, Lok Sabha TV, 5 February 2011; TV Program on Cancer on World Cancer Day, Delhi Doordarshan News, 4 February 2011; Live TV Program on Lung Cancer, Total Health Show, Delhi Doordarshan News, 23 January 2011; Live TV Program on Breast Cancer, Delhi Doordarshan National, 8 January 2011; Live TV Program on Tobacco and Cancer, Delhi Doordarshan News, 13 December 2010; Press Conference on Breast Cancer, 4th October 2010. Live TV Program on Breast

Cancer, Lok Sabha TV, 22 September 2010; Live TV Program on Head and Neck Cancer, Total Health Show, Delhi Doordarshan News, 12 September 2010; AIR Phone-in Program on Head and Neck Cancer, 21 July 2010; Live TV Program on River Ganga and Cancer, Star News, 14 June 2010; Live TV Program on Tobacco and Cancer, Total Health Show, Delhi Doordarshan News, 30 May 2010; AIR Phone-in Program on Cancer and Management, 17 May 2010; Live TV Program on Mobile Phones and Cancer, Live Total TV, 16 May 2010; Live TV Program on Tobacco and Cancer, Lok Sabha TV, 1 May 2010; Articles on “Gene Mapping” in “Navbharat Times”, 11 October 2010, “Breast Cancer” in “Dainik Bhaskar”, 5 October 2010, “Cancer Awareness” in “Hindustan”, 5 October 2010.

Dr D. N. Sharma participated in a Live Programme on DD News on breast cancer, March, 2011.

16. OPD PROCEDURES TOTAL 3712

1. DRESSING	578
2. SUTURE REMOVAL	24
3. NG TUBE REMOVAL	0
TOTAL	602

CHEMOTHERAPY SERVICES (OPD) TOTAL 18,890

1. M /F CT – ANTIBIOTICS	18,864
2. MALE CHILD CT	104
3. FEMALE CHILD CT	22
TOTAL	18,990

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—Fibre optic upper G.I. endoscopy, side viewing duodenoscopy, Colonoscopy, Sigmoidoscopy, Bronchoscopy, Cystoscopy, Nasopharyngo laryngoscopy and laparoscopy. Therapeutic—Stricture dilatation, Intraluminal Radiotherapy, Stenting and Percutaneous Endoscopic Gastrostomy.
3. Major 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 facilities are also available. In addition advanced state of art technologies like LASERS, CUSA, Harmonic Scalpel Vesalius and Intra Operative Radiotherapy are also available.

Total minor operations and endoscopic procedures done: 5627

Total major operations done: 706

Total no. of Indoor patients: 740

Community services

Dr S.V.S. Deo participated in a public health talk show on cancer “HELP” organized by the dept. of community medicine, AIIMS, 16 April 2010; delivered a public lecture through teleconference on “Breast Cancer” for Pan African e-Net work project of Ministry of Health, Govt. of India; participated in a public interactive session on Breast cancer during the “Breast cancer Awareness Program” organized by the department of Oncology, IGIMS, Patna, on 19 November 2010.

Dr N.K. Shukla participated in a panel discussion on general aspect of cancer for the general public; participated in a discussion on role of mammography in breast cancer for publication in the magazine “The Week” for the general public; was nominated by Ministry of Human resource Development as a Member Expert in the subject field of “Cancer Research” on 12.11.10; is senior medical advisor of the Indian ostomy society and involved in care of “Ostomy patients”.

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Professor G.K. Rath was Member of the International Peer Review Committee of the Tata Memorial Centre, Mumbai; delivered Prof GN Agarwal Oration at the 24th foundation day celebration of the Department of Radiotherapy at Chatrapati Sahuji Maharaj University(CSMU),Lucknow on 16 December 2010 at Lucknow; Keynote address “The Importance of Awareness and Prevention in Cancer Control” at the Cancer Sahyog Seminar on preventive oncology on 19 September 2010 at New Delhi.; Inaugurated the CME: SOOCON-2010 on 7 August 2010 at Patna; Chief Guest at the Cancer Sahyog annual meeting on 19 September 2010 at New Delhi; Guest of Honor at 23rd ICON conference at Allahabad on 24 September 2010; Chairman of: The Expert committee of the University Grants Commission (UGC) to prepare guidelines for universities, institutes and colleges for “Procurement, Storage, Utilization and Disposal of Radioactive and Other Hazardous Material/Chemicals”, Task Group of the Atomic Energy Regulatory Board (AERB) for “Assessment of Suitability to use Un-flattened Photon Beam for Clinical Use” held on February 17, 2011 at Mumbai, Team constituted by Secretary, Department of Health Research, MoHFW, and Director General, ICMR, to visit Amritsar, Firozpur, Bhatinda and Mansa for an onsite assessment of the high prevalence of cancer in certain parts of Punjab and to facilitate developing a research programme to identify different types of cancer and trends 15-17 September 2010, Project Review and Steering Group (PRSG) of the Department of Information Technology (DIT), Govt. of India for the project “Design and Development of Multileaf collimator for use in Linear Accelerators, PRSG of the DIT for the project entitled “Development of Oncology Management system for RCC, Thiruvananthapuram being implemented by the Centre for Development of Advanced Computing (C-DAC), of the Ministry of Communications and Information Technology, Government of India, PRSG of the DIT on “Design and development of Electronic Portal Imaging Device (EPID) for Radiation Therapy” being carried out by CSIO (Central Scientific and Industrial Organization), Chandigarh and TSG integration, New Delhi, ICMR Task force Project on “Breast Cancer and Malignant Brain Tumors”, Steering Committee of NCRP (National Cancer Registry Program), ICMR, ICMR task force on Cancer Management Guidelines, Ethics Committee, Institute of Cytology and Preventive Oncology (ICPO), ICMR; Expert Committee constituted by MoHFW for establishment of a National Cancer Institute (NCI) under AIIMS at Jhajjar, Haryana; Specialty Board for Radiotherapy of the Medical Council of India, New Delhi; Member of the following expert Committees/ Bodies: PRSG meeting to review the progress of the project “Medical Image Analyzer for Cervical Cancer” submitted by CDAC, Thiruvananthapuram, RCC, Thiruvananthapuram and IIT, Kharagpur; PRSG meeting for reviewing the projects: establishment of facility for batch fabrication of linac tube and linear accelerator machine; design and development of dual photon energy and multiple electron energy; development and deployment of 6 MV medical linac for cancer treatment (phase II) being implemented at SAMEER, Mumbai; Scientific Advisory Committee of the Regional Medical Research Center (RMRC), Dibrugarh; Member of Advisory Committee (on behalf of Director, AIIMS) constituted by the Hon’ble Supreme court of India to look into various aspects of Bhopal Gas Victims on 22 September 2010 at Bhopal; Member of committee to examine the proposals to engage high level technical consultants under National Programme for prevention and control of cancer, diabetes, cardiovascular diseases and stroke; Member of the Project Review Committee of North East (PRC-NE) of ICMR; Member of the evaluation committee to “evaluate the specialty of Psychooncology, its need in India, the Phase I performance of COPER (Centre of psychooncology for Education and research) and its request for Phase II funding” at Bangalore; Member of working group constituted by the AERB for assessing suitability to use stereotactic gamma ray system (SGS-I) for whole body treatment at Kadambi Supergamma Cancer care, CMH Road, Bangalore; Member of subcommittee constituted by the Tata Memorial Center Governing Council to study the proposal of ‘Augmentation of medical and nursing staff at Tata Memorial Hospital’ and also to review the existing Shared Hospital Income Scheme (SHI) for the medical officers at the Tata Memorial Centre, Mumbai; Appointed by the MCI to assess the

physical and other teaching facilities available at Cancer Institute (WIA), Adyar, for increase of seats in MD (Radiotherapy) course under the Tamilnadu Dr MGR Medical University, Chennai; Attended the XXVI-annual review meeting of the NCRP as the chairperson of it's steering committee, from 9-10 December, 2010 at Bangalore; Expert member for the committee constituted by the Government. of Odissa for the selection of Director for AHRCC, Cuttack on 6th October, 2010 at Bhubaneswar; Expert for selection of Asst Prof of Radiotherapy at Gandhi Medical College, Bhopal on 27 October 2010; Technical committee to review the technical specification of linear accelerators (a dual energy and a 6 MV with IMRT) for the AHRCC on 26th September 2010 at Cuttack; Technical Expert to help the selection committee for the recruitment of Senior residents and technologists in clinical oncology at the Delhi State Cancer Institute, Government of NCT of Delhi New Delhi on 14 August, 2010; Member of the technical evaluation committee to evaluate the technical offers for procurement of Linear Accelerator at Dr B. Borooah Cancer Institute on 24th December, 2010 at Guwahati; Expert for J&K Public Service Commission (JKPSC) for conducting the interviews for the post of B grade medical specialists and lecturers in Radiotherapy on 19th December, 2010 at Jammu; External examiner for MD (Radiotherapy) at MGM Medical College, Indore; IG Medical College, Shimla; SMS Medical College, Jaipur; PGIMER, Chandigarh; Governing Bodies of four Regional Cancer Centers (Acharya Tulsi Regional Cancer Center, Bikaner, Kamla Nehru Memorial cancer center, Allahabad, Acharya Harihara Regional Cancer Center, Cuttack and Regional Cancer Center, Agartala); Governing Body of Delhi State Cancer Institute (DSCI), Govt of NCT, New Delhi; Governing Body of the Bhagwan Mahavir Cancer Center, Patna; Safety Review Committee for Application of Radiation (SARCAR), Atomic Energy Regulatory Board (AERB), Anushakti Nagar, Mumbai, Govt. of India; Academic Senate of the Manipal University, Manipal; President of the Cancer Research Foundation of India; Indian Cancer Winner's Association; Project Review Committee, Oncology (PRC Oncology), ICMR, New Delhi; Standing Committee on Radiotherapy Development Program, DteGHS, MoHFW; SAG (Scientific Advisory Group), ICMR; Indo American Cancer Association; Forum for Breast Protection; Anti Cancer trust; Technical expert for assisting the selection committee for the recruitment of various levels of posts for faculty in radiation oncology and in medical physics at the DSCI, New Delhi; Advisory Committee, Dr BRA IRCH, AIIMS; Sub group of Ministry of Information and Technology, Govt. of India to review the progress of the Jai Vigyan project, Ministry of Communication and Information Technology, Govt. of India on the development & deployment of 6 MV Medical Linear Accelerator; Cancer foundation, Delhi; Project Review Committee on Working Group of Medical Electronics, Ministry of Information Technology, 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; Working Group in relation to Non-communicable Diseases of Indo-US Health Initiative, MoHFW; Member, Standing selection committee for interview of faculty posts of North East Indira Gandhi Regional Institute of Health and Medical Sciences (NEIGRIHMS), Shillong held at New Delhi, on behalf of director AIIMS from 23-25 February, 2011; Advisory Editor of Journal Academy of Hospital Administration; Member, Editorial Board: Indian Journal of Chest Diseases and Allied Sciences, Indian Journal of Cancer, International Journal of Biosciences and Technology, Journal of Contemporary Brachytherapy; Consulting Editor, Journal of Cancer Research and Therapeutics; Reviewer for Clinical Oncology, International Journal of Otolaryngology, International Journal of Biosciences and Technology, Eastern Journal of Medicine, Journal of Cancer Research and Therapeutics, Projects submitted to ICMR on Oncology; chairperson for Carcinoma Breast Session at SOOCON-2010, on 7th Aug 2010 at Patna; Participated in the meeting of Indian Society of Oncology on 18th of September 2010 at Mumbai; Participated in the seminar of Cancer Sahyog on "Preventive Oncology" on 19th September, 2010 at New Delhi; Chairperson for the Cancer Awareness Session and Member of the Panel Discussion on Practical Problem of Cancer Patients at the 23rd Indian Cooperative Oncology Network (ICON) conference on 24th September, 2010 at Allahabad; Participated in the deliberations in the Indo-US Health Summit under the auspicious of American association of Physicians of Indian Origin (AAPPI) from 3-5th January, 2011 at Jaipur; Attended the meeting to discuss the Infrared Thermography Based Image Construction (ITBIC) for biomedical applications on 27th Januar, 2011 at IIT, Madras.

Professor P.K. Julka was Head of Delhi Cancer Registry, under National Cancer Registry Programme; Participated in ICMR Meeting on Breast Cancer, New Delhi, 31st August 2010; Expert for Selection of Equipment for IGRT at RGCI, New Delhi, 26th July 2010; Expert for the Tomotherapy Purchase Committee Meeting, IRCH, New Delhi,

12th May 2010; Appointed as Member, Faculty of Medical Sciences, University of Delhi, 30th April 2010; Chairman of the First meeting of Radiation Safety Committee, AIIMS, New Delhi, 29th April 2010; Participated in Governing Council Meeting of RCC, Agartala, 21st April 2010; Chairman, Inspection Committee (GGSIP University) for PG Courses in PGIMER and RML Hospital, New Delhi, 16th April 2010; Chairperson for Post-Graduation Affiliation Committee (GGSIP University) for PGIMER and RML Hospital, New Delhi, 9th April 2010; Expert for Selection of Professors, Associate Professors and Assistant Professors at PGIMER Chandigarh, 4 March 2011; Expert for J&K Public Service Commission for conducting interviews for the posts of B Grade Specialists and Lecturers in Radio-Therapy on 19th December 2010 at Jammu; Examiner: M.D. Radiotherapy, Rohtak Medical College, PGIMER, Rohtak, IPJMR Medical College, Kolkata, AIIMS, New Delhi; Member, Editorial Board, Journal of Cancer Research and Therapeutics; Dr PK Julka served as a chairperson for Scientific Sessions on Brain Tumors, Colon, Prostate and Cervix Cancer at CME organized by Apollo Hospital, New Delhi, 21st November 2010; chairperson for a Scientific Session on Breast Cancer, NCR Oncology Forum, 21st July 2010; Chairperson for a Scientific Session on Management of Advanced NSCLC, Gurgaon, 20th November 2010; Chairperson for Brachytherapy Update at Galaxy Cancer Institute, Ghaziabad, 13th November 2010; Chairperson for First Brinker Awardee Breast Cancer Conference, New Delhi, 13th November 2010; Participated in ICMR-NCI Workshop on Breast Cancer, Oral Cancer and Cervical Cancer, Bangalore, 14 - 17th February 2011; Chairperson for a Scientific Session on Brain Tumors in Childhood, RGCON, New Delhi, 6th February 2011; Participated in International Breast Cancer Congress (IBCC), Paris, 29th -31st January 2011; Program Director and Chairperson at Pink Poll Breast Cancer Conference, New Delhi, 10th November 2010; Panelist for the Scientific Session on Breast Cancer at UAE Cancer Congress, Dubai, 29th October 2010; Participated in UAE Cancer Congress, Dubai, 27th-30th October 2010; Chairperson for the Scientific Sessions on Breast and Cervix Cancer at Women Health Initiatives, TMH, Mumbai, 22nd-23rd October 2010; Participated in ESMO Meeting at Milan, 7th-9th October 2010; Chairperson and Panelist for a Scientific Symposium on Her-2 Breast Cancer, Ganga Ram Hospital, New Delhi, 18th September 2010; Chairperson for a Scientific Session on Radiobiology in Glioma, New Delhi, 28th August 2010; Participated in Ayush Project Meeting at CCRS, Janakpuri, New Delhi, 27th August 2010; Chairperson for the Symposium on Her-2 Driven Breast Cancer, New Delhi, 23rd August 2010; Participated in Investigator's Training Meeting, Clinigene, Bangalore, 17th July 2010; Participated in discussion on Radiation Safety Aspects and Hazards, New Delhi, 15th May 2010; Chairperson for the Symposium on Neuroendocrine Tumors, New Delhi, 25th April 2010; Moderator and Chairperson for Symposium on Metastatic Colorectal Cancer, 23rd April 2010; Participated in Clinical Grand Round on Breast Cancer, AIIMS, New Delhi, 13th April 2010; Moderator and Chairperson for Symposium on Breast Cancer, New Delhi, 6th April 2010.

Professor N.K. Shukla chaired a panel discussion on Neoadjuvant Therapy in esophageal cancer at CME program of NCR Oncologist at Army Hospital (R&R) on 22 September 2010; attended the 5th AIIMS Surgical week on 11th March 2011 and chaired session on recent trends in the management of breast cancer.

Professor Subhash Chander attended XVI-Indo-US CME in Cytology, Surgical Pathology and Hematology, 11-13 February, 2011 at Allahabad and International Cancer Conference, 2011, 25-17 February, 2011 at Hyderabad.

Professor Rajive Kumar nominated as external expert at PGI, Chandigarh on Jan 13, 2011

Professor B.K. Mohanti was appointed as an external Expert by the European Commission (EC), Brussels, Belgium, for Framework-Health under EC-FP7-Health-Cancer area activities of 27 EC countries, 2010; Appointed as expert by the International Union Against Cancer (UICC), Geneva, Switzerland for evaluation of UICC fellowship projects and grants; Nominated as National Faculty for the Institute of Palliative Medicine, Calicut, by Indian Association of Palliative Care and as Steering Committee member of curriculum development for MD in Palliative Medicine; Reviewer of manuscripts for Clinical Oncology, National Medical Journal of India, Indian Journal of Palliative Care, Supportive Care Cancer; Appointed as External Examiner for MD (Radiotherapy) by Nizam's Institute of Medical Sciences (NIMS), Hyderabad, A.P. for year 2009-2010; Invited as chief scientific investigator from India to the Technical meeting of International Atomic Energy Agency (IAEA) for Research Coordination Meeting on protocol for head and neck cancer I (HYPNO trial), at IAEA, UNO, Vienna, Austria, 22-25 March 2011; Worked as reviewer for the

Handbook for Certificate Course of Indian Association of Palliative Care (IAPC), 2nd Edition, 2011; Acted as co-chairman of Medical Publication Committee of AIIMS; Worked as a member of the committee for process development in Examination Section of AIIMS; External Examiner for IAPC certificate course examination conducted at PGIMER, Chandigarh on 15th January 2011; acted as expert faculty in. round-table discussion on care of terminally ill cancer patients

Dr S.V.S. Deo was Member Editorial Board of New Indian Journal of Surgery, Surgical clinics of India and IJPC; Elected as the Director Education and Training (North Zone) of Association of Breast Surgeons of India of ASI; Chaired a scientific session during a Oncology CME program on Head & Neck cancers held at Appollo Hospital, New Delhi on 20th, Nov, 2010; Chaired a scientific session on Breast Cancer screening during the 1st Brinker Awardee Breast Cancer CME held by New India cancer Charity Initiative (NICCI) at Hotel Radisson, New Delhi, 13th November, 2010; Chaired a scientific session on “Country wide presentations- breast cancer” during the 7th WCI-TMH conference held at Tata Memorial hospital, Mumbai between 22-23 oct 2010.

Dr Shushma Bhatnagar was selected as Chair Person of Scientific Committee in 18th International Conference on Indian association of Palliative Care 10th -13th Feb 2011 to be held at SGPGI, Lucknow; continued as Editor of Indian Journal of Palliative Care; attend 6th Conference in the series on All India Students’ Conference on Science and Spiritual Quest (AISSQ2011) as a Speakers, Session Chairs, Co-Chairs and Participants. at Vigyan Bhawan, Delhi on 13th March 2011; chaired session on Palliative and supportive care. ICON – Indian Co-operative Oncology Network on 24 March 2011; Chaired poster session in 2nd Conference of the Asian Society of Neuro-Anaesthesia and Critical Care & 12th Annual Conference of the Indian Society of Neuro-Anaesthesia & Critical Care to be held on 26 February 2011 at New Delhi; Examiner of IAPC certificate course in Palliative care on 14th Aug. 2010 at Jaipur.

Dr Sameer Bakhshi was Member, National Academy of Medical Sciences (India) 2010

Dr Pratik Kumar was deputed to sign the document on behalf of Ministry of Health & family welfare as per procedure laid down by AERB for establishment of Radiotherapy Unit at six AIIMS like institution under Pradhan Mantri Swasthya Suraksha Yojana (PMSSY); Examiner for Ph.D. thesis entitled “Biophysical Investigations on Blood of Cancer Patients” at Jawaharlal Nehru Technological University, Hyderabad; Examiner for Ph.D. thesis entitled “Study of Physical and Dosimetric Aspect of Intensity Modulated Radiation Therapy” at Ch Charan Singh University, Meerut; was invited as reviewer for the project proposals submitted to DBT, New Delhi.; Member, Technical Advisory Committee, Delhi State Cancer Institute, Dilshad Garden, Delhi for technical specification of radiodiagnosis and radiotherapy equipments; External Expert for selection of Medical Physicist at Maulana Azad Medical College, L.N.J.P. Hospital, New Delhi; Member, Committee for examining x-ray machines for possible repair, National Institute of Family Welfare (NIHFW), New Delhi; External Expert, Technical Committee, Inter-University Accelerator Centre (IUAC), New Delhi for neutron shielding doors for beam hall – 2; was invited by ICMR to stakeholder meeting of Health Account Number Scheme; reviewer for the manuscripts submitted to Rajasthan Medical Journal, India; Editor, Medical Physics Chronicle; Member of the Editorial Board of Journal of Medical Physics; Member of Electro-medical Equipment Sectional Committee, BIS, New Delhi; Member, Executive Committee, Association of Medical Physicists of India (AMPI), Referee for Journal of Medical Physic and Examiner, Rajasthan University of Health Sciences, Jaipur for B.Sc. Radiation Technology.

Dr. Seema Mishra was Member of Editorial Reviewer Board of *American Journal of Hospice and Palliative Medicine*; Member, Editorial Board, Indian Journal of Palliative Care; Examiner of Basic certificate Course in Essentials of Palliative Care held on 8th Aug. 2010 at Indore.

Dr D.N. Sharma was awarded AROI Fellowship for one month observership at MD Anderson Cancer Center, Houston, USA, May 2010.

Dr Sushmita Pathy attended International Society for Genetic Eye Disease & Retinoblastoma meeting, 14-15th Jan 2011, Bangalore; attended 10th Annual International Conference of RGCON 2011, 4-6th Feb, 2011 New Delhi; attended 17th Annual Congress of Indian Society of Critical Care Medicine & International Critical care Congress

2011, 16-18th Feb, 2011, New Delhi; attended 24th Indian Cooperative Oncology Network Meeting 11-13th Mar' 2011, New Delhi.

Dr Ritu Gupta chaired a session on “Symposium on Myeloma”, in National Hematology Update-VIII at AIIMS, New Delhi, India; presented 2 posters at BTG 2011, Singapore: “B-cell maturation pattern in CD20/CD10 flow cytometric display: relevance in distinction between normal vs leukemic B-lineage blasts. (Saroj Singh, Anita Chopra, Jyoti Mishra, Sandeep Rai, Sangita Pandey, Rachna Seth, Rajive Kumar)” and “Diagnostic utility of flowcytometry in myelodysplastic syndrome (MDS): first study from India. (Chopra A, HP Pati, Manoranjan Mahapatra, Pravas Mishra, Tulika Seth, Saroj Singh, Sandeep Rai, Sangita Pandey, Rajive Kumar).”

Dr Prakash Chaudhary received Second prize in Debate competition during 18th International Conference on Indian association of Palliative Care 10th -13th Feb 2011 to be held at SGPGI, Lucknow

VISITING SCIENTISTS

1. Dr Jayant Vaidya, Department of Surgery, Whittington Hospital NHS Trust, Magdala Avenue, London, UK.

ADMINISTRATION

Chief Professor G.K.Rath

Asstt. Admn Officer Smt. Renu Bhardwaj

Office Supdt. Sh. Karam Chand

Total staff of Dr.BRA IRCH including Faculty

Faculty	20	Group 'A' & 'B'	16
Tech. Staff	130	Nursing Staff	195
Resident Doctors	60	Stores Staff	06
Ministerial Staff	18	Group 'D' Staff	82
Daily wages	02	PTSG	03
Outsourced Sanitation Staff	181	Outsourced Security Staff	57
Outsourced Data Entry Operators	8		

DELHI CANCER REGISTRY Scientist I Sh. N. Manoharan

FINANCE Accounts Officer Sh. D.P. Gangal

STORES Asstt.Stores Officer Sh. T.R. Mahajan

10.5 Neurosciences Centre

Chief

H. H. Dash

NEUROANAESTHESIOLOGY

Professor and Head

H. H. Dash

Professor

Parmod Kumar Bithal

Additional Professor

Arvind Chaturvedi

Associate Professors

Rajendra Singh Chouhan
(Sabbatical Leave)
Girija Prasad Rath

Mihir Prakash Pandia

Hemanshu Prabhakar

NEUROLOGY

Professor and Head

Madhuri Behari

Professors

Kameshwar Prasad

MV Padma Strivastava

Additional Professors

Manjari Tripathi
Achal Srivastava

Vinay Goyal

Garima Shukla

Rohit Bhatia

Associate Professor

Mamta Bhushan Singh

NEUROPATHOLOGY LABORATORY

Professor

Chitra Sarkar

Additional Professor

M.C. Sharma

Associate Professor

Vaishali Suri

NEURORADIOLOGY

Professor and Head

N.K. Mishra

Professor

Shailesh B. Gaikwad

Additional Professor

Ajay Garg

NEUROSURGERY

Professor and Head

A.K. Mahapatra

Professor

B.S. Sharma (on deputation)

Additional Professors

S.S. Kale

P. Sarat Chandra

Ashish Suri

Associate Professors

Rajendra Kumar

Man Mohan Singh

Assistant Professor

Manish Sharma

Associate Professors, Trauma Centre

Deepak Agarwal

Deepak Gupta

Sumit Sinha

Assistant Professor, Trauma Centre

G.D. Sathyarthee

EDUCATION

NEUROANAESTHESIOLOGY

Postgraduate teaching

1. Eight MD Anaesthesiology students (1.5 months each) from Department of Anaesthesiology department of AIIMS received training.
2. Twelve Senior Residents (8 from Department of Anaesthesiology, AIIMS, and 4 from Unit of Anesthesiology, Dr BRA IRCH received training for variable periods as a part of interdepartmental rotation policy on mutual exchange basis.
3. Thrice a week (Monday, Tuesday, Saturday) Seminars, Journal club and Case presentations as part of departmental teaching programme were organized for 1 hour at a time.

Short-term training

1. Four doctors from Lady Hardinge Medical College received 15 days training in the department.
2. One doctor from Hong Kong received 15 days training in the department

Long-term training

1. One doctor from the Indian Army received training for 2 years.

Continuing Medical Education

Conferences, Seminars, Workshops organized by the department

2nd Conference of Asian Society for Neuroanesthesia and Critical Care (ASNACC INDIA) and 12th Annual Conference of Indian Society of Neuroanaesthesiology and Critical Care (ISNACC 2011) was organized by the department at India Habitat Centre, New Delhi, during 25–27 February 2011.

Lectures delivered in CME/ National and International conferences: 14

NEUROPATHOLOGY LABORATORY

Lectures delivered in CME/ National and International conferences: 20

NEUROLOGY

Undergraduate and Postgraduate training.

The department has 18 residents enrolled for the DM course and residents of MD medicine, MD psychiatry courses also rotate through the department. Undergraduate students are also provided training in neurology.

Lectures delivered in CME/ National and International conferences: 32

NEURORADIOLOGY

DM Neuroradiology course: Two candidates are registered for this course at present.

Short term training

One consultant from UP government had two months training in the department. Residents from Neurology, Neurosurgery, Radiodiagnosis undergo training on rotation in the department. B.Sc. Radiography students from the Dept. of Radiodiagnosis also undergo training on rotation in the department.

Lectures delivered in CME/ National and International conferences: 21

NEUROSURGERY

Experimental Microneurosurgery laboratory was fully functional during this period.

Visiting Fellowship programme-11 fellows visited the department during 2010-2011.

Visiting Faculty: 7 visiting faculty visited the department and gave lectures during 2010-2011

PhD programme : 1 student

Continuing medical education

Conferences, seminars, workshops organized by the department

1. 13th AIIMS Microneurosurgery Workshop, AIIMS, New Delhi, 17–19 February 2011.
2. Skill development and cadaver workshop at AIIMS, April 2010, July 2010 and November 2010.
3. AIIMS operative and AOSpine advances cadaver workshop on spinal surgery, AIIMS, New Delhi, 12–14 November 2010.

4. Cadaveric Hands On training on Brachial plexus surgery, Conducted as part of Trauma 2010, AIIMS, New Delhi, 26 November 2010.
5. Nursing workshop, Conducted as part of Trauma 2010, at JPN Apex Trauma Centre, AIIMS, New Delhi, 26 November 2010.
6. Research methodology workshop, Conducted as part of Trauma 2010, JPN Apex Trauma Centre, AIIMS, New Delhi, 26 November 2010
7. Nursing conference, 'Trauma 2010, International congress and Second annual conference of ISTAC, JPN Apex Trauma centre, AIIMS, New Delhi, 27–28 November, 2010.

Lectures delivered in CME/ National and International conferences: 40

RESEARCH

NEUROANAESTHESIOLOGY

Funded projects

Ongoing

1. Avoidance of nitrous oxide during anaesthesia in patients undergoing craniotomy for supra-tentorial tumours. Dr H H Dash. Funded by ICMR, 2009–2011; Rs 4,82,880.
2. Evaluation of cerebroprotective effects of isoflurane and propofol anaesthesia in patients undergoing neuroendoscopic procedures. Dr Hemanshu Prabhakar. Funded by AIIMS (Institute Grant), 2010–2011; Rs. 1 lakh.
3. Effect of pregabalin premedication on post-craniotomy pain in patients undergoing supra-tentorial tumor surgery. Dr Girija Prasad Rath. Funded by AIIMS (Institute Grant), 2010–2011; Rs 1 lakh.

Departmental projects

Completed

1. Effect of pregabalin premedication on preoperative anxiety and postoperative pain in lumbar laminectomy and discectomy.
2. Complications following elective craniotomy- a prospective observational study.
3. A comparative study of early and delayed extubation following transoral odontoidectomy and posterior fixation.
4. Postoperative pulmonary complications after transoral odontoidectomy and posterior fixation.
5. Incidence and characteristics of postoperative complications during hospital stay in patients undergoing transsphenoidal removal of pituitary tumours.
6. Comparison of two anaesthetic techniques on postoperative cognitive dysfunction in patients undergoing transsphenoidal removal of pituitary tumours.
7. To compare the effect of different anesthetic agents on electrocorticography in patients undergoing epilepsy surgery – A BIS guided study.
8. Laryngeal morbidity associated with fiberoptic tracheal intubation performed Under General anaesthesia without or with use of muscle relaxant.
9. Perioperative management in children with encephalocele.
10. The causes, risk factors, and rate of postoperative ventilation in patients undergoing elective craniotomy.

Ongoing

1. Comparison of perioperative events, tumor markers and markers of inflammation in patients undergoing craniotomy for supratentorial tumor with and without nitrous-oxide.
2. Perioperative complications in paediatric patients undergoing craniotomy.
3. A study comparing effects of 20% mannitol and 3% hypertonic saline on intracranial pressure and systemic haemodynamics.
4. Awake craniotomy: An institutional experience
5. Comparison of dexmedetomidine and lignocaine on attenuation of airway and pressure responses following tracheal extubation.
6. Anaesthetic management and postoperative outcomes of patients undergoing surgery for Moya-Moya disease.
7. Effect of intraoperative dexmedetomidine on postoperative recovery profile of children undergoing surgery for spinal dysraphism.

NEUROPATHOLOGY LABORATORY

Funded projects

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. ICMR. Rs 16.5 lakhs (approx). 2007–2010.
2. Study of the role of bone marrow derived mononuclear cells in peripheral nerve repair of adult rats. Dr Vaishali Suri. AIIMS Rs 18 lakhs (approx). 2006–2010.
3. 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 Antisense Pharma, Germany. Rs 25 lakhs (approx) 2007–2010.
4. Angiogenesis in astrocytic tumors of the brain: A clinicopathological study with special reference to expression of vascular endothelial growth factor (VEGF), and hypoxia inducible factor (HIF)-1 alpha and correlation with vascular morphometric parameters and tumor infiltrating inflammatory cells. Dr Chitra Sarkar. ICMR. Rs. 21 lakhs approx. 2009–2012.
5. Glioblastomas in children. A study with special reference to molecular pathways and MGMT methylation status. Dr Vaishali Suri. ICMR. 2010–2013.
6. Open label, prospective, multicentric study to evaluate the safety and efficacy of BIOMAb-EGFR (Nimotuzumab) as induction and maintenance therapy in combination with radiotherapy plus temozolamide (concomitant and adjuvant) in Indian patients with glioblastoma multiforme–Phase II/III clinical trial. Dr Chitra Sarkar. Biocon Biopharmaceuticals. Rs. 15 lakhs. 2008–2012.
7. Hypoxia and p53-HIC1 axis in stemness of glial tumors and cell lines. Dr Chitra Sarkar. DBT. Rs. 50.9 lakhs. 2009–2012.

Departmental projects

Ongoing

1. Study of gliomagenesis: Role of Shh-Gli pathway
2. Study of Limb Girdle Muscular Dystrophy (LGMD) Patients in Indian Population Using Calpain-3, Dysferlin and Sarcoglycan Protein Analysis.

3. Study of PTEN and CDKN2 gene alterations in GBMs.
4. Study of IDH-1 mutations in gliomas.
5. Study of WNT pathway in ependymomas.
6. Analysis of CDKN1A/p16 alterations in ependymomas.
7. Diagnostic accuracy of skin biopsy in diagnosing muscular dystrophy—a cross sectional study.
8. Study of Notch Signaling pathway in Ependymomas.
9. Characterization of dendritic cells and expression of cytokines, chemokines and NF κB in idiopathic inflammatory myopathies.
10. Analysis of genetic alterations in meningiomas.
11. Study of LOH on chromosome 10q in GBMs.
12. Analysis of 1p/14q deletion in meningiomas.

Collaborative projects

Completed

1. Analysis of immuno-modulation property of IFN-γ on classical, non-classical MHC 1 and TGF-β expression in astrocytic tumors and their relevance in immuno-therapy (Department of Neurobiochemistry).
2. Study of HIC-1 in tumorigenesis and cell response (Dept of Biochemistry).

Ongoing

1. Effects of administration of human umbilical cord blood cells (HUCBG) in combination with melatonin versus HUCBG alone in rat with stroke. (Department of Neurology).
2. Comparative study of the treatment outcome with concurrent chemoradiotherapy in glioblastoma with Temozolomid post chemoradiotherapy 6 cycles vs. 12 cycles and molecular basis of resistance based on EGFR, MIB-1 and p53. (Department of Radiation Oncology).
3. Expression of Notch signaling molecules, Epithelial Mesenchymal Transition (EMT) markers and HIF-1α in Glioblastoma Multiforme. (Department of Biochemistry).
4. Oxygen concentration, p53-HIC1 axis and stemness characteristics in glial tumors cell lines. (Dr Chitra Sarkar).
5. Effects of bone marrow derived mononuclear cells on nerve regeneration rat sciatic nerve transaction model. (Dr Vaishali Suri)
6. Dose dependent facilitation of peripheral nerve regeneration by bone marrow derived mononuclear cells – Randomized controlled trial. (Dr Vaishali Suri)

NEUROLOGY

Funded projects

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. Madhuri Behari. Clinirx India Ltd. Rs. 10.00 lakh. 2009 – 2010.
2. A randomized, multicenter, double-blind, placebo-controlled, Dose – comparison study to determine the efficacy and safety of BG00012 in subjects with relapsing- remitting multiple sclerosis. Madhuri Behari. Biogen Idec. Rs. 16.5lakh. 2008-2010.

3. Study of safety and efficacy of R-HSC-001 in patients with Advanced Parkinson's disease. Madhuri Behari. Reliance Life Sciences. Rs 16.5 lakh. 2008-2010.
4. Identification of novel gene(s) for familial PD. Madhuri Behari (Co-I). DBT. Rs 95.0 lakh. 2007-2010.
5. Clinical Correlation of Ach-R-Abs and MuSK-Abs in myasthenia gravis patients in context with phenotype and genotype variation. Madhuri Behari. ICMR. Rs 28.lakhs 2007-2010.
6. Intravenous autologous bone marrow derived stem cell therapy for patients with acute ischemicstroke: A multi-institutional project. Kameshwar Prasad. DBT.Ongoing.
7. Central Database Management Facility. Kameshwar Prasad. DBT.
8. Capacity Building on Stroke Biology. Kameshwar Prasad. DBT.
9. Mobilization of stem cells using G-CSF in acute ischemic stroke patients: A randomized clinical trial. Kameshwar Prasad. DBT.
10. Beta Adrenergic Receptor and Angiotensin Converting Enzyme Encoding Gene Polymorphism As A Risk Factor For Stroke: A Case Control Study. Kameshwar Prasad. ICMR.
11. Comparison of effects of administration of bone marrow mononuclear clls (BMMNCs) in combination with melatonin versus BMNCs alone in middle cerebral artery occlusion model of stroke in rats. Kameshwar Prasad. DBT.
12. Autologous Intra-arterial Infusion of Bone Marrow Mono Nuclear Cells for Static Encephalopathy with special reference to Cerebral Palsy. M.V.Padma. DST.Rs.23 Lakhs.
13. Normobaric Oxygen Therapy for Acute Ischemic Stroke: A pilot study in Indian patients. M.V.Padma. ICMR – 20 lakhs.
14. Minocycline in acute ischemic stroke. M.V.Padma. ICMR. Rs. 10 lakhs
15. Study of role of pathogens and inflammatory biomarkers in cerebrovascular diseases in Young. M.V.Padma. ICMR
16. Comparison of two treatment regimes in patients with chronic stroke and disability outcome measures and functional imaging. M.V.Padma.ICMR
17. Effect of Non-ionizing electromagnetic field (EMF) on human health. M.V.Padma. COI
18. Study of safety and feasibility of autologous bone marrow derived intravenous mononuclear stem cells in chronic stroke- clinic radiological correlative study with biomarkers of stroke recovery. M.V.Padma. DST.
19. "Correlation of Electrophysiological States and Heamodynamic changes during simultaneous EEG-fMRI in Intractable Epilepsy", Principal Investigator/ DBT/26.310000
20. "Cognitive Activation Studies of Language and Memory as a Preoperative Evaluation in Patients with Intractable Epilepsy-A Novel Non-invasive method of investigation". Manjari Tripathi. DST. Rs. 25,00,000.
21. To Assess whether saliva and serum free anti-epileptic drugs levels are equivalent", Manjari Tripathi. ICMR . Rs. 1,90,000.
22. Safety, tolerability and effectiveness evaluation of the ISS in the treatment of vascular dementia-A Pilot Study. Manjari Tripathi. Co investigator. BRAIN GATES.
23. Evaluation of therapeutic effect of Repetitive Transcranial magnetic stimulation (rTMS) in Writers cramp, Migraine, Drug resistant Depression and Obsessive Compulsive Disorders. Vinay Goyal. ICMR. Rs 14.2 Lacs.
24. Randomized study comparing effect of freshly prepared Botulinum toxin verses refrigerated solution for 4 weeks in focal dystonia. Vinay Goyal. ICMR. Rs. 20 Lac

25. Prevalence of the restless legs syndrome in women and its relationship with iron deficiency – a prospective case-controlled study from North India. Garima Shukla. All India Institute of Medical Sciences. Rs. 44,000.
26. Generating knowledge for assessment of emerging technologies - The effects of Continuous positive airway pressure therapy for prevention of new vascular events in patients with sleep disordered breathing and stroke: A randomized controlled study. Garima Shukla. DST. Rs 69 lacs.

Departmental Projects

1. Predictors of seizures in intractable epilepsy patients undergoing long term video EEG recording
2. Neuropsychiatric problems in patients with Parkinson's disease
3. Care giver burden among caregivers of Parkinson's disease patients
4. Long term prognosis and factors affecting prognosis in tubercular meningitis
5. Sleep disorders in intractable and controlled epilepsy patients
6. Result of Mitoxantron therapy in multiple sclerosis
7. Ocular movements in young onset Parkinson's disease
8. Comparison VATS thymectomy vs. Open thoracotomy thymectomy in Myasthenia Gravis
9. Non motor symptoms in Parkinson's disease
10. Validation of Hindi version of PDQ-39 in Indian Parkinson's disease patients
11. Natural history of Parkinson's disease
12. Inflammatory response in SSPE
13. Study of cognition and Quality of life in Chronic Intractable Epilepsy using Functional Magnetic Resonance Imaging" (fmri)
14. A Randomized Controlled Trial (RCT) of Early verses Late Surgery in childhood intractable Epilepsy
15. Practice trend in management of tubercular meningitis.
16. Neuro-psychological co-morbidity in MSA and PSP as compared to idiopathic Parkinson's disease
17. Eye movement disorders in young onset parkinson's disease.
18. Psychiatric co-morbidity in patients of medically refractory epilepsy – pre and post epilepsy surgery.
19. Prevalence of Sleep disordered breathing in Stroke patients
20. Lower prevalence of Sleep disturbances in familial Parkinson's disease: a prospective case control study
21. To study the clinical, demographic and treatment profile of patients with multiple sclerosis.
22. Longterm outcome of decompressive hemicraniectomy in stroke.
23. To study the seasonal and diurnal variation of stroke
24. Excessive daytime sleepiness in patients with medically refractory epilepsy versus those with controlled epilepsy – a prospective study
25. Validation of hindi version of NIHSS stroke scale.

Collaborative Projects

1. PREDICT: Predicting hematoma Growth in intracerebral hemorrhage. University of Calgary, Canada.

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, UK)
3. Genetic basis of ischaemic stroke in an Indian population. (Funded by : UK-India Education Research Initiative, British Council, UK.)
4. Sensitivity and specificity of PCR in the detection of TBM versus other Neuroinfective diseases. Dept Biochemistry.
5. Study of Immune response of Immuno competent cells derived from Tuberculosis patients and healthy individuals.
6. Serological and molecular methods for detection of Cryptococcal Neoformans from clinical samples.
7. Proteomics in the detection of hereditary ataxias.
8. High-throughput proteomics and protein marker discovery in tuberculous meningitis.
9. Evaluation of antiepileptic property of selected Indian plants and their mechanism of action.
10. Randomization clinical trail on determining the efficacy of Reflexology and usual drug treatment in the management of west syndrome.
11. Pilot Study determining the efficacy of Reflexology and usual drug treatment in the management of Lannoux-Gastaut Syndrome and screening on possible genetic mutation in GPR56 gene in Indian population
12. A study to evaluate the impact of health education on self care medication compliance in patients with epilepsy
13. Thrombolysis with intravenous rt-PA for acute ischaemic stroke: the third International Stroke Trial. (IST-3). (Funded by : Medical Research Council, UK)

NEURORADIOLOGY

Funded projects

1. Phase imaging and Diffusion tensor imaging - Novel MR Contrasts in the evaluation of cryptogenic focal epilepsy DST. 2007-2010, three years duration
2. Quantitative Vessel size imaging (VSI) in cerebral gliomas and correlation with histopathological grading and vascular endothelial growth factor expression DBT. 2007-2010.

Departmental projects

1. Cerebral venous obstruction in patients of Multiple Sclerosis
2. Spinal vascular malformations, a review of cases with special reference to endovascular management at our centre.

NEUROSURGERY

Funded projects

Completed

1. Cotrara study: Intratumoural 1131 targetted monoclonal antibody recent GBM, Dec. 2010.
2. AP – 120009 – G005, Study March 2011, Fist Project – DST 2007-2010.

Ongoing

1. STICH II Medical Research Council, UK 2011.
2. STITCH (TRAUMA) Medical Research Council, UK 2011.

3. Exon Defects in Osseous developmental CVJ anomalies Dept of Biotechnology, Ministry of Science and Technology, India (17 lakhs), 2011.
4. Centre of Excellence to be commissioned as a National facility for difficult to treat epilepsy Dept of Biotechnology, ministry of Science and Technology, India 2011.
5. DBT funded project under the Rapid Young Investigator scheme 2011. Role of human umbilical cord blood stem cells and neural stem cells in neuronal regeneration and functional restoration: A comparative study in male adult rats with acute spinal cord injuries.
6. Differential expression of neurotransmitters from hippocampus during amygdalo-hippocampectomy for epilepsy surgery. DBT, Rs 30 lakhs, 2011.
7. FIST grant: To develop neurosurgical skills lab

Departmental projects

Completed

1. Outcome after surgery for traumatic brachial plexopathies.
2. Quality of life and disability after surgery for traumatic brachial plexopathies
3. Quality of life and disability after surgery for brachial plexus injuries.
4. Microsurgical outcome after surgery for traumatic brachial plexopathies.
5. Randomised evaluation of surgery with craniectomy for uncontrollable elevation of intra-cranial pressure (RescueICP study): International, multicentre, prospective, randomised, controlled trial on the role of decompressive craniectomy in management of severe traumatic brain injury.

PUBLICATIONS

Journals: 150

Chapters in Books: 15

Abstracts: 31

PATIENT CARE

NEUROANAESTHESIOLOGY

Perioperative anaesthetic care

- | | | | |
|--|------------|----------------|-----------------|
| 1. Neurosurgical operations: | Total 2753 | Elective 2100 | Emergency 653 |
| 2. Neuroradiological procedures | Total 277 | Diagnostic 127 | Therapeutic 150 |
| 3. MRI procedures (under sedation/anaesthesia) : | 151 | | |

Neuro-intensive Care Unit

Intensive care management: 2960 patients (2690 neurosurgical and 170 neurological patients).

Pain clinic

931 patients (163 New and 768 Old) were seen in OPD. 215 of them were treated with nerve blocks in the OT.

NEUROPATHOLOGY

- | | |
|--------------------------------------|------|
| 1. Neuropathology surgical specimens | 2106 |
| 2. Frozen sections | 403 |
| 3. Muscle biopsies | |
| Total received | 384 |

Muscle enzyme histochemistry	977	Muscle immunohistochemistry	1710
4. Immunohistochemistry	4745		
5. Myelin stain	156		
6. Diagnostic fluorescent in situ hybridization	95		
7. Electron microscopy			
Specimen received	749	Specimen processed	412

NEURORADIOLOGY

Procedures	Number	Procedures	Number
Digital subtraction angiography	727	Interventional procedures	153

MRI 2070

CT

Head	15498	Chest	254
Abdomen	153	Spine	603
Angiography	80	HRCT	26
Image guided/CT guided study	156	Emergency CT	8284
Ultrasound	1480	Plain X-rays OPD/indoor	14511
Pvt. Case reporting	4167		

Total 48162

NEUROLOGY

1. The department runs outpatient clinics 6 days a week.
2. Special clinics: Stroke, Movement disorders, Epilepsy, Sleep, Neuroimmunology, Neuroinfections, Pediatric neurology, Headache, Neuromuscular disorders are run regularly.
3. Inpatient services comprises, 68 general ward beds, 5 epilepsy monitoring beds with video-EEG, sleep lab, 5 ICU beds.
4. The department has a dedicated neurophysiology lab for EEG, EMG, NCS, evoked responses, video EEG.
5. Regular patient and public awareness programs for Stroke, Parkinson's disease, Epilepsy are conducted.

NEUROSURGERY

2. The department runs outpatient clinics 4 times a week. During 2010–11, the department treated 9805 old cases and 21962 new cases. In the Gamma Knife follow-up clinic, 997 patients were seen.
3. Inpatient care comprises 25 ICU beds, 72 General Ward beds. CN Tower has become the Private Ward block, with Neurosurgical patients being admitted on 1st, 3rd, 5th and 6th floors.
4. The department has 8 dedicated Neurosurgical operating rooms. The entire range of Neurosurgical cases are operated and managed. During 2010–11, 3757 procedures were done of which 2653 were major. During the same period, 209 Gamma knife procedures were done.

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Professor H. H. Dash continues to be 'Superintendent of Hostels' at AIIMS; continues to be 'Editor-in-Chief' of *News Letter* published by Indian Society of Neuroanaesthesiology and Critical Care (ISNACC); continues to be one

of the Editors of *Journal of Neurosurgical Anesthesiology*; honoured with 'Teacher of the Year Award' by Society for Neuroscience in Anesthesiology and Critical Care (SNACC) at San Diego, USA; Elected 'President-Elect' of Asian Society for Neuroanesthesia and Critical Care (ASNACC); invited speaker in 13th Asian Australasia Congress of Anesthesiologists (AACCA) and 57th Annual Meeting of Japanese Society of Anesthesiologists (JSA) in Fukuoka, Japan from 1–5 June 2010; invited speaker in International seminar of MDCRC in PNUH, Busan South Korea on 2 October 2010.

Prof Madhuri Behari was invited to be the member of the AFMRC, chairman of a review committee by the University Grants Commission to review the functioning of NIMHANS, Bangalore. She is a member of Institutional Research Review Board and Ethics committee, JNU, Advocacy Subsection, Indian Academy of Neurology, expert committee of Human Resource Development Group, CSIR, Asean Oceanian Section of International Movement Disorders Society, Education committee, Asean Oceanian Section of International Movement Disorders Society, PR Committee, International Movement Disorders Society Member Education committee, Movement Disorders Group, World Federation of Neurology.

Professor P. K. Bithal was elected 'President' of *Indian Society of Neuroanaesthesiology and Critical Care* (ISNACC).

Professor Chitra Sarkar was awarded ICMR international fellowship for Senior Biomedical Scientist 2010–11; Elected Vice President of Indian Society of Neuro-Oncology for 2010–11; nominated member of the Committee formed by Neurological Society of India to frame National Guidelines for the Diagnosis and Management of Gliomas; member Research Committee of SGPGI, Lucknow, 2010–13; member DST–Swarnajayanti Fellowship Committee; Member, Sectional Committee (medical sciences) of Indian Academy of Sciences, Bangalore; Member, Ethics committee, Dr BR Ambedkar Centre for Biomedical Research, University of Delhi; Member, Faculty Assessment Committee, NBRC; Member, Selection committee, ICMR Institute of Pathology, New Delhi.

Professor N.K. Mishra was International Faculty, chaired a session on 'Aneurysms', and conducted the 'Meet the Expert' session: "Life in Neuroradiology", during XIX Symposium Neuroradiologicum, 4–9 October, Bologna, Italy.

Prof Kameshwar Prasad is member, Cochrane Neurological Network, member of the Task Force on Chronic Disease Biology of the Department of Biotechnology, Govt. of India, member of the Executive Council of Assam University, Silchar (2010-13), member of the Technical Advisory Group to IndiaCLEN Health Research Capacity Building Initiative, member of the Executive Council of Pandit Bhagwat Dayal Sharma University of Medical Sciences, Rohtak,

Editor, Edinburgh-based Cochrane Stroke Group and Amsterdam-based Cochrane ARI Group.

Professor S.B. Gaikwad was nominated on the committee for setting up the facility of nanotechnology at AIIMS; invited as technical expert by the director, SGPIIMS, Lucknow; awarded Membership of Asia Pacific Society of Cardiovascular and Interventional Radiology (APSCVIR); Invited to chair session on "Neuroradiology of stroke at XIX World congress of Neuroradiology, Bologna, Italy, 4-9 October 2010

Dr Manjari Tripathi is member of AIIMS Research committee to consider the New Research proposals for the year 2010-2011 and member of AIIMS sub-committee to consider the Research proposals for the year 2010- 2011 for clinical subjects and Member of national Advisory Board-for Journal of the Indian Academy of Geriatrics, 2010.

Dr Rohit Bhatia and Dr Mamta Bhushan Singh: Edited and wrote a text book titled "Emergencies in Neurology". 22 chapters. International and National contributors. Byword Publishers, New Delhi, India. ISBN: 978-81-8193-067-5.

Dr Vinay Goyal is executive member: Delhi Neurological Association and Honorary Editor: DNA Newsletter, Delhi Neurological Association.

Dr M. P. Pandia served one year as a visiting faculty in the Department of Anesthesia, Stanford University School of Medicine, USA.

Dr P Sarat Chandra was expert in the committee to develop “Guidelines to develop Epilepsy Education In India”; by the Indian Epilepsy Association”

Dr Deepak Agarwal was awarded Synthes Spine Observiship program’ to visit Spine Centre in Hong Kong from 23 April to 2 May 2010.

Dr Aanchal Kakkar received the Ramalingaswami First Prize for oral paper entitled “Loss of Heterozygosity on Chromosome 10q in Glioblastoma Multiforme” in the Annual Conference of IAPM, Delhi Chapter, 11 April 2010.

VISITING SCIENTISTS

NEUROANAESTHESIOLOGY

Dr Deepak Sharma, Seattle, USA

10.6 Dr. Rajendra Prasad Centre for Ophthalmic Sciences

Chief and Professor

Supriyo Ghose

Professors

Rajvardhan Azad
S.P. Garg
Atul Kumar
Gita Satpathy
(Ocular Microbiology)
S.K. Khokhar

Rasik B. Vajpayee
Anita Panda
Pradeep Sharma
J.S. Titiyal

Vimla Menon
Y.R. Sharma
Ramanjit Sihota
Radhika Tandon

Mahesh Chandra

Dilip R. Shende
(Anesthesiology)

Mandeep Singh Bajaj

Medical Superintendent

Shakti Kumar Gupta

Additional Professors

Raj Pal

Sanjay Sharma
(Radiodiagnosis)
Pradeep Venkatesh
T. Velpandian
(Ocular Pharmacology)

Niranjana Nayak
(Ocular Microbiology)
Seema Kashyap
(Ocular Pathology)
Tanuj Dada
Praveen Vashist
(Community Ophthalmology)

Seema Sen
(Ocular Pathology)
Namrata Sharma

Neelam Pushker
Jasbir Kaur
(Ocular Biochemistry)

Associate Professors

Rohit Saxena

Vinay Gupta

Renu Sinha
(Anesthesiology)

Tushar Agarwal
Bhavna Chawla

M. Vanathi

Rajesh Sinha
Parijat Chandra

EDUCATION

The Center provided training for 45 undergraduates, 33 senior residents, 5 ocular anesthetists, and 7 pool officers. 25 postgraduate (MD) and 12 B.Sc.(H) Ophth completed their training. There are 24 Ph.D. scholars doing research in the center.

Short and long term training: 28 Short term trainees and 9 Ophthalmologists from various parts of the country were trained in different fields of specialization.

Lectures delivered by faculty in CME/National and International conferences: 117

RESEARCH

Funded Projects

Completed

1. SHIELD STUDY: A 24 week multicentre, randomized, double-masked, placebo controlled study to assess the difference in the rate of recurrent exacerbations in Behcet's patients with posterior or panuveitis treated with AIN 457 vs placebo adjunctive to standard-of-care immunosuppressive therapy. PI- Prof. Rajvardhan Azad; NOVARTIS; Six months; Rs1.8 lakhs.

2. 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". Protocol No. CBPD952AIN03T, 2007. PI:-Prof. Rajvardhan Azad; NOVARTIS; 2007-2010; Rs 3,62,730.
3. DEGAS STUDY: A phase II prospective, randomized, multi-centre, diabetic macular edema dose ranging, comparator study evaluating the efficacy and safety of PF-523655 versus laser therapy (DEGAS). PI: Prof. Rajvardhan Azad; Pfizer; 2009–2011; Rs 16.5 lakhs.
4. ENDURE STUDY: A 24-week multicenter, randomized, double-masked, placebo controlled, dose-ranging phase III study of AIN457 versus placebo for maintaining uveitis suppression when reducing systemic immunosuppression in patients with quiescent, non-infectious intermediate, posterior or panuveitis and Protocol No.CAIN457C2301. PI: Prof. Rajvardhan Azad; June 2010 to February 2011; Rs1.8 lakhs.
5. 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. PI- Prof. Gita Satpathy; Funding Agency: ICMR; 2007–2010; Rs 16 lakhs.
6. Role of stratifin in ocular squamous cell neoplasia and its correlation with other tumor suppressors. PI: Dr Seema Sen; Funding Agency: ICMR; 2010–2013; Rs 26 lakhs.
7. Human pharmacology and toxicology profiling of INMAS biomedical products. PI: Dr T. Velpandian; Funding Agency: DRDO; 2008-2011; Rs 9.75 lakhs.

Ongoing

1. National retinoblastoma registry.
2. A pilot study to assess the adjunctive role of Pegaptanib sodium (Macugen) for treatment of severe, aggressive and posterior retinopathy of prematurity (ROP) (IIR).
3. 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." Protocol No.A5751013, 2006.
4. Phase–II multicenter, prospective, randomized, age related macular degeneration, comparator controlled, dose ranging study evaluating PF-04523655 versus Ranibizumab in the treatment of subjects with choroidal neovascularization (Monet Study).
5. The epidemiology of anophthalmia and/or microphthalmia in children aged 0–5 years in selected district of Bihar.
6. Development of small interfering RNAs (siRNAs) for inhibition of enterovirus70 and coxsackievirusA24 viruses causing acute hemorrhagic conjunctivitis.
7. Phenotypic molecular and ultrastructural study of coagulase negative staphylococci and their biofilms in device related infections.
8. Identification of human papilloma virus types in malignant ocular tumors.
9. Detection of cancer stem cell marker by flow cytometry in retinoblastoma.
10. Evaluation of trans-rectal ultrasound, elastography and contrast enhanced sonography in detection of prostate cancer.
11. Ocular lymphomas and chlamydia: an immunophenotypic and molecular study.
12. Evaluation of calcium dobesilate for various ocular pharmaceuticals conditions.

13. Assessment of magnitude and progression of myopia in school going children in Delhi.
14. Evaluation of incidence and determinants of recurrence of Amblyopia following cessation amblyopia therapy.
15. Correlation between clinical features, imaging characteristics and histopathological findings in advanced intraocular retinoblastoma.
16. Conjunctivodacryocystorhinostomy using high density porous polyethylene tear drain tube.
17. Malignant tumor of the eye and orbit – varied clinical profile, role of tumor markers in management.
18. Factors associated with severity at presentation of juvenile onset primary open angle glaucoma.
19. Phenotype-genotype correlation among patients with juvenile onset primary open angle glaucoma.

Departmental Projects

Completed

1. Study of visual functions and fundus findings in orbital tumors and their alterations after surgery.
2. Lateral eyelid rotation flap for reconstruction of full thickness eyelid defects.
3. Visual parameters in patients with regressed retinoblastoma.
4. Evaluation of modified levator plication in marcus gunn jaw-winking ptosis.
5. Serial ultrasonic evaluation and its clinico-pathological correlation in retinoblastoma patients undergoing chemoreduction and local treatment or enucleation.
6. Anatomical and functional results of laser in central serous retinopathy.
7. Role of Macugen and Lucentis in diabetic macular edema.
8. Comparison of pascal photocoagulation and diode laser for treatment of diabetic retinopathy.
9. Comparative evaluation of intravitreal pan anti-VEGF with intravitreal selective anti-VEGF in diabetic macular edema: a randomized prospective study.
10. Comparative study of 25 gauge Vs 20 gauge system for pars plana vitrectomy in the management of rhegmatogenous retinal detachment.
11. Bone marrow derived stem cell therapy and the trabecular meshwork: an experimental study.
12. Radiofrequency ablation of symptomatic lower limb varicosities.
13. Role of MRI in characterisation of sonographically indeterminate adenexal masses.
14. An integrated predictive model for evidence based eye care.
15. Health related quality of life in blind children (8 to 18 years) of retinoblastoma.
16. Evaluation of air-Q intubating laryngeal airway as a conduit for tracheal intubation in infants and children.
17. Variation in LMA cuff pressure and ventilatory parameters in paediatric patients: effect of air and O₂ – air mixture used for LMA cuff inflation.
18. Development of microdialysis technique to study intraocular kinetics of drugs.
19. Evaluation of cassette dosing technique for the transcorneal penetration of drugs.
20. Development of a quantitative structure property relationship using molecular dynamics for congeneric compounds for their *in vivo* intraocular penetration.
21. Evaluation of polyherbal formulation for allergic conjunctivitis.
22. Evaluation of retinal nerve fibre layer thickness in optic neuritis and multiple sclerosis.

23. Correlation of visual functions with cortical activation patterns on functional MRI in cases of optic neuritis.
24. To evaluate the incidence of recurrence of amblyopia following discontinuation of amblyopia treatment in the case of treated anisometropic amblyopia.
25. Cycloplegic refraction in children: a comparison of homatropine and atropine.
26. To evaluate baseline cortical activation patterns using functional magnetic resonance imaging (fMRI) in amblyopia and compare it with activation patterns after recovery post-occlusion therapy.
27. Evaluation of visual field changes in eyes with optic neuritis and fellow eyes with microperimetry.
28. Evaluation of lateral rectus periosteal anchoring and split VRT in exo-duane retraction syndrome and third nerve palsy.

Ongoing

1. Gene expression profile of human uveal melanoma.
2. Molecular genetics of glaucoma.
3. Regulation of apoptosis in human retinoblastoma.
4. Identification and characterization of differentially expressed genes in human retinoblastoma.
5. Sentinel lymph node biopsy in malignant eyelid tumors.
6. Role of fine needle biopsy in orbital and periorbital lesions.
7. Clinical, radiological and genetic analyses in blepharophimosis syndrome.
8. Clinical and demographic profile in thyroid associated ophthalmopathy.
9. A randomized prospective study for comparison of effects of pascal photocoagulation with conventional laser photocoagulation in diabetic macular edema and proliferative diabetic retinopathy.
10. Comparison of lucentis vs laser in branch retinal vein occlusions.
11. Comparison of retcam assisted fluorescein angiography vs gonioscopy for early detection of angle neovascularization in proliferative diabetic retinopathy.
12. Correlation of visual acuity with integrity of foveal photoreceptor layer using SD-OCT and multifocal ERG in patients of diabetic macular edema.
13. Results of vitreoretinal surgery at tertiary eye care centre.
14. Anatomical and functional outcomes of intraoperative bevacizumab in diabetic vitreoretinal surgery.
15. Comparative evaluation of 23G and 25G microincision vitrectomy in management of diabetic tractional retinal detachment.
16. Comparison of large spot laser vs. standard spot laser for treating retinopathy of prematurity.
17. Comparative evaluation of predictors for success in macular hole surgery varying gas mixtures (18% C3F8, & 25% SF6) for managing minimal gauge dye enhanced.
18. Use of autologous bone marrow derived stem cells for rehabilitation of patients of retinitis pigmentosa and allied heredo-retinal dystrophies.
19. Ocular surface evaluation in allogenic hematopoietic stem cell transplant patients.
20. Correlation between baseline intraocular pressure and histopathology of trabecular meshwork.
21. Clinical, histopathological & genetic characterization of corneal endothelial dystrophies.
22. FNAC of orbital lesions with clinical and histopath correlation.

23. Evaluation of trans-rectal ultrasound, elastography and contrast enhanced sonography for detection of prostate cancer.
24. Comparative evaluation of endovenous LASER ablation, radiofrequency ablation and surgery in the treatment of symptomatic lower limb varicosities.
25. Comparative evaluation of outcome of conservative management vis-à-vis interventional radiological management for discogenic low back pain.
26. Community based epidemiological study on corneal opacities.
27. Socioeconomic factors in glaucoma treatment compliance.
28. Quality of life among the newly diagnosed glaucoma patients at R.P. centre.
29. IH and molecular studies on WntB-Catenin signaling pathway in sebaceous cell carcinoma of the eye lid.
30. Expression of cell cycle regulatory proteins in ocular surface squamous neoplasia.
31. Comparison of granisetron with different doses of granisetron and dexamethasone for postoperative nausea and vomiting in children undergoing elective strabismus surgery.
32. Development of topical estrogen or androgen receptor modulator for postmenopausal dry eye using computer aided drug design.
33. Evaluation of cassette dosing for the intraocular penetration of drugs.
34. Isolation and evaluation of bioactive compounds from marine origin.
35. Prediction of ocular toxicity using OMR paradigms in gold fish.
36. Indian Solar UltraViolet Radiation Assessment – Project ISUVRA under WHO–WMO programme of INTERSUN.
37. Evaluation of polyherbal formulation for ocular neovasulcar conditions.
38. Long term structural and functional outcomes in treated juvenile onset primary open angle glaucoma eyes.
39. Evaluation of macular function in differing severity of glaucoma.
40. Evaluation of long term visual outcomes following trabeculectomy with trabeculotomy for congenital glaucoma.
41. Evaluation of the use of FD-2 (Frisby Davis – distance) in surgical management of intermittent exotropia.
42. Prediction of ocular side effects of therapeutic models.
43. Long term evaluation of imaging in glaucoma
44. Microperimetry in glaucoma
45. Ocular changes with raised intraocular pressure.
46. Evaluation of lens extraction as a treatment modality in primary angle closure and primary angle closure glaucoma.
47. Phenotype-genotype correlation among patients with juvenile onset primary open angle glaucoma.
48. Clinical correlation of imaging findings in congenital neuropathic strabismus.
49. To compare the sensitivity of different investigations in the diagnosis and follow up of NA-AION.
50. Evaluation of torsion in anterior and nasal transposition in inferior oblique.
51. To evaluate the structural and functional changes in retina in cases of Parkinson's disease.
52. Evaluation of tear-fluid constituents in various ocular pathological conditions using tandem mass spectrometry.

Collaborative Projects

Completed

1. Study of visual function and fundus findings in orbital tumors and their alterations after surgery.
2. Study of non alcoholic fatty liver disease and atherosclerosis in Asian Indians.
3. Genetic polymorphisms of vascular endothelial growth factor and risk of 'Threshold' retinopathy of prematurity.
4. The INDGEN study "A genetic component to the cataract and age-related macular degeneration in India".
5. Community Ophthalmology activities in ORBIS sponsored – RIO child eye care project.
6. Development of new LC-MS/MS method for the determination of homocysteine and homocysteine thiolactone from plasma samples.

Ongoing

1. Randomized control trial using carboplatin 750mg/m² and 560 mg/m² for ocular salvage in group C and D retinoblastoma.
2. Role of magnetic resonance imaging and spectroscopic methods in the evaluation of early prostate cancer.
3. Role of ultrasound elastography in evaluation of breast cancer.
4. Role of non alcoholic fatty liver disease in adult population in a rural community living in Haryana.
5. Evaluation of adjuvant chemotherapy in stage 2 and neoadjuvant chemotherapy in stage 3 retinoblastoma as per the international retinoblastoma staging system.
6. Imaging guided lung biopsies in immunocompromised patients with probable fungal pneumonia and its clinical implications.
7. Study of duration of anticoagulation in patients with deep venous thrombosis based on compression ultrasound.
8. Randomized control study of laparoscopic sleeve gastrectomy with and without staple line reinforcement in morbidly obese patients.
9. Role of magnetic resonance imaging and spectroscopic methods in the evaluation of prostate cancer.
10. Clinical correlation of imaging findings in congenital neuropathic strabismus.
11. Sentinel surveillance unit at the R.P. Centre, AIIMS, under the National Programme for Control of Blindness, Ministry of Health and Family Welfare, Government of India.
12. ICMR Multi-centric collaborative study on the impact of global warming and ultra violet radiation (UVR) exposure on ocular health in India.
13. KAP study on awareness and practices of eye care services in urban slums of Delhi- sponsored by sight savers international.
14. The development of a potential bio-polymer to serve as an alternative substrate of human amniotic membrane for *ex vivo* expansion of corneal epithelial stem cells.
15. Malignant tumors of the eye and orbit in children: The varied clinical profile and role of tumor markers in management.
16. Serial ultrasonic evaluation and its clinicopathological correlation in retinoblastoma patients undergoing chemoreduction and focal treatment or enucleation.
17. Strategies for extending utilization of donor corneal tissues for corneal transplantation by harnessing their full clinical potential.

18. Evaluation of role of cultivated oral mucosal epithelial cells in patients with bilateral acute ocular burns as compared to amniotic membrane transplantation.
19. Comparison of efficacy of intravenous paracetamol and fentanyl for perioperative analgesia in children undergoing elective strabismus surgery.
20. Evaluation of vitreous humor as a marker fluid in the autopsy drug level analysis.

PUBLICATIONS

Journals: 56

Chapters in Books and Monographs: 7

PATIENT CARE

	New cases	Old cases	Total
1. General OPD	1,13,774	81,362	1,95,136
2. Emergency	14,034	11,434	25,468
Total	1,27,808	92,796	2,20,604

SPECIALITY CLINICS

1. Cornea	5283	15381	20664
2. Lens Clinic	892	1562	2454
3. Uvea Clinic	906	3248	4154
4. Contact Lens Clinic	1013	3009	4022
5. Glaucoma Clinic	2594	6324	8918
6. Ophthalmoplasty Clinic	2933	1649	4582
7. Paediatric Ophthalmology Clinic	734	319	1053
8. Trauma Clinic	754	753	1507
9. Retina Clinic	2623	3863	6486
10. Neuro-Ophthalmology Clinic	1789	1342	3131
11. Medical Ophthalmology Clinic	985	1647	2632
12. Vitreo Retinal Clinic	1466	798	2264
13. Ocular Surface Disorder Clinic	74	60	134
14. Retinoblastoma Clinic	284	803	1087
15. a) Orthoptic Clinic	5697	24826	30523
b) Squint Clinic	6994	26937	33931
16. Refraction	–	26723	26723
Total Cases	35013	119244	154257
Grand Total of Cases	162821	212040	374861

INDOOR	No. of cases
1. General Admissions	15349
2. Casualty Admissions	2137
3. Private Admissions	1276
4. Short Admissions	5559
5. Day Care Admissions	7422
Total	31743
OPERATIONS	
1. Major	15536
2. Day Care	7048
Total Major	22584
3. Minor	7350
Grand Total	29934
Deaths	03
YEARLY OTHER FIGURES	
1. Average Bed occupancy Rate	84%
2. Average length of stay	4.7 days
3. Average OPD Attendance per working day	1253
4. Average No. of Indoor Admission per working day	86%
5. Average No. of Surgeries per working day	82%
Investigative Laboratories	
Fluorescein Angiography + ICG	5,847
Ultrasonography	17,067
EUA	187
ECG	2,227
Applanation Tonometry	13,117
Indirect Ophthalmoscopy	3,405
Goldmann Perimetry	2,735
Automated Perimetry	4,837
ERG	709
VER	6,105
EOG	56
ENG	24
Focimetry	4,699
Colour Vision	3,849

LI	4,279
Ultrasonic Pachymetry	1,679
Non Contact Tonometry	22,980
Refraction	68,734
Auto Refraction	26,582
Axial Length	16,782
Keratometry	17,955
OCT	9,568
Contact Lenses (Old + New)	5,068
Artificial Eye	561
Low Vision Aid	1,271
PRP	3,141
Nd-Yag Laser	2,277
Fundus Photography	3,147
Excimer Work up (Lasik)	3,533
PDT	129
Inj Lucentis	30
Inj Macugen	340
Retinal Camera Ret. CAM	514
Cornea Service Lab (total no of inv.)	19,514
Cornea Research Lab (total no of inv.)	10,089
Glaucoma Research Lab (total no of inv.)	43,547
Ocular Microbiology	
<i>Grand total</i>	<i>12153</i>
Bacterial culture and sensitivity	9147
Fungal culture	1949
<i>Specimens processed for</i>	
cytology	165
viral antigen detection	61
chlamydia antigen detection	150
PCR for chlamydia	9
PCR HSV	91
Conjunctivitis (PCR)	117
Chlamydia tissue culture	16
Chlamydia serology	8

Conjunctivitis (antigen detection)	117
Conjunctivitis (tissue culture)	117
Culture for acanthamoeba	111
Acanthamoeba PCR	95
Ocular Pathology	
Total number of investigations	60,548
Blood: TLC, DLC, PBS, ESR, BT/CT	35,167
Urine	9,453
Histopathology, Cytopathology and Research	15,928
Ocular Biochemistry (Clinical Chemistry)	
Total number of samples (apart from research)	11065
Indoor	9885
Outdoor	1180
Ocular Pharmacology and Pharmacy	
Free drugs (vials) supplied through	
Ocular Pharmacy	104688
MK Media	1551
Eye Care Services in Slums	
Primary Eye care Clinics	24
Slums covered for Primary eye care services	36
Attendees at PEC Centres in Slums Cluster	20149
Refraction carried out in PEC Centres in slums Cluster	8282
Patients referred to R.P. Centre	2170
Patients operated	640
Subsidized Spectacles issued in Slums	2435
Comprehensive screening camps organized in urban slums	08
Training events and health education events	
Volunteers Training Programmes organized	22
Volunteers Trained	256
Eye Health Education Events	11
Participants in the Health Education events	432
Reach-in-Programme for cataract surgery in Rural and remote areas	
Adult screening camps organized	45
People examined	10254
Patients referred at R.P. Centre	1474

Patients operated at R.P. Centre	788
Follow-up camps organized	19
Patients examined in Follow-up camps	665
School Eye Screening (SES) Programme	
Schools covered	14
Teachers trained	60
Children screened	9263
Children prescribed spectacles	1447
Children issued spectacles	1372
Rehabilitation services	
Blind patient counseled for rehabilitation services	36

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Prof. Supriyo Ghose: SAARC Academy of Ophthalmology, Dhaka, Bangladesh early March 2011, conducted a well attended and very interesting instruction courses on Visual Impairment Standards Categories, and on practical applications of color deficiency.

Prof. Rajvardhan Azad: Awarded Medical Doctor of the Year 2010 award by eMedinews-Revisiting 2010, New Delhi on 9 January 2011; Dr Puneet Sharma Memorial Trust Oration on “Retinopathy of Prematurity” by Rajasthan Chapter of National Neonatology Forum, Birla Auditorium, Jaipur, 2010; Chairman, Ophthalmic Education and Certification Committee, Asia Pacific Academy of Ophthalmology, 2010; Dr P.K. Jain Oration Award by Delhi Ophthalmological Society, 2010; President, All India Ophthalmological Society, 2010; K.R. Dutta Memorial Award by AIOS, 2010; Principal Investigator, Retinoblastoma Registry Group (ICMR)–Delhi Site; Chairman and Principal Investigator, ICMR Task Force on Retinitis Pigmentosa; Member Reviewers Committee, Indian Council of Medical Research (ICMR); Reviewer for: Bio Med Central Ophthalmology, London; Ophthalmic Surgery Laser and Imaging; Indian Journal of Ophthalmology; Journal of American Association Pediatric Ophthalmology and Strabismus; Clinical and Experimental Ophthalmology; British Medical Journal Ophthalmology; Indian Journal of Pediatrics; Acta Ophthalmologica; Advisor, Editorial Board, Delhi Journal of Ophthalmology; Section Editor, Retina – Indian Journal of Ophthalmology; Section Editor, Surgical Retina - Asia Pacific Journal of Ophthalmology, 2011; Chief Executive Editor, Ophthalmology World Report; Member, ESI Medical Board for Associate Professor and Professor Selection Committee; Member, Selection Committee for Professor, Sanjay Gandhi PGI, Lucknow, UP; Appointed Examiner for Ph.D Exam at PGI, Chandigarh; Member, Deans Committee, All India Institute of Medical Sciences, New Delhi; Continues to be: Expert Standing Selection Committee, PGI, Chandigarh; Regional Secretary, SAARC Academy of Ophthalmology; Regional Secretary of Asia Pacific Academy of Ophthalmology (APAO), 2005–2009, 2009–2013.

Prof. Yog Raj Sharma: Reviewer for: Ophthalmology (AAO Journal), 2010; American Journal of Ophthalmology, 2010; British Journal of Ophthalmology, 2010; Pediatric Ophthalmology and strabismus, 2010.

Prof. Atul Kumar: Awarded UGC- Hari Om Ashram Trust National Award 2010.

Prof. Pradeep Sharma : Chairman of the FAICO Pediatric Ophthalmology and Strabismus, AIOS; Selected as Section Editor of Indian Journal of Ophthalmology 2010–11; Reviewer for: Indian Journal of Ophthalmology 2010-11; Ophthalmology (BJO) 2010–11; Awarded Silver Medal for Best Paper in Indian Journal of Ophthalmology 2010.

Prof. Ramanjit Sihota: Reviewer for: Indian J Ophthalmology, 2010; Archives of Ophthalmology, 2010; British Journal of Ophthalmology, 2010; Eye, 2010; Ophthalmic and Physiological Optics, 2010; Acta Ophthalmologica, 2010; Member, Glaucoma Research Society, 2010.

Prof. Mahesh Chandra: Invited to conduct the assessment of the physical and other teaching facilities at Maharashtra Institute of Medical Education & Research, Talegaon, Maharashtra, Feb 2011.

Dr Sanjay Sharma: Awarded the prestigious Dr JC Bose Memorial Oration: to be delivered in February 2012, at the 65th Annual Conference of the Indian Radiological and Imaging Association (IRIA) at Hyderabad; Awarded Second prize for the paper “Endovascular management of paediatric Budd Chiari syndrome” at the 20th Annual Conference of the Pediatric Gastroenterology, Hepatology and Nutrition (IAP & ISG), Chandigarh, October 2010; National Joint Secretary of the Indian Society of Vascular and Interventional Radiology 2010–11 (second time); Vice President of the Delhi State Chapter of Indian Radiological and Imaging Association (IRIA); Member Cardiovascular and Interventional Radiology Society of Europe (CIRSE); Life Member Indian College of Radiology and Imaging.

Dr Praveen Vashist: Awarded Commonwealth scholarship for the M.Sc Community Eye Health Course at London school of Hygiene and Tropical Medicine, London, UK. for the year 2010–2011; Member, Expert- Group on Trachoma by Blindness Control Division of the Ministry of Health and Family Welfare; Resource person for the State Programme Manager and District Programme Manager’s training under NPCB. Continued to be: Reviewer: Indian Journal of Ophthalmology; Indian Journal of Community Medicine; Member, Editorial Board of “NPCB India” Quarterly Newsletter of National Programme for Control of Blindness.

Dr Rohit Saxena: Elected Editor, Delhi Journal of Ophthalmology, July 2009–June 2011.

Dr Parijat Chandra: Reviewer for: Journal of Postgraduate Medicine; Indian Journal of Ophthalmology; Eye; Member, Editorial Board Delhi Journal of Ophthalmology; Certified for Fundus Photography and Fluorescein angiography by University of Wisconsin, USA; Certified for Fundus Photography and Fluorescein angiography by Duke University, USA.

VISITING SCIENTISTS

Team from Sight Savers International, United Kingdom, December 2010.

10.7 Jai Prakash Narain Apex Trauma Centre

Chief

M. C. Misra

Additional Professor, Orthopaedics and Faculty Incharge, Hospital Administration

Kamran Farooque

Associate Professors Emergency Medicine

Sanjeev Bhoi

Vinay Gulati (On leave w.e.f. 24 March 2011)

Shefali K. Sharma

Forensic Medicine

Sanjeev Lalwani

Adarsh Kumar

Anaesthesia

Babita Gupta

Chhavi Shawney

Laboratory Medicine

S. Arul Selvi

Purva Mathur

Neurosurgery

Deepak Agrawal

Deepak K Gupta

Sumit Sinha

Orthopaedics

Vijay Sharma

Buddhadev Chowdhry

Vivek Trikha

Radiodiagnosis

Shivanand G.

Atin Kumar

Surgery

Biplab Mishra

Sushma

Amit Gupta

Subodh Kumar

Maneesh Singhal

Assistant Professor

Neurosurgery

G. D. Satyarthee

Orthopaedics

John R Bera

EDUCATION

Short term training

6 students underwent training for 1 to 6 months

Elective training

26 students from Austria, Canada, China, Czech Republic, Germany Nepal, Singapore, UK and USA underwent training for 7 days to 3 months

Observership

2 students from Germany and Saudi Arabia

Short Term Trainees

56 students trained in Blood Bank, Dietetics, Emergency Medicine, Laboratory Medicine, Physiotherapy, Surgery and Trauma Centre for 2 weeks to 6 months

Academic activity of undergraduate and postgraduate students and paramedical staff is being conducted by faculty in JPNATC.

CONTINUING MEDICAL EDUCATION (CME)

Continuing Medical Education (CME)

Dr M.C. Misra

1. Course Director for

- I. Training courses in Operative Laparoscopy conducted at Minimally Invasive Surgery Training Centre, AIIMS, New Delhi on 14–18 February 2011, 21–25 February 2011, 17–21 January 2011, 3–7 January 2011, 6–10 December 2010, 15–19 November 2010, 18–22 October 2010, 13–17 September 2010, 19–23 July 2010, 10–14 May 2010, 26–30 April 2010.
 - II. Training course in Laparoscopic Colorectal Surgery at Minimally Invasive Surgery Training Centre, AIIMS, New Delhi on 7–9 February 2011, 16–18 August 2010,
 - III. Training course in Laparoscopic Suturing Skills at Minimally Invasive Surgery Training Centre, AIIMS, New Delhi on 1–2 February 2011, 31 January–2 February 2011, 6–8 September 2010, 3–5 May 2010.
 - IV. Training course in Laparoscopic Hernia Surgery at Minimally Invasive Surgery Training Centre, AIIMS, New Delhi on 11–13 January 2011, 9–11 November 2010, 27–29 July 2010.
1. Course Director, Training Course, Basic and Advanced laparoscopy, 26–30 April 2010, 10–14 May 2010, 5–9 July 2010, 19–23 July 2010, 13–17 September 2010, 18–22 October 2010, 25–29 October 2010, 22–26 November 2010, 6–10 December 2010, 13–17 December 2010, 3–7 January 2011, 17–21 January 2011, 14–18 February 2011, 21–25 February 2011, 21–25 March 2011, AIIMS, New Delhi including 5 courses for doctors sponsored by the UP government.
 2. Course Director, 39th Training Course, in Laparoscopic Suturing and Knotting 3–5 May 2010, AIIMS, New Delhi.
 3. Course Director, 42nd Training Course, Advanced laparoscopy and Suturing and 8th Laparoscopic Course on hernia Repair for Indian Group of Surgeons, 13–15 July 2010, 27–29 July 2010, 10–12 August 2010, 30 November–2 December 2010, 11–13 January 2011, AIIMS and EISE, New Delhi.
 4. Course Director, 46th Training Course, in Advanced laparoscopy and Suturing, Laparoscopic colorectal surgery 16–18 August 2010 at AIIMS, New Delhi.
 5. Course Director, Training Course, Advanced laparoscopic Suturing, Minimally Invasive Training Centre, Department of Surgical Disciplines, AIIMS, 31 January–2 February 2011, AIIMS, New Delhi.
 6. Course Director, Training Course, Advanced laparoscopic Colo-rectal Course, Minimally Invasive Training Centre, Department of Surgical Disciplines, AIIMS, 7–9 February 2011, AIIMS, New Delhi.
 7. Course Director, India Chair, ATLS – India Program Promulgation, ATLS and ATCN Provider Course, 1–3 February 2011, 24–26 February 2011, 24–26 March 2011, 22–24 April 2010, 28–30 October 2010, 22–24 November 2010, at JPN Apex Trauma Centre, All India Institute of Medical Sciences in Collaboration with American College of Surgeons. (4 Course for the doctors and Nurses sponsored by the UP Government).
 8. Course Director, India Chair, ATLS – India Programme Promulgation, ATLS Instructor Course, 4–5 June 2010, 11–12 October 2010, 17–18 December 2010, JPN Apex Trauma Centre, All India Institute of Medical Sciences in Collaboration with American College of Surgeons.
 9. Course Director, India Chair, ATLS – India Programme Promulgation, ATLS Provider Course, 6–8 January 2011, 19–21 February 2011, 15–17 March 2011, 29–31 December 2010, 17–19 June 2010, 22–24 July 2010, 26–28 August 2010, 9–11 December 2010, 18–20 November 2010, at JPN Apex Trauma Centre, All India Institute of Medical Sciences in Collaboration with American College of Surgeons.

10. Organizing Chairman, National Conference on Medical Response to Mass Casualty Management 2010 (MRMCM 2010), DRDO Bhawan, New Delhi, 6–7 May 2010. Organized by JPN Apex Trauma Centre, AIIMS and National Disaster Management Authority (NDMA).

Dr Babita Gupta

1. Course Director, FCCS Course on management of critically ill patients, Trauma 2010 conference, New Delhi, November 2010.

Dr Chavvi Sawhney

1. Course Director, ABCDE workshop Trauma 2010, 26–28 November 2010.

Dr Sanjeev Bhoi

1. AIIMS Basic Emergency Care Course 2010-2011: This is being conducted in collaboration with National Rural Health Mission and State governments. Were held at Imphal, Guwahati, Chandigarh and Lakshadweep. Further details: www.aiimsbecc.com
2. AIIMS Ultrasound Trauma life support Course 2010-2011: This course has been started by Department of Emergency Medicine at the Trauma Centre for emergency physicians and critical care physicians. Details at www.aiimsultrasound.com. Healthcare providers trained 213.
3. National Emergency and trauma care initiative 2010-11.

Dr Vinay Gulati

1. Conducted Workshop on 'Basic Emergency Care' in Manipur in association with the State Health Society, NRHM, Manipur, September 2010.
2. Conducted 'Ultrasound Trauma Life Support Course' at TRAUMA 2010, Level 1 academic forum for the advancement of trauma care and research in India, October 2010, AIIMS, New Delhi and at ASICON, Annual Conference of Association of Surgeons of India, December 2010, AIIMS, New Delhi.

Dr Sanjeev Lalwani

1. Faculty – Coordinator – 3rd AIIMS Cadaver Knee Arthroplasty Course, 26–27 March 2011 in collaboration with Department of Orthopedics.
2. Faculty Coordinator – AIIMS Operative workshop on Spinal Surgery and AO Spine Advances Cadaver Workshop, 12–14 November 2010 in collaboration with Department of Neurosurgery.
3. Faculty Coordinator Cadaveric Course on Hip and Knee Arthroplasty, 16–17 July 2010, in collaboration with Department of Orthopedics.
4. Faculty Coordinator – AIIMS Cadaver Knee Arthroscopy Workshop, 12 September 2010 in collaboration with Department of Orthopedics.

Dr Deepak Aggarwal

1. Course Director for AIIMS BECC course and held 5 courses in various parts of India during 2010–2011 in partnership with NHRM (National Rural Health Mission).
2. Co-organizing Secretary for MRMCM–2010 conference held in DRDO Bhawan, 6–7 May 2010.
3. Course director for 'Nursing workshop' conducted as a part of 'Trauma 2010' at JPN Apex Trauma Centre, AIIMS, New Delhi, India 26 November 2010.
4. Course director for 'Research methodology workshop' conducted as a part of 'Trauma 2010' at JPN Apex Trauma Centre, AIIMS, New Delhi, India 26 November 2010.

5. Convener of Nursing Conference in 'Trauma 2010' International Congress and Second Annual Conference of ISTAC, JPN Apex Trauma Centre, AIIMS, New Delhi 27–28 November 2010.
6. Organizing Secretary of National Consultative Workshop on Cost-effective Information Technology in Healthcare, AIIMS, New Delhi, 5 March 2011.

Dr Deepak Gupta

1. Editor, Souvenir of Trauma 2010, 26–28 November 2010.
2. Executive Member, Organizing Committees, Trauma2010.

Dr Sumit Sinha

1. Organizing Secretary, AIIMS operative and AO Spine advances cadaver workshop on spinal surgery, AIIMS, New Delhi, 12–14 November 2010.
2. Course Director, Cadaveric Hands on training on brachial plexus surgery; conducted as a part of 'Trauma 2010', AIIMS, New Delhi, 26 November 2010.

Dr Kamran Farrooque

1. Co-Organizing Secretary, Trauma 2010, 26–27 November 2010.
2. Organizing Secretary, "AIIMS Cadaveric Knee Arthroscopy Course" 12 September, AIIMS, New Delhi.
3. Course Director, "Basic Pelvis and Spine Trauma Management Workshop", "Trauma 2010" conference.

Dr Vijay Sharma

1. Philos workshop DOACON 2010
2. Cadaveric Knee Arthroscopy Course 2010

Dr Shivanand and Dr Atin Kumar

1. AIIMS–MAMC–PGI imaging course series: 2010 (CME) on Paediatric Imaging, AIIMS, New Delhi, 15–16 November 2010.
2. Course Director, Trauma Radiology Workshop, Trauma 2010, 26–28 November 2010.
3. Executive Member, Organizing Committee, Trauma 2010, 26–28 November 2010.

Dr Amit Gupta

1. Workshop Director, Workshop on Hospital Preparedness in Mass Casualty in Trauma 2010, International Conference, CME-cum-Live Workshop and Inaugural Conference of the Indian Society Trauma and Acute Care (ISTAC), 26–28th November 2010.
2. Joint Secretary, Fifth AIIMS Surgical week and Endosurg 2011, International CME-cum-Live Workshop. AIIMS and Indian Hernia Society. March 2011.

Dr Biplab Mishra

1. Joint organizing secretary, Trauma 2010, International Conference, CME-cum-Live Workshop and 3rd Annual Conference of the Indian Society Trauma and Acute Care (ISTAC), 26–28 November 2010.

Dr Maneesh Singhal

1. Course Director, 1st Basic Plastic and Reconstructive Surgery Course (BPRS), JPNA Trauma Centre, AIIMS, 31 July–1 August 2010.
2. Course Director, Maxillofacial Workshop at Trauma 2010, International Conference, CME--cum-Live Workshop and 3rd Annual Conference of the Indian Society Trauma and Acute Care (ISTAC), 26–28 November 2010.

3. Joint-Secretary, Fifth AIIMS Surgical week and Endosurg 2011, International CME-cum-Live Workshop. 11–13 March 2011.

Dr Subodh Kumar

1. Organising Secretary, Fifth AIIMS Surgical week and Endosurg 2011, International CME-cum-Live Workshop. 11–13 March 2011.
2. Member executive committee, Trauma 2010, International conference, CME-cum-Live Workshop and 3rd Annual conference of the Indian Society Trauma and Acute Care (ISTAC), 26–28 November 2010.
3. Course Coordinator, ABCDE Workshop, Trauma 2010, International conference, CME-cum-Live Workshop and 3rd Annual Conference of the Indian Society Trauma and Acute Care (ISTAC), 26–28 November 2010.

Dr Sushma Sagar

1. Course co-ordinator, 1st Basic Plastic and Reconstructive Surgery Course (BPRS), JPNA Trauma Centre, AIIMS, 31 July–1 August 2010.
2. Course Director for Maxillofacial Workshop at Trauma 2010, International Conference, CME cum Live Workshop and 3 Annual Conference of the Indian Society Trauma and Acute Care (ISTAC), 26–28 November 2010.
3. Joint-Secretary, Fifth AIIMS Surgical week and Endosurg 2011, International CME cum Live Workshop. 11–13 March 2011.

Lectures delivered in CME/ National and International conferences: 200

RESEARCH

Funded projects

Ongoing

1. Association of cytokines – IL 6, IL 10, IL 18 and TNF α in acute coronary syndrome. (ICMR). A Collaborative research with dept of CTVS, AIIMS. Dr S Arulselvi
2. Cleft Lip and Palate anomaly in India: Clinical profile, Risk factors and current status of treatment – Hospital based surveys”. Indian Council of Medical Research Task Force Project. Dr Sushma Sagar, Dr M. Singhal
3. Cost Effectiveness Analysis and Comparison of Single Stage vs Two Stage management of Patients with concomitant Gall Stone Disease and Common Bile duct Stones. A Randomized Controlled Trial. Dr M.C. Misra
4. DBT funded project under the Rapid Young Investigator scheme 2011. Role of human umbilical cord blood stem cells and neural stem cells in neuronal regeneration and functional restoration: A comparative study in male adult rats with acute spinal cord injuries. Dr Sumit Sinha
5. Development and Implementation of an Automated Electronic Surveillance System for Hospital Acquired Infections at a Tertiary Care Hospital (ICMR; Rs 15,26,906). Dr Purva Mathur
6. Efficacy of a short course of prophylactic antibiotic treatment for prevention of post operative infections in open reduction and internal fixation of closed fractures. (ICMR, 2008–2011; Rs 7,92,111). Dr Purva Mathur
7. Evaluation of Coagulation status among North Indian Blood Donors using thromboelastography and conventional methods (Institute). Dr S Arulselvi
8. Evaluation of serum procalcitonin levels for diagnosis of sepsis in trauma patients admitted to intensive care units. (Institute Research Grant, 2009–2011; Rs 2 lakhs). Dr Purva Mathur
9. Immunological changes in patients of Shock due to Trauma. Sponsored By Indian Council of Medical Research, New Delhi, India.

10. Molecular and epidemiological study of *Streptococcus pyogenes* in India (ICMR, 2008– 2012: Rs 17,06,949).
Dr Purva Mathur
11. Prospective Randomized Control Trial of Early Versus Late Tracheostomy in Critically Ill Trauma Patients, Funded by All India Institute of Medical Sciences, New Delhi.
12. Prospective versus intravenous two drug analgesia in thoracic trauma”, randomized comparison of efficacy and safety of thoracic epidural analgesia with bupivacaine and opioid in two different concentrations (AIIMS funded Project). Dr Babita Gupta
13. Study of novel chemokine RANTES (Regulated upon Activation, Normal T cell Expressed, and Secreted) levels in plasma, cerebrospinal fluid and contused brain tissues as a marker of immune activation in Traumatic Brain Injury (TBI) patients (ICMR). Dr S Arulselvi
14. Study on the use of Tranexamic acid in patients undergoing surgery: safety and effectiveness, funded by all India institute of medical sciences, New Delhi.

Completed

1. Evaluation of monitor 100 in measurement of erythrocyte sedimentation rate” (Institute project. One year study).
Dr S Arulselvi
2. Coagulation profile in Isolated Head injury patients.(ICMR funded project). Dr S Arulselvi

Departmental projects

Ongoing

1. A comparative study for determination of postmortem interval by analysis of CSF and Vitreous Humour in South Delhi region.
2. A prospective controlled double blind study on analgesic efficacy of intra articular bupivacaine and morphine; A comparison of three different doses of morphine in arthroscopic knee surgeries.
3. A prospective controlled double blind study on efficacy of tranexamic acid versus aprotinin to reduce blood loss in traumatic spine surgeries.
4. A prospective study on radiological evaluation in patients with vascular malformations in patients with vascular malformations of the extremities.
5. A Randomized Controlled Trial of Early versus Late Tracheostomy in Critically ill Trauma Patients in Department of Surgery, Jai Prakash Narayan Apex Trauma Centre, AIIMS.
6. A study of the causes and pathologic features of traumatic deaths in Department of Surgery, Jai Prakash Narayan Apex Trauma Centre, AIIMS.
7. Applicability of transfusion scores in determining transfusion requirement of trauma patients.
8. Auditing platelet usage among head injury patients in a tertiary trauma care centre and study on incidence and clinical factors influencing platelet refractoriness
9. Chronic groin pain and quality of life after laparoscopic inguinal hernia repair using heavy weight vs. light weight meshes.
10. Chronic groin pain, testicular function and quality of life after laparoscopic and open inguinal hernia repair.
11. Clinical utility of breast ultrasound as an adjunct to mammography in diagnostic breast imaging.
12. Comparison of chronic groin pain and quality of life after laparoscopic inguinal hernia repair – TEP vs. TAPP
13. Comparison of long term outcome and quality of life after laparoscopic incisional and ventral hernia repair with suture or tracker mesh fixation.

14. Comparison of various imaging modalities in the diagnosis and staging of the periampullary tumors and study of various perioperative factors in predicting the outcome of the patients with periampullary tumors.
15. Efficacy of short course of prophylactic antibiotics for prevention of postoperative infections in open reduction and internal fixation of closed fractures.
16. Epidemiological study in the pathway of Maxillofacial Fractures seen at a tertiary care hospital of North India.
17. Evaluation of role of urinary myoglobin detection in the clinical diagnosis of trauma patients.
18. Evaluation of serum procalcitonin level for diagnosing sepsis in trauma patients admitted to ICU.
19. Evaluation of vitreous humour as a biomatrix for the quantification of drugs and chemicals in postmortem forensic investigation.
20. Functional outcome in patients with intra articular fractures of calcaneus undergoing treatment with open reduction & internal fixation vs. minimal invasive techniques – A randomized controlled study (Ongoing).
21. Intra-arterial chemotherapy (neoadjuvant) in patients with advanced laryngeal and hypo-pharyngeal cancer.
22. Laparoscopic suturing skills acquisition – a comparison between trained and novice surgeons.
23. Major Trauma Outcome Study in a level – I Trauma Centre.
24. MDCT evaluation of solid retroperitoneal organ injuries in blunt abdominal trauma with limited MRI correlation.
25. MR evaluation of vertebral lesions.
26. Percutaneous radiofrequency ablation of painful benign bone tumors and metastasis.
27. Prospective randomized controlled blinded study to evaluate the effect of short term focused training program in laparoscopy on operative room performance of surgery resident.
28. Prospective, randomized comparison of efficacy and safety of thoracic epidural analgesia with bupivacaine and opioid in two different concentrations versus intravenous two drug analgesia in thoracic trauma.
29. Qualitative and quantitative extraction of DNA from decomposed tissues.
30. Retrospective and prospective analysis of magnitude, severity and outcome of chest trauma in a level 1 trauma centre.
31. Retrospective and prospective evaluation of magnitude, severity and outcome of traumatic hepatobiliary and pancreatic injury in a level 1 trauma centre.
32. Role of CECT and splenic artery embolization in management of blunt splenic injury.
33. Role of CT perfusion in mild head injury.
34. Safety and efficacy of Tranexemic Acid in patients undergoing surgery post trauma.
35. Study of medico-legal factors affecting tissue and eye donation.
36. The feasibility of management of occult pneumothoraces without intercostal drainage tube.
37. To evaluate the endovenous laser ablation in the treatment of varicose veins.
38. To study Epidemiology and Trauma scoring in patients presenting in a level 1 trauma centre.
39. To study the role of virtopsy (Postmortem CT scan) in predicting the cause of death in trauma patients by comparing the findings of postmortem CT scan and conventional autopsy in Department of Surgery, Jai Prakash Narayan Apex Trauma Centre, AIIMS

Completed

1. Admission levels of Amylase and Lipase in the predicting the development of multi organ failure in trauma patients.

2. Clinical course and outcome in acutely injured patients with thrombocytopenia.
3. Comparative evaluation of image guided and palpation guided core biopsy of palpable breast masses.
4. Comparison of two different laboratory methods used to measure electrolytes’.
5. Cysts, tumours and tumour like lesions of the jaw: evaluation by panoramic radiographs and multi-detector computed tomography with limited MRI correlation.
6. Determinants of mortality in trauma patients following Massive blood transfusion.
7. Evaluation of amylase and lipase estimation in Blunt Trauma Abdomen patients’.
8. Evaluation of C Reactive protein (CRP), Erythrocyte Sedimentation rate (ESR) and Immature Granulocyte Fraction (IGF) as a prognostic marker in severely traumatized patients.
9. Fresh frozen plasma – audit of its use and correlation to mortality in trauma patients.
10. Histopathological and morphometric evaluation of surgically excised specimen of aortic aneurysm.
11. Hypofibrinogenemia in isolated traumatic brain injury in Indian patients.
12. Influence of Transfusion in the mortality of Trauma patients.
13. Magnetic resonance evaluation of chronic internal derangements of knee.
14. Maximum surgical Blood Ordering schedule (MSBOS) for Surgery and Neurosurgery Trauma patients.
15. MDCT and MRI evaluation of renal masses.
16. MDCT evaluation of splenic injuries with endovascular management.
17. Radiofrequency ablation of varicose veins.
18. Retrospective analysis of post trauma renal failure.
19. The Leucocyte Count, Immature Granulocyte Count and Immediate Outcome in Head Injury Patients’.

Collaborative projects

Completed

1. A comparative evaluation of changes in ultrasonographic dimensions of masseter muscle with EMG activity prior and subsequent to twin block therapy (with Dental Department).
2. Abdominal fat estimation in patients of obstructive sleep apnoea (with Medicine).
3. Arthroscopic and MR evaluation of elbow in patients with rheumatoid arthritis (with Orthopedics).
4. Comparison of various imaging modalities in the diagnosis and staging of periampullary tumors and to study the role of various perioperative factors in predicting the outcome of patients with periampullary tumors (with Surgery).
5. Estimation of standard liver volume in the Indian population (with Gastrointestinal Surgery).
6. MRI in avascular necrosis of hip and impact on patient management (with Orthopedics).
7. Pattern of peripheral arterial diseases in tertiary care surgical practice (Indian scenario) (with Surgery).
8. Role of intraoperative ultrasound in GI malignancies: comparison with conventional imaging techniques (with Gastrointestinal Surgery).
9. To study the clinical and neurodevelopmental profile in children with tuberous sclerosis (with Paediatrics).
10. To study the efficacy and safety of glossopharyngeal nerve block in the management of glossopharyngeal neuralgia (with Anesthesiology).

11. Ultrasound doppler evaluation of EHPVO patients follow up (with Gastrointestinal Surgery).
12. USG evaluation of intimal-medial thickness of carotid artery in patients with SLE (with Medicine).

Ongoing

1. A prospective randomized controlled trial comparing laparoscopic and endoscopic drainage of pseudocyst of pancreas (Surgery).
2. A randomized controlled study of comparison of single stage vs two stage treatment for patients with gall stones and common bile duct stones. (with Gastroenterology and Community Medicine).
3. A randomized controlled trial of early versus late tracheostomy in critically ill trauma patients (with Anaesthesiology).
4. A study of the causes and pathologic features of traumatic deaths in Department of Surgery, Jai Prakash Narayan Apex Trauma Centre, AIIMS.
5. Assessment of response of hepatocellular carcinoma to transarterial chemoembolisation by using magnetic resonance imaging. (Gastroenterology).
6. Chronic groin pain and quality of life after laparoscopic inguinal hernia repair using heavy weight vs light weight meshes (with Psychiatry).
7. Clinico-pathological study of antral mucosal changes in patients with ethmoidal polypi (Otorhinolaryngology).
8. Comparative study of foot pressure force analysis in patients with plantar fasciitis treated with diclofenac alone and diclofenac with ultrasonic therapy (Physical Medicine and Rehabilitation).
9. Comparison of chronic groin pain and quality of life after laparoscopic inguinal hernia repair – TEP vs TAPP (with Psychiatry).
10. Comparison of chronic groin pain, testicular functions and quality of life after open and laparoscopic inguinal hernia repair – a prospective randomized control trial (with Anaesthesia, Radiology, Reproductive Biology and Psychiatry).
11. Comparison of long term outcome and quality of life after laparoscopic incisional and ventral hernia repair with suture or tacker mesh fixation (with Psychiatry).
12. Comparison of single stage versus two stage treatment of patients with common bile duct stones and gall stones – a randomized controlled study (Surgery).
13. Comparison of various imaging modalities in the diagnosis and staging of the periampullary tumors and study of various perioperative factors in predicting the outcome of the patients with periampullary tumors (with Gastroenterology and Radiology).
14. Effect of continuous positive airway pressure on cardiovascular biomarkers in patients with obstructive sleep apnoea (Medicine).
15. Effect of N-Acetylcysteine on Oxidative stress, endothelial dysfunction & carotid intimal media thickness in chronic peritoneal dialysis patients – An open labeled randomized trial (Nephrology).
16. Evaluation of injury pattern and results of medical and surgical treatment in cases with traumatic and iatrogenic facial nerve injury (Otorhinolaryngology).
17. Evaluation of testicular blood flow and volume in patients undergoing laparoscopic inguinal hernia repair (Surgery).
18. Liver stiffness estimation by transient elastography in cirrhosis and non-cirrhotic portal hypertension (Gastroenterology).
19. Major Trauma Outcome Study in a level – I Trauma Centre (with Orthopedics, Neurosurgery and Forensic Medicine).

20. MDCT evaluation of spinal trauma: preoperative and postoperative evaluation (Orthopedics).
21. Minimally invasive necrosectomy in pancreatitis (GI surgery).
22. MRI based protocol for the management of infected pancreatic necrosis (Gastroenterology).
23. Multidetector CT scan evaluation of retroperitoneal solid organ injury with limited MRI correlation (with Radiodiagnosis).
24. Optic nerve sheath diameter measurement for raised ICP in severe head injury patients (Neurosurgery).
25. Plain radiograph and MR imaging of patients with tennis elbow (Orthopedics).
26. Prospective, randomized comparison of efficacy and safety of thoracic epidural analgesia with bupivacaine and opioid in two different concentrations versus intravenous two drug analgesia in thoracic trauma (with Anaesthesiology).
27. Randomized Control Trial of N-Acetylcysteine in Prevention of Renal Failure in Hepatocellular Carcinoma patients undergoing Transarterial Chemotherapy and Transarterial Chemoembolisation. (Gastroenterology).
28. Randomized control trial of oral chemotherapy versus supportive therapy in the treatment of Unresectable Hepatocellular carcinoma. (Gastroenterology).
29. Randomized control trial of Transarterial chemoembolisation (TACE) versus TACE plus oral chemotherapy in the treatment of Unresectable Hepatocellular carcinoma. (Gastroenterology).
30. Randomized control trial of Transarterial chemotherapy (TAC) versus Oral chemotherapy in the treatment of Unresectable Hepatocellular carcinoma. (Gastroenterology).
31. Randomized controlled trial comparing laparoscopic and endoscopic drainage of pseudocyst of pancreas (with Gastroenterology and Radiology).
32. Randomized controlled trial of Radiofrequency ablation versus Percutaneous acetic therapy for the treatment of small hepatocellular carcinoma (Gastroenterology).
33. Retrospective and prospective evaluation of magnitude, severity and outcome of traumatic hepatobiliary and pancreatic injuries in a level 1 trauma centre. (Surgery).
34. Retrospective and prospective study of magnitude, severity, and outcome of chest trauma in a level I trauma centre. (with Anaesthesiology, Emergency Medicine, Radiology and Forensic Medicine).
35. Retrospective and prospective study of magnitude, severity, and outcome of traumatic hepatobiliary and pancreatic injury in a level I trauma centre (with Gastroenterology and Radiology).
36. Role of computed tomography and splenic artery embolisation in blunt splenic trauma (with Radiodiagnosis).
37. Role of contrast enhanced ultrasound in the diagnosis and for assessment of the therapeutic response in patients of hepatocellular carcinoma (Gastroenterology).
38. Safety and efficacy of autologous stem cells in prevention of amputation in patients with chronic critical limb ischemia (Surgery).
39. Safety and efficacy of Transxemic acid in patients undergoing surgery post trauma (with Anaesthesiology).
40. Study of non-alcoholic fatty liver disease in CAD in asian Indians (Medicine).
41. To study of the feasibility of management of occult pneumothoraces without intercostal drainage tube in Department of Surgery, Jai Prakash Narayan Apex Trauma Centre, AIIMS
42. To study the effect of cricoids split with or without rib grafting in cases of subglottic stenosis for laryngotracheal stenosis (with Otorhinolaryngology).

43. To study the role of virtopsy (Postmortem CT scan) in predicting the cause of death in trauma patients by comparing the findings of postmortem CT scan and conventional autopsy in Department of Surgery, Jai Prakash Narayan Apex Trauma Centre, AIIMS.
44. Ultrasound evaluation cervical lymph nodes in patients with carcinoma of esophagus (GI surgery).

PUBLICATIONS

Journals : 104

Chapters in books : 9

PATIENT CARE

Anaesthesia

Total number of surgeries under anaesthesia	3902
Surgery	1449
Neurosurgery	1053
Orthopaedics	1400
Anaesthesia for radiological procedures	81
Total number of patients treated in ICU	465

Forensic Medicine

Casualty Services: round the clock coverage to the casualty in medico-legal cases in injury, sexual offences, poisoning and other complicated medico-legal cases.

Medico-legal Postmortem performed : 1138

Doctors of the department attended court and also attended court in CBI cases as an expert witness.

The department examined 50 cases of age estimation, medical examination, marriage disputes, potency, DNA fingerprinting etc referred by honourable courts, CBI and other investigating agencies.

Laboratory Medicine

1. Hematology:

A. Hemogram

Hemoglobin	33865	TLC	33865	Differential count	33865
HCT	33865	RBC	33865	MCH	33865
MCHC	33865	MCV	33865	RDW	33865
Platelet count	33865	Retic count	17403	ESR	4294
RBC morphology	1658	Blood parasite	4041		
Total	3,55,403				

B. Coagulation

PT	18116	APTT	18116	TT	2062
Fibrinogen	2062	D-dimer	2062		

C. Thromboelastography (TEG)

Total	290		42,708
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D. Clinical pathology

Urine routine/microscopy	2144	Urine myoglobin	430	CSF microscopy	1916
Total	4490				
Total tests conducted in hematology section			4, 02,601		

E. Biochemistry

Sugar	8103	Urea	28,768	Creatinine	28,768
Calcium	10,663	Phosphorous	9,447	Uric acid	9,067
Sodium	28,749	Potassium	28,749	TBIL	14,041
DBIL	14,041	Total protein	10,844	Albumin	11,160
SGOT	11,203	SGPT	11,203	ALP	11,236
Cholesterol	3,708	Amylase	3,945	HDLD	1,579
LDLD	1,579	TG	1,579	VLDL	1,579
CK	400	CRP	350	Mg	1,683
Lipase	280	CK-MB	68	CSF sugar	987
CSF protein	1,737	Peritoneal fluid sugar	50	Peritoneal fluid protein	50
Urine sugar	150	Urine protein	150	Drain fluid amylase	50
HbA1c	25	ABG	6,745		
Total tests conducted in biochemistry section			2, 62,800		

F. Microbiology

Culture	15412	Bacterial identification	3870	Antibodies sensitivity	3870
HIV serology	313	Hepatitis B serology	324	Hepatitis C serology	209
Hospital infection surveillance culture			2940		
Total tests conducted in microbiology section			26,938		

G. Histopathology

Hematoxylin and eosin	1103	Acid fast bacilli staining	63	PAP staining	4
Periodic acid Schiff staining	25	Luxols blue	3	Toluidine blue staining	2
Silver Methenamine staining	15	Specimen processed	539	No. of blocks	874
Total number of slides			1215		
Total tests conducted in Histopathology			3843		
Total number of tests done in department 6, 96,182					

Radiodiagnosis

S.No.	Investigation	Number
1.	Plain X ray (including emergency)	48987
2.	Portable X ray	15537
3.	CT	18916
4.	Ultrasound including Doppler and guided interventions	7282
5.	Digital Subtraction Angiography including interventional procedures	77
6.	MRI	1175
	TOTAL	91974

Surgery

• Total patients attended in emergency (5–6 patients /hour)	47,767
• Total surgical patients attended in emergency	35420
• Total surgical cases admitted (>24 hours)	1768
• Operative procedures done under anesthesia	1531
• Mortality rate	151/1768 (8.54%)
• Follow up OPD attendance	5949

Community services

Dr Deepak Gupta

Venue medical commander of Thyagraj sports complex and looked after all national/ international athletes health (Commonwealth games 2010, New Delhi, India)

Medical record section

Faculty in-charge: Dr Adarsh Kumar

Besides regular staff, few DEO and Sulabh workers (outsourcing basis) are also helping in day-to-day management of various functions of medical records section. With a view to streamline the functioning of various activities in existing manpower; the areas which were subdivided last year to Medical Records Division, Central Registration Counter & Follow-up OPD are functioning efficiently. The complete statistical data for the period is as under.

Statistics at a Glance

I. Total bed strength	186		
Ward beds	120	ICU beds 2nd floor	16
Triage	30	ICU beds 3rd floor	20
II. Total casualty attendance	47828	Average per day	131 patients
Males	36784	Females	11044
Total admissions	4930	Average per day	14 patients
Average length of stay (ALS)	10.2	(per patient per days)	
Total follow-up OPD cases	26910		
New	11055	Old (Re-visit)	15855
III. Specialty- wise break-up of admissions			
Orthopaedics	1309	Surgery	1630
Neurosurgery	1970	Emergency medicine	21
IV. Total number of operations performed	4541		
Major	3887	Minor	654
Specialty- wise break-up of operations performed			
Orthopaedics	1598	Surgery	1743
Neurosurgery	1200		
V. Total deaths	1180		
Deaths under 48 hours	704	Deaths over 48 hours	476
Gross death rate	25.6%	Net death rate	12.2%
Bed occupancy rate	69%	Average length of stay 10.2 days	
Bed turnover rate	24.7	patient per bed per month	

Central Registration and Emergency Reception

By virtue of its location, the CRC initiated and undertook the function of emergency reception of JPNATC. Approximately 400-500 enquiries are attended daily at first hand and about 90% of these are sorted out at this level. It is providing information regarding patient care; follow up, organizational structure, hospital administration and related services to Patients, Relatives/Attendants, Police, Media and General Public. The result of successful disposal of most of the enquiries at this level is that other sections are spared of facing these enquiries directly thus saving their precious manpower, man-hour and disruption of work thereby smooth lining whole function. Satisfaction of majority of visitors query at the entrance itself reduces the rush and crowd inside Trauma centre thus helping in better management of all existing facilities.

In addition to various innovations by introducing various kinds of improved forms and Performas; this particular year renovation of CRC was done as Multifunctional emergency Reception with four separate dedicated counters for (a) Round the clock casualty registration (b) Round the clock wards/ICU admission (c) Certification of Medical/Fitness Reimbursement counter and (d) Inquest Papers clearance counter.

Refurnishing of Emergency Reception was done during Commonwealth Games 2010 for better ambience as well as international standard presentable look.

Installation of computerized access control system with restricted entry only for authorized personnel only thus better management of crowd and existing facilities.

Follow-up OPD Registration Counter

In addition to issuing computerized token numbers with large display screens which was introduced last year, this year Computerized OPD Cards with printed Bar Code for detection by bar code scanners (not pasted one) were effectively introduced; thus helping in much improved management of the patient queue at the counters.

Main Medical Records Division

In addition to above, Medical Record Section (MRS) of JPNATC is the FIRST Government Hospital who had started online registration of deaths at NDMC since year 2008 is running successfully and also coordinating the amendments pertaining to deceased after due legal procedure. MRS is regularly attending to summons from various Hon'ble Courts in Delhi as well as other neighbouring states. Total 730 such summons were attended to during this period. MRS is also handling various Insurance Policy matters of patients who attended JPNATC in both case whether alive or dead. Total 55 such cases were disposed off during this period. During the preceding year MRS has entertained police requests for issuing X-rays; and coordinating for collection of X-rays from Radio-diagnosis unit and handing over to police. Total 2003 such cases were disposed off during this period. The MRS is furthermore involved in issuing information (for assistance/ compensation etc.) to Delhi State/ Central Government pertaining to the patients/victims attended JPNATC during the year. The replies of questions raised under Right to Information Act 2005 by various applicants, were also provided by MRS in 37 cases. MRS has provided the basic framework as well as continuous inputs to computer facility; so as to computerize whole registration process in a phased manner. Steel Compactors which were installed for safe custody of medicolegal registers as well as complete treatment records of patients/ deceased at JPNATC have been put for effective use. The custody of all the handwritten MLC Registers (370) lying with Police Post JPNATC have been taken in a phased manner with proper details.

Mr Saurabh, MRT, was deputed for in-service Medical Records Officer Training at Safdarjung Hospital for one year through CBHI, Nirman Bhawan, w.e.f. 1 July 2009–30 June 2010. He has successfully completed the same by securing 1st division.

Blood bank

Dr S. Arulselvi

Faculty in-charge

Annual Audit, Blood Bank, JPNATC, AIIMS

Month	Donor screened	Donor Blood	Replacement donors			Voluntary Donors			Indoor voluntary donor	Outdoor camp voluntary donor
			Total	Male donor	Female donor	Total	Male donor	Female donor		
Apr 10	1006	782	780	771	9	2	1	1	2	nil
May 10	962	738	668	663	5	70	54	6	1	69
June 10	912	760	657	651	6	103	83	20	3	100
July 10	890	753	739	735	4	14	12	2	14	nil
Aug 10	1008	908	600	593	7	308	277	31	4	304
Sep 10	856	711	646	645	1	65	63	2	2	63
Oct 10	778	717	655	653	2	62	52	10	5	57
Nov 10	820	741	692	687	5	49	44	5	8	41
Dec 10	783	720	646	640	6	74	67	7	3	71
Jan 11	763	714	708	705	3	6	6	nil	6	nil
Feb 11	825	743	614	612	2	129	124	5	79	50
Mar 11	924	815	632	627	5	183	179	4	119	64
Total	10527	9102	8037	7982	55	1065	972	93	246	819

Number of voluntary blood donation camps 11

Component separation laboratory

Month	Pack RBC prepared	Fresh frozen plasma prepared	Platelets prepared	Cryoprecipitate prepared	Quality control of blood and components
Apr 10	782	741	521	50	1% of all units
May 10	738	673	579	55	1% of all units
June 10	760	683	613	Nil	1% of all units
July 10	753	623	623	Nil	1% of all units
Aug 10	908	750	696	31	1% of all units
Sep 10	712	670	646	30	1% of all units
Oct 10	717	678	661	32	1% of all units
Nov 10	741	678	669	34	1% of all units
Dec 10	720	655	654	68	1% of all units
Jan 11	714	707	683	20	1% of all units
Feb 11	743	701	685	30	1% of all units
Mar 11	815	753	735	32	1% of all units
Total	9103	8312	7765	382	

Infectious marker laboratory and donor counselling

Month	HIV test done	HIV reactive	HBsAg test done	HBsAg test reactive	HCVtest done	HCV reactive	VDRL test done	VDRL reactive	MP test done	MP reactive
April 10	964	3	969	13	964	1	819	Nil	793	nil
May 10	924	6	924	10	922	5	778	6	745	nil
June 10	927	5	927	6	925	5	749	7	749	nil
July 10	938	2	921	11	944	7	754	5	754	nil
Aug 10	916	3	937	13	920	6	728	5	728	nil
Sep 10	885	1	887	16	858	5	709	5	709	nil
Oct 10	885	3	895	19	887	8	729	4	729	nil
Nov 10	841	1	851	21	836	5	727	1	727	nil
Dec 10	816	2	824	12	817	6	708	3	708	nil
Jan 11	771	5	773	16	768	3	761	4	714	nil
Feb 11	758	nil	827	8	765	4	790	7	743	nil
Mar 11	849	4	854	16	856	4	921	2	815	nil
Total	10474	35	10589	161	10462	59	9173	49	8914	nil

Total number of donors called for counseling 274

Total donors reported and counseled 83

Total donors referred to VCTC 7

Grouping laboratory

Month	Donor grouping	Patient grouping	Total
April 10	782	708	1490
May 10	738	607	1345
June 10	760	654	1414
July 10	753	746	1499
Aug 10	908	727	1635
Sep 10	711	750	1461
Oct 10	717	790	1507
Nov 10	741	817	1558
Dec 10	720	654	1374
Jan 11	714	751	1465
Feb 11	743	689	1432
March 11	815	791	1606
Total	9102	8684	17786

Emergency issue counter: Samples received, cross-match done and blood/component issued

Month	Number of samples received	Number of cross- match done	Number of PRBC issued	FFP issued	PRC issued
Apr 10	708	1935	849	568	396
May 10	607	1708	710	418	367
Jun 10	654	1703	715	425	460
Jul 10	746	1891	753	454	428
Aug 10	727	1971	730	355	355
Sep 10	750	1765	730	559	497
Oct 10	790	2068	687	678	436
Nov 10	817	2003	730	678	484
Dec 10	654	2418	686	655	232
Jan 11	751	1931	763	633	583
Feb 11	689	1777	717	381	588
Mar 11	791	2059	768	601	654
Total	8684	23229	8838	6405	5480

Blood and components issued to other hospital blood banks**(Main AIIMS, CNC, GB Pant, LNH, ESI, Dr Hedgewar)**

Month	Blood	FFP	Platelet
April 10	65	11	94
May 10	93	120	171
June 10	29	197	124
July 10	75	135	145
Aug 10	133	197	298
Sep 10	7	80	86
Oct 10	19	73	217
Nov 10	20	NIL	94
Dec 10	98	42	346
Jan 11	66	210	197
Feb 11	31	20	266
March 11	63	155	313
Total	699	1240	2351

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Prof. M.C. Misra attended the 5th IRF Regional Conference 'Institutional Arrangement for Reduction of Road Fatalities', 25 November 2010, New Delhi; attended the Second Conference on "Disaster Preparedness", 16 September 2010, JIM, Noida; attended the conference on "Emergency Planning in Industries Including HWM and Transportation of Petroleum Products, Natural Gas by Pipelines and POL Tankers", 30–31 August 2010, New Delhi; Chief Guest, "International Symposium on Emergency Medicine 2010", 21–22 August 2010, Rabindranath Tagore International Institute of Medical Sciences, Kolkata; Recognition for Public Service by bringing up Apex Trauma Centre, AIIMS to Improve Trauma Care by Shri Chunni Lal Jindal Memorial Trust (Regd.) at a Public Function to Honour Recipients, Kamani Auditorium, New Delhi, 20 March 2011, Organized by Shri Chunni Lal Jindal Memorial Trust (Regd.); Participated as an expert in the following programmes on Doordarshan News, New Delhi; 11 July 2010 on Hernia, 4 April 2010 on Emergencies during live phone in programme 'Total Health', Charcha Mein on 2 June 2010 on Medical students and related healthcare delivery issues related to ongoing strike at Safdarjung Hospital, New Delhi, Interactive programme with school children on Deepawali – Safety Issues related to Firecrackers, Pollution, 28 October 2010, 17 October 2010 on Breast Cancer, Live Phone in programme 'Total Health', Evening Live Show on Emergency preparedness in view of forthcoming CWG 2010 20 September 2010, 11 July 2010 on Hernia during a Live Phone in programme "Total Health", 4 April 2010 on Emergencies during Live Phone in programme "Total Health", Charcha Mein, 16 March 2011 on "Health Care Reforms"; 13 March 2011 on Breast cancer during a live phone in programme "Total Health", Curtain Raiser of Breast Cancer Exhibition and Seminar for Evening Live Show, New Delhi, 10 March 2011, 14 December 2010 for discussion on Common Entrance Test (CET) for admission to MBBS and Postgraduate Courses in Medicine as ruled by Supreme Court of India, 8 January 2011 for a live discussion on Breast Cancer, 5 December 2010 for a discussion on Organ Donation during a Live Phone in programme "Total Health", on 31 October 2010 on Accident and Emergency Services during a Live Phone in programme "Total Health"; attended meeting on "Injury Surveillance and trauma Registry in India", 10–11 May 2010, New Delhi; attended Project Review Committee meeting for Trauma, 3 May 2010, ICMR, New Delhi; Visited the RC Cowley Shock Trauma Centre and University of Maryland, USA, 24 April 2010; Invited to participate in "Planning Meeting of Road Traffic Injury Prevention Project of India (GRIPP/RS10), 27–28 April 2010, Organized by WHO and MoHFW at New Delhi; Appointed Member, Project Review Committee for the Area of Trauma by Indian Council of Medical Research (ICMR). Meeting held on 3 May 2010; Technical Expert, Akashvani FM Gold Channel, New Delhi, on 18 January 2011 and 3 February 2011 for a Discussion on Accidents and Emergencies; Organizing Chairman, International Conference and Live Operative Workshop on Minimally Invasive Surgery "Fifth AIIMS Surgical Week, Endosurg 2011", 11–13 March 2011, AIIMS, New Delhi; Convener, Monthly Meeting of Delhi State Chapter, Association Surgeons of India, 19 February 2011, Department of Surgical Disciplines, AIIMS; Appointed by the Medical Council of India as a Member of the reconstituted Specialty Board in General Surgery for drafting/updating the curriculum for MS courses in the specialty of General Surgery; External Examiner, IMRCS Examination, Sir Ganga Ram Hospital, New Delhi, 6–10 September 2010; President, Society of Endoscopic and Laparoscopic Surgeons of India (SELSI) for the year 2011; Organizing Chairman, First Basic Plastic & Reconstructive Surgery (BPRS) Course on 31 July and 1 August 2010 at JPN Apex Trauma Centre, All India Institute of Medical Sciences, New Delhi; Organizing Chairman, *Third International Conference and CME-cum-live Workshops, Organized by Indian Society of Trauma and Acute Care (ISTAC®)* from 26–28 November 2010. *The theme of conference was "Current Trends in Trauma Management"; Organizing Chairman, First Fundamentals Critical Care Support (FCCS) Course, 25–26 November 2010, J P N Apex Trauma Centre in Collaboration with Indian Society of Critical Care Medicine (ISCCM);* Member, Cell For Medical Ethics and Health Policy Research by the Medical Council of India; Member, National Advisory Committee, 6th World Organ Donation Day and Organ Donation Congress, 12–13 November 2010, Organized by DGHS, Ministry of Health, Government of India; Member, Board of Studies, Trauma Centre, SGPGIMS, Lucknow to participate at its Meeting on 12 July 2010, held at SGPGIMS, Lucknow; Chairman, Technical Expert Committee, Drug Controller General of India, 8 July 2010; Visiting Professor at the Division of Acute Care Surgery, University of Michigan, Ann Arbor, USA, 18–21 May 2010; Invited by Parliament TV for a one-to-one discussion with Ramesh Bhatt for Amnae Samne, 5 May 2010; Technical Expert and Resource Person, Indo-US Workshop – 'Developing a Road Map for

Injury Prevention and Control in India', organized jointly by Ministry of Health and Family Welfare, Government of India and Centre for Disease Control, Atlanta, USA, 14–15 February 2011, New Delhi; Part of the Round Table Conference on "Millennium Development Goals: Indian perspective of 'a decade of action for road safety', 2 February 2011 during TrafficInfra Tech Show–2011, 2–4 February 2011, New Delhi; Participated in the evening live show, Rarest of the Rare Surgery, 28 April 2010, New Delhi; Participated in Fourth Annual 2010 Indian MedTech Summit, Organized by Stanford–India Biodesign, 10–11 December 2010, New Delhi; Technical Expert at Lok Sabha TV, New Delhi, 4 December 2010, Bariatric Surgery in Morbid Obesity during a Live Phone in program Healthy India; Joint Group meeting of the Indo ICMR–Australian team (George Institute, Sydney) to discuss concept proposals on Injury Surveillance and Preventive Strategies, 25 November Conference Hall, ICMR, New Delhi; Technical Expert, Lok Sabha TV studios, New Delhi, 3 November 2010 on Head Injuries and Medicolegal Issues, 23 October 2010.

Dr Babita Gupta won the first prize for the paper Acute Kidney Injury in Trauma ICU: Our experience in level one ICU – Presented in Trauma 2010 held in New Delhi; Treasurer-Trauma 2010, 26–28 November 2010.

Dr Chavvi Sawhney was Executive Member, Trauma 2010, 26–28 November 2010.

Dr Sanjeev Bhoi wrote National curriculum for disaster medicine for undergraduate and postgraduate students; ATLS Instructor; Community Emergency care: Bystander Care program for Delhi Police every Saturdays; Trained doctors, nurses, and paramedics of Sikkim and made protocols for level III trauma centres of Sikkim; Established regional training centre for emergency and trauma care at Assam Medical College, Dibrugarh; Guest faculty: Patterns of Blast injury, CDC Round table on Blast injury, BJ Medical Medical College, Pune; CME-cum-workshop on emergency medicine, Assam Medical College, Dibrugarh, India

Dr Vinay Gulati was awarded the ICMR International Fellowship for Young Biomedical Scientists 2010–2011 to pursue advanced training in Critical Care at the University of Minnesota, USA for a period of 6 months; Member Core Committee: National Disaster Management Guidelines – Medical Preparedness & Mass Casualties Management (NDMG-MPMC). National Disaster Management Authority, Ministry of Home Affairs, Government of India; Faculty: Advanced Trauma Life Support (ATLS) Course of American college of Surgeons, India Program; Instructor: Fundamental Critical Care Support (FCCS) Course of the Society of Critical Care Medicine, USA; Co-Organizing Secretary of the annual conference of the Department of Medicine, AIIMS, 'Medicine Update' held in August 2010 at JLNA, AIIMS; Basic Life Support Courses (AIIMS Basic Emergency Care Course) for Resident doctors, nurses, paramedics and community people; Advanced Cardiac Life Support training for resident doctors and nurses; USCMS "BLIPROVIDER" equivalent Trainer in Sonography in Critical Illness and Traumatic Emergency.

Dr Vijay Sharma was Faculty for ATLS Instructor and Provider Courses; Awarded Honorary membership of Lions Club December 2010; Completed AUTLS (Advance ultrasound trauma life support) Course in AIIMS 2011; Participated in Training the trainer course done by Zimmer Education in Gurgaon In 2011; Auditor for BPRS Course in AIIMS Trauma Centre; AO Faculty for Principles, course held at Rohtak 2011; Faculty BECC Course (Basic Emergency Care Course).

Dr Sanjeev Lalwani was awarded Distinguished Services Award – Geriatric Society of India November 2010; Excellence award from ICFMT on the "In recognition of outstanding contribution in organization of Indo Pacific Association of Legal Medicine and Science 2010 (INPALMS 2010); Organizing Secretary – 'Trauma 2010' International Congress and Third Annual Conference of ISTAC, JPN Apex Trauma Centre, AIIMS, New Delhi 27–28 November 2010; Member, Organizing Committee, Indo Pacific Association of Law, Medicine and Science (INPALMS) – 2010 International Conference organized in collaboration with Amity University, AIIMS and PGIMER 25–30 October 2010.

Dr Adarsh Kumar tenure as General Secretary, IAFM was extended up to 2013; Chairman Scientific Committee - 2nd International Conference on Medical Negligence and Litigation in Medical Practice, 20–21 February 2011, Goa.

Dr Purva Mathur was Chairman, Scientific Committee, Trauma 2010, 26–28 November 2010.

Dr S. Arulselvi received best paper award for the study titled 'Elective Blood Ordering Schedule for General Surgery

and Neurosurgery Departments in a Tertiary Trauma Centre in India' at 'Trauma 2010' International congress and Third Annual Conference of ISTAC, held in Siri Fort auditorium, New Delhi 27–28 November 2010; received best poster award in the study titled 'Evaluation of Amylase and lipase estimation in Blunt Trauma Abdomen patients: a prospective study in a tertiary trauma care hospital, North India' at 'Trauma 2010' International congress and Third Annual Conference of ISTAC, held in Siri Fort Auditorium, New Delhi, 27–28 November 2010; received a memento for the services rendered towards upliftment of the working and prestige of medical fraternity and society at large on 10 August 2010 while celebrating 96th foundation day of Delhi Medical Association and on Doctors day celebration held in DMA house, Daryaganj, New Delhi; 2 MSc (Biotechnology) students, 1 BE (Biotechnology) and 4 MLT students from various universities trained under my guidance; DNB appraiser for 4 DNB Pathology students at Army Base hospital.

Dr Sumit Sinha was awarded the prestigious AOSpine fellowship – Hospital Univeritario Cajuru, Curitiba, Brazil, under Prof Luis Vialle; nominated by the International Who's Who Historical Society, for the contribution in the field of Medicine

Dr Deepak Aggarwal was awarded the AO Spine fellowship for training in spine surgery at Basel University Hospital, Basel, Switzerland 28 March 2011– 24 April 2011; Awarded the Best Poster award for study titled 'To assess the effect of camera surveillance in improving compliance with hand washing practices in the ICU setting' in Nursing workshop, Trauma 2010 international conference held in AIIMS, 26–28 November 2010; Awarded 2nd Best Poster award for study titled 'Effect of PEEP on CVP in ventilated patients' at Nursing workshop and conference, Trauma 2010 international conference held in AIIMS, 26–28 November 2010; Awarded the Best Paper award for co-authoring the paper titled 'Use of Blood Donation Board by Nurses for Increasing Blood Donation in Neurosurgery ICU' at Nursing workshop & conference, Trauma 2010 international conference held in AIIMS, 26–28 November 2010; awarded the 3rd Best Paper award for co-authoring the paper titled 'Study to assess the Cost-effectiveness of reuse of expensive disposable items in Neurosurgery ICU' at Nursing workshop and conference, Trauma 2010 international conference held in AIIMS, 26–28 November 2010; awarded the 3rd Best Paper award for co-authoring the paper titled 'Relation of Dopamine Dependent Hypotension with Outcome in Cervical Spine Injury Patients' at Nursing workshop and conference, Trauma 2010 international conference held in AIIMS, 26–28 November 2010; awarded the Best Poster award for study titled 'Neurosurgery ICU – poles apart from general ICU' at the 19th Annual Conference of Neuro-Trauma Society of India. Chennai. 20– 22 August 2010; awarded the 2nd Best poster award for study on usefulness of mobile CT in neurosurgery ICU of trauma centre' at the 19th Annual Conference of Neuro-Trauma Society of India. Chennai. 20–22 August 2010; Received the 'eIndia 2010 Jury's choice award' in mGovernance for 'Eliminating queues in OPD – An mgovernance initiative at JPNATC' on 6 September 2010 at Hyderabad, India; Received the 'm-billionth 2010 award' for m-health category for mBillionth Congress and Award Gala scheduled on July 23 2010 in New Delhi, India; awarded the 'Synthes Spine Observership programme' to visit Spine Centre in Hong Kong from 23 April–2 May 2010; Chairperson, MRMCM-2010 conference, DRDO Bhawan, 6–7 May 2010; Chairperson, National Consultative Workshop of Stakeholders addressing problems related to alcohol use, 12–13 May 2010, NISD, New Delhi; Chairperson, National Consultative Workshop on Cost-effective Information Technology in Healthcare, AIIMS, New Delhi, 5 March 2011.

Dr Deepak Gupta was AO SPINE ASIA PACIFIC regional faculty for Spine training, November 2010; Visiting faculty to Medical university South Carolina, Charleston, USA, September 2010; Visiting faculty to Central military hospital, , Prague, Czech Republic, January 2010; Visiting Faculty to Erasmus Medical university, August 2010

Dr Kamran Farooque was awarded the prestigious "AO Spine" fellowship at Hong Kong for five weeks 3 October–5 November 2010; ATLS Faculty from 16–18 September 2010, JPNATC; FCCS Course at JPNATC, 25–26 November , 2010; ATLS Faculty at Kottayam, Kerala from, 2–4 December 2010; ATLS Faculty at JPNATC, 29–31December 2010; Basic Spine Workshop at DOACON at Safdarjung Hospital, 8 January 2011; ATLS Faculty, 19–21 February, JPNATC; AIIMS Basic Emergency Care Course at Lakshadweep, 26–28 February 2011.

Dr Vivek Trikha was awarded the North Zone Indian Orthopaedic Association Fellowship (NZIOA) for the year 2010–11; Editor of the Journal of Clinical Orthopaedics And Trauma, Official Publication of Delhi Orthopaedics Association; nominated to the Editorial Board of Indian Journal of Orthopaedics Trauma Section for 2011–14.

Dr Amit Gupta was appointed as Course Faculty for Basic Plastic and Reconstructive Surgery Course in Trauma (BPRS Course) – Developed by Department of Trauma Surgery, JPN Apex Trauma Centre, AIIMS, New Delhi, India. (2010); Appointed as Course Faculty: Course on Preparedness for Emergency Response to CBRN Casualties – Developed by DRDE, Gwalior and National Disaster Management Authority, Government of India.(2010–11); Member of CBRN co-ordination committee of National Disaster Management Authority, Government of India. 2010–2011; Awarded Executive Membership of International Society of Surgery/ Societe' Internationale' de Chirurgie (ISS/SIC) – 2010–2011; Awarded Executive Membership of International Association of Trauma Surgery and Surgical Intensive Care (IATSIC)–2010–2011; Member: World Association of Disaster and Emergency Medicine (WADEM) 2010–11; Executive Member: Academic Council for Emergency and Trauma (ACET). Indo-US Emergency and Trauma Collaborative. A collaborative between Division of Emergency Medicine, AIIMS; Division of Emergency Medicine, USF, USA and State University of New York Downstate, New York, USA – 2010–15; Awarded life membership of Association of Surgeons of India (ASI); Second prize for Oral paper presented by Kataria K, Kumar S, Gupta A, Mishra B, Sagar S, Singhal M, Misra MC. Diagnostic laparoscopy in abdominal Trauma – Experiences of a level one trauma centre. In Fifth AIIMS Surgical week and Endosurg – 2011, International CME cum Live Workshop. 11–13 March 2011, at AIIMS, New Delhi.

Dr Maneesh Singhal won second prize for Oral paper presented by Kataria K, Kumar S, Gupta A, Mishra B, Sagar S, Singhal M, Misra MC. Diagnostic laparoscopy in abdominal trauma-Experiences of a level one trauma centre. In Fifth AIIMS Surgical week and Endosurg – 2011, International CME cum Live Workshop. 11–13 March 2011, at AIIMS, New Delhi.

Dr Subodh Kumar was awarded membership of World Association for Disaster and Emergency Medicine (WADEM), USA; Awarded membership of European Society for Trauma and Emergency Surgery (ESTES), Europe; Awarded Membership of Society of American Gastrointestinal and Endoscopic Surgeons (SAGES), USA; Awarded scholarship by National Institute of Health, USA to attend a Workshop on Observational Studies organized by GS Seth Medical College, Mumbai 15–17 March 2010; Awarded a Travel Grant by University Grant Commission, Government of India to present a paper in an international conference “SAGES 12th world congress of endoscopic surgery in Washington DC, USA in April 2010; First prize for Oral paper presented by Albert V, Arulselvi S, Sagar S, Kumar S, Agarwal D, Misra MC. Elective blood ordering schedule for general surgery and neurosurgery departments in a tertiary trauma care centre in India in Trauma 2010, 26–28 November JPN Apex Trauma Centre, AIIMS, New Delhi; First prize for paper presented by Albert V, Kapoor N, Arulselvi S, Kumar S, Sagar S. Evaluation of Amylase and Lipase estimation in blunt trauma abdomen patients: A prospective study in a tertiary trauma care hospital, North India. In Trauma 2010, 26–28 November JPN Apex Trauma Centre, AIIMS, New Delhi; First prize for paper presented by Kilambi R, Bansal VK, Tamang T, Misra MC, Kumar S. ‘Laparoscopic suturing skills acquisition – a comparison between trained and novice surgeons’ – at Delhi State Chapter of ASI, RML Hospital, New Delhi, February 2011; Second prize for Oral paper presented by Kataria K, Kumar S, Gupta A, Mishra B, Sagar S, Singhal M, Misra MC. Diagnostic laparoscopy in abdominal trauma – Experiences of a level one trauma centre. In Fifth AIIMS Surgical week and Endosurg – 2011, International CME cum Live Workshop. 11–13 March 2011, at AIIMS, New Delhi; Appointed as Course Faculty: Course on Preparedness for Emergency Response to CBRN Casualties – Developed by DRDE, Gwalior and National Disaster Management Authority, Government of India; Member Editorial Board – Journal of Society for Wound Care and Research (JWSCR); Reviewer for Tropical Gastroenterology, a peer review journal indexed in Pubmed; Appointed as an External Examiner by University of Delhi.

Dr Sushma Sagar was awarded membership of World Association for Disaster and Emergency Medicine (WADEM), USA; awarded membership of European Society for Trauma and Emergency Surgery (ESTES); awarded membership of International Society of Burn Injuries; awarded membership of Association for the Advancement of Wound Care;

International Course Director for Advanced Trauma Life Support Course certified by the American College of Surgeons – Committee on Trauma, USA; course co-ordinator and faculty for Basic Plastic and Reconstructive Surgery (BPRS) Course at Apex trauma centre AIIMS, New Delhi; Co-Editor Journal of Society for Wound Care and Research (JWSCR); Member review committee Journal of Medicine and Medical Sciences (JMMS); First prize for Oral paper presented by Albert V, Arulselvi S, Sagar S, Kumar S, Agarwal D, Misra MC. Elective blood ordering schedule for general surgery and neurosurgery departments in a tertiary trauma care centre in India in Trauma 2010, 26–28 November JPN Apex Trauma Centre, AIIMS, New Delhi; First prize for paper presented by Albert V, Kapoor N, Arulselvi S, Kumar S, Sagar S. Evaluation of Amylase and Lipase estimation in blunt trauma abdomen patients: A prospective study in a tertiary trauma care hospital, North India. In Trauma 2010, 26–28 November JPN Apex Trauma Centre, AIIMS, New Delhi; Second prize for Oral paper presented by Kataria K, Kumar S, Gupta A, Mishra B, Sagar S, Singhal M, Misra MC. Diagnostic laparoscopy in abdominal trauma-Experiences of a level one trauma centre. In Fifth AIIMS Surgical week and Endosurg – 2011, International CME cum Live Workshop. 11–13 March 2011, at AIIMS, New Delhi; Co-ordinator from Trauma Centre for Health exhibition on Institute Day the 25–27 September 2010.

11.1 B.B. Dikshit Library

Chairperson

Dr Chitra Sarkar, Professor of Pathology

Chief Librarian

K.P. Singh

TIMINGS AND MEMBERSHIP

The library is being open round the clock on all days of the week including Sundays and holidays, w.e.f. 1 August 2003. It has 2375 regular members and an average of 375 readers visit the library everyday.

SERVICES

The library extends the following services to the users. These services are not only modernized and updated but also further strengthened.

1. Books 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 a fortnightly service, listing of new periodicals received in the library during the previous fortnight.

3. Interlibrary loan services

Interlibrary loan services with several local libraries are being maintained to help users procure documents that are not available in library.

4. Reprographic services

The library has three machines to meet the demands of the readers, viz. two WC5638 and one WC 7242 Colour of Xerox India Ltd. During the year 48,241 pages were photocopied, on a payment basis, as a service to the readers.

5. CD-ROM printout services

During the year 6,730 computer printout pages containing articles and other useful literature were made available to the readers on a payment basis.

Book bank

The book bank continues to serve the undergraduates and interns. The total membership of the Book Bank is 94. The book bank has more than 2,735 books, which are issued on a long-term basis to the students.

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 cassettes playback decks and 109 audio cassettes.

CD-based services

The library has a collection of 1033 CD ROMs of different digital books/journals. It can be used by the readers within the library. Different encyclopedias and dictionaries are also available on CD-ROMs.

Library automation

The library has a centralized server with 16 terminals, ten laser printers and one network laser printer. The house keeping operations of the library (viz. acquisition, cataloguing, series control, and circulation) have been automated. The library uses LS-Premia, a commercially available software package.

Computerized thesis search

About 5,575 theses received so far in the library can be retrieved through a computer search. Information about each thesis such as author, title, department, guide's name, co-guides and other bibliographical details are available on the computer.

Online journals

The library received 561 online journals for the current year, made available to it through their publishers along with print versions. Now all online journals have IP based subscription and can be accessed smoothly anywhere from the Institute's campus area through Internet/Wi-Fi facility provided by the Institute.

OPAC (online public access catalogue)

All the records from 1985 onwards can be retrieved through computers; 5,575 theses received so far in the library can also be retrieved through Online Public Access Catalogue (OPAC). The searchable databases (through OPAC) include 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 the journals and its recent arrivals can also be retrieved through OPAC.

Internet

The internet facility is available in the library from 10 AM to 10 PM from Monday to Friday and till 8:30 PM on Saturdays. Twenty-two nodes are available to the users.

New additions

The library added 319 new books, 134 bound volumes of journals, 97 pamphlets/reports, 264 new theses and now has total of 72,146 books, 67,920 bound journals, 17,129 pamphlets/reports respectively.

The library annually subscribing to 767 journals in various field of health sciences, 561 of them were received online along with their print versions; 24 journals are subscribed on behalf of the National Drug Dependence Treatment Centre (NDDTC), Ghaziabad, are received in the library.

Significant events

Besides the Internet and Wi-Fi Facilities, library has installed an Electro-Magnetic Security System (EM+Barcode) to prevent theft of library documents. During the period Retrospective Conversion and Bar-Coding of 50,000 books of library have been successfully completed.

AWARDS AND HONOURS

1. Mr K.P. Singh was honoured by HOLY MAAMAYA Young Librarian's Award, ETTLIS-June, 2010 at Jaypee University of Information Technology, Wagnaghat, Solan, Himachal Pradesh.

Lectures delivered in CME/ National and International conferences: 8

PUBLICATIONS

Journals: 1

11.2 Cafeteria

Chairman

Deputy Director (Administration)

Faculty-in-charge

Professor O. P. Kharbanda

Accounts Officer

S. K. Gupta

General Manager

S. K. Kaushik

Deputy General Manager

K. K. Sharma

AIMS AND OBJECTIVES

The AIIMS Cafeteria established in 1972, provides wholesome food at reasonable prices to the employees of the Institute. In 1983 it was registered with Director of Canteen Department of Personnel and Training, Government of India. In October 1991, the cafeteria was taken over by the Institute and all employees are treated at par with other AIIMS employees. Since then the cafeteria run with guidelines from the Department of Personnel and Training, on no profit no loss basis, without any financial assistance from the Institute.

MANAGEMENT COMMITTEE

A management committee is constituted by the 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. Shri 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, W.O. | Special 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 Gen. Manager, Cafeteria	Member

SERVICES

Cafeteria runs 7 units for services to about 9000 employees of the Institute.

1. Main Cafeteria (24 hour service) situated near Jawahar Lal Nehru Auditorium
2. Main operation theater cafeteria situated on 9th floor of the main hospital
3. Cardiothoracic Neurosciences Centre cafeteria on the 2nd floor of the centre
4. Dr Rajendra Prasad Centre operation theater cafeteria on the 5th floor of the centre
5. Faculty room cafeteria near main cafeteria.
6. Dr B.R. Ambedkar Institute Rotary Cancer Hospital cafeteria on the 3rd floor of the centre
7. Centre for Dental Education and Resort

In addition cafeteria provides services to the Director, Deputy Director, Medical Superintendent, Dean and Faculty Members for their day-to-day as well as special requirements for important meetings, including catering arrangements for MD/MS/MDS examinations, Governing Body, Institute Body, SFC, Academic Committee and during visits of dignitaries.

STAFF STRENGTH

81 employees (regular/ad hoc/temporary) cater to the needs of 9,000 employees with catering services to official meetings, conferences, symposia, etc.

MEDICAL CHECKUP OF CAFETERIA EMPLOYEES

Being food handlers all the cafeteria employees are medically checked once a year.

DEVELOPMENT ACTIVITIES

Several changes were introduced during the year, by installing hot food trolley Georgia tea/coffee vending machines to provide healthy hygienic services to the faculty.

FUTURE PLANS

There is a proposal for a multi story cafeteria with a better ambience equipped with latest technology to provide healthy and hygienic services to the employees. A detail-working proposal has been prepared with several meetings with HSCC.

11.3 Central Animal Facility

Professor-In-Charge

D. N. Rao

Senior Veterinary Officer

P. K. Yadav

Veterinary Officer

Vijender Singh

During the year 2010–11, animals were maintained in the animal facility. (Rodents, sheep and non-human primates—monkey). The activities of this unit included.

SMALL ANIMAL (RODENTS)

The following rodents were maintained in 2010–11.

1. Rats (Wistar)	1107	2. Rats (Sprague Dawley)	288
3. Mice (Swiss)	561	4. Rabbits (New Zealand)	93
5. Guinea Pigs (Dunkin Hartley)	70		

A total of 4421 small animals (rats, mice, rabbits and guinea pigs) were supplied to various departments and a considerable number of animals were also sold to other institutions in Delhi and outside, i.e. rats 220, mice 775, rabbit 11, guinea pig 121 and monkeys (Rhesus) 5.

LARGE ANIMAL FACILITY (SHEEP)

The sheep colony had 3 sheep for research work of the Department of Microbiology.

Non-human primate (Monkeys)

Total number of monkeys as on 1 April 2010	53	Number of deaths	5
Born in the colony	Nil	Given to National Brain Research Centre	5
Total number of monkeys as on 31 March 2011	43		

BREEDING PROGRAMME

All monkeys were kept out in open run. Non-human primate monkeys have 4 indoor runs that are used for providing exercise to all the monkeys housed in these runs.

REHABILITATION FACILITY

A programme for the rehabilitation of monkeys was started in 2000. All monkeys that had been used in experiments for 3 to 5 years, and old monkeys were put in open run and cages. Most of these monkeys were permanently rehabilitated (after an experiment with old monkeys) with NGOs/agencies through CPCSEA, under the Ministry of Environment and Forests, Government of India.

CLINICAL PROCEDURES DONE

Blood sample collected	53	Physical examination, testing for tuberculosis and weight	55
Haematology	53	Blood chemistry	53
X-ray	31		
Other procedures injury, ASD treatment	931		

(Management of trauma, obstetrics procedures, ASD treatment, etc.)

EXPERIMENTAL SURGERY

One hundred and six surgical procedures and radiological investigations were done by various departments (Surgery, Biomedical Engineering Unit, Neurosurgery, Paediatric Surgery, Laboratory Medicine and Pathology) on small and large animals in the Central Animal Facility.

INSTITUTIONAL ANIMAL ETHICS COMMITTEE

During the year, the Institutional Animal Ethics Committee cleared 29 projects on small animals (rodents) of various investigators of AIIMS and one project on large animals (monkeys) was completed.

SERVICES PROVIDED

A wing has been operational for maintaining animals belonging to departments of Microbiology, Biomedical Engineering Unit, Biochemistry, Biotechnology, Paediatric Surgery, Reproductive Biology, Anatomy, Psychiatry, Pathology, Laboratory Medicine and Neurosurgery. This facility housed the following animals: Sprague Dawley rats 182, rats 100, mice 200, rabbits 30 and guinea pigs 4.

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.

Educational programme

1. Dr P.K. Yadav, Senior Veterinary Officer and Mr Dhananjay Kumar, Animal House Attendant assisted with animals in Minimally Invasive Surgery Training Centre, Department of Surgical Disciplines, AIIMS.
2. Dr P.K. Yadav, Senior Veterinary Officer delivered lectures in National Institute of Animal Welfare under Ministry of Environment and Forest during training programmes on animal welfare on 'Care, breeding and management of laboratory animals'.

11.4 K. L. Wig Centre for Medical Education and Technology

Chairman

Professor R.C. Deka, Director, AIIMS

Professor In-Charge

Professor S. Datta Gupta
(04 February 2009–04 May 2010)

Professor S.K. Panda

(04 May 2010–09 March 2011)

Professor K. K. Deepak

(10 March 2011 onwards)

Co-ordinator (Medical Sciences)

Rakesh Yadav

Co-ordinator (Dental Sciences)

O.P. Kharbanda

Educationist

B.V. Adkoli

Education Media Generalist

Yogesh Kumar

EDUCATION

Ten sessions (2 hours each) were conducted by Mr Yogesh Kumar, Educational Media Generalist, for the MSc. Nursing students of College of Nursing, AIIMS on topics related to media and communication.

Continuing medical education

Conferences, seminars, workshops organized

Organized 9 in-house workshops on various topics by Mr Yogesh Kumar.

1	Research Bibliography Management using Zotero	10 November 2010
2	Research Bibliography Management using Zotero	15 December 2010
3	Tools for Scientific Writing using MS word	4 January 2011
4	Tools for Scientific Writing using MS word	11 January 2011
5	Tools for Scientific Writing using MS word	18 January 2011
6	Information Retrieval in Health Sciences using Internet	25 January 2011
7	Information Retrieval in Health Sciences using Internet	1 February 2011
8	Effective Presentation Skills	8 February 2011
9	Use of Animation in Power Point	25 March 2011

CMET provided space and facility to conduct 10 CMEs/workshops other departments of AIIMS including technical support, A/V equipment and computers. CMET also provided such facility for practical sessions conducted by the Computer Facility for the College of Nursing.

Interactive sessions on scientific writing

CMET jointly with the faculty of the Clinical Epidemiology Unit and editors of scientific journals organized a series of five interactive sessions dealing with the critical appraisal of scientific papers..

Lecture series on medical education

This is a unique initiative by CMET to sensitize the prospective faculty, viz. resident doctors and PhD students in various aspects of medical education through interactive sessions. The topics covered were: Group Dynamics, Curriculum Design, Assessment Strategies, Structured Questions, MCQ & Item Analysis, Teaching Methodology, Lecturing Skills & Micro Teaching, OSPE & OSCE, Problem Based Learning, Ethics & Professionalism, Media in Medical Education and Educational Research.

Lectures delivered in CME/ National and International conferences: 20

PUBLICATIONS

Journals: 10

SUPPORT TO PATIENT CARE AND MEDIA RELATED ACTIVITY

Details of Media Production during the year

Clinical photography	1045
X-ray, specimen, gel	4591
Scanning of images (slides, photos, documents)	4661
Video recording and editing	400
Designing/printing of large format posters)	1125
On screen presentations	345

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Professor K.K. Deepak was Member, Education Committee, International Union of Physiological Sciences (IUPS); Member, Advisory Committee, Central Board of Secondary Education (CBSE); Member, Committee for Undergraduate MBBS curriculum and postgraduate (MD Physiology) curriculum of Medical Council of India (MCI); served as 'Item Bank Administrator' for IDEAL Consortium, till 14 September 2010, University of Dammam. Prepared document on 'Policies and Procedures for Examination' for University of Dammam, Saudi Arabia; Member of Academic Council, Sports Authority of India (SAI), Netaji Subhash National Institute of Sports (NSNIS), Patiala; Member, Editorial Board, International Journal of Yoga, India. Appointed Member, Advisory Board of the Journal – Health Renaissance, BPKIHS, Nepal; Continues as Editorial Board Executive for Al-Ameen Journal of Medical Sciences, India; Reviewer for following journals: Indian Journal of Medical Research, Journal of Postgraduate Medicine, International Journal of Yoga, Medical Education, Medical Teacher.

Dr B. V. Adkoli was awarded Membership of Academic Bodies, Member of Association for Medical Education in Europe (AMEE), Member, South East Asian Regional Association for Medical Education (SEARAME) and International Clinical Epidemiology Network (INCLLEN); Reviewer for International Journals, like Advances in Medical Education, and Practice (Dove Press), BMC Emergency Medicine (BioMedCentral), Advances in Health Sciences Education (Springer).

Exhibitions organized

CMET played a key role in organizing two exhibitions under the leadership of Professor O. P. Kharbanda.

The first one was 55th Institute Day Exhibition on the theme 'Frontiers in Healthcare practices' (25–27 September 2010). The exhibition included hundreds of posters video/live demonstrations besides skits and role play. The exhibition was inaugurated by the Honourable Union Health Minister and was attended by a large number of general public.

The second exhibition on 'State of Science and Technology in India' was organized by National Science Centre, Pragati Maidan, New Delhi, on the eve of Commonwealth Games 2010. It showcased the State-of-the-Art facilities available at AIIMS along with other Science and Technology institutes in India. Twenty large size (8x4 feet) posters addressing various health issues were designed at CMET and displayed at the National Science Centre.

11.5 Computer Facility

Professor in-charge

Prof. P.P. Kotwal

Systems Analysts

S. Kailash

S. N. Ragu Kumar

Satish Prasad

Senior Programmers

Sushil Kumar Meher

Sanjay Gupta

V. K. Jindal

S. P. Singh

Vinay Pande

EDUCATION

Postgraduate

Computer programming classes covering both theory and practical aspects were conducted for postgraduate students of Department of Biotechnology and students of nursing at the College of Nursing. The department conducted Bioinformatics classes for students of Department of Biotechnology and taught Linux and C language, Database Structure I, II and Hidden Markov Models (HMM). Also provided training for armed force officers deputed to study medical informatics for 2-year period, with various new course modules including HL7, SNOMED, PACS, ICD, ICCS, XML and UML.

Graduate

A 3-month course on Basics of Computers, Internet, Windows applications, Computer-aided learning, Data-Base, Biostatistics, was provided to BSc (Hons) final year nursing students. Computer course for BSc Nursing (post certificate) was also conducted during this year.

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 Department guided various software projects for students of Computer Applications (leading to BCA, BE, B.Tech, and MCA) from various engineering colleges in and outside Delhi.

SERVICES

Hospital Computerization

Main hospital, R. P. Centre and Centre for Dental Education and Research

The following software design, development and implementation activities were carried out: Continuous maintenance and enhancement/upgradation of modules developed for new patients OPD registration for main hospital, dental OPD at CDER, casualty registration (since 1992), admission registration (for both short and long admission) for the main hospital and centers including RP Centre (casualty). The screens were made bilingual (English and Hindi) and captions on registration card were printed in both English and Hindi. Discharge summaries for clinical departments like Gastroenterology, Orthopaedics, Cardiothoracic and Vascular Surgery, Prosthodontic and Maxillofacial of Centre for Dental Education and Research and Physical Medicine and Rehabilitation modules developed have been monitored regularly and software is upgraded on the requirement of the end user. A software package for the central workshop covering job card management, stock and inventory management, repair, installation and condemnation process management has also been developed and Phase I has been implemented. The department introduced electronic-based token system in the main OPD registration for queue management system.

We have implemented laboratory module for AB1 ward and integrated it to emergency laboratory in laboratory medicine and are in the process of implementing it in 6 different locations in emergency and new emergency ward.

A new network linking has been implemented for accessing images from PACS system between main radiology department and new emergency ward. The pilot test has been performed.

Dr B.R. Ambedkar Institute Rotary Cancer Hospital

Successfully implemented computerized registration of OPD (new and old patients), in-patients, day care registration, appointment for the day care patients and discharge of patients, e-billing, discharge of in-patients at medical oncology, radiation oncology and laboratory registration of OP and IP patients on-line and report generation of patients for peripheral smear, multiple myeloma and bone marrow which are also stored in the database of patients for retrieval any time from any location. All these modules are running successfully. The modules which were implemented earlier were continuously monitored and maintained and changes made as and when required.

Cardiothoracic and Neurosciences Centre

Successfully implemented electronic registration of new patients both for OPD and clinics. These modules are being maintained since February 2009. LAN based discharge summary for neurosurgery in-patients has been developed and is running successfully. Software for OT notes and OT list has been implemented and is running successfully. The modules which were implemented previously are being continuously monitored and maintained and changes made as and when required.

Academic Section Management and Information System

Complete automation of student information and management system for MBBS courses covering all functionalities from the entry of students to the course till completion of the course was demonstrated to Dean and Sub-Dean (Academics). The system is ready for implementation.

Hostel Section

Implementation of waitlist updation and room allotment system for students and residents. This module was demonstrated to Director, Dean, Hostel Superintendent, student union and residents besides other senior officers of AIIMS. It is implemented and running successfully.

The department participated in the 55th institute day celebrations and presented inhouse software development work done by the computer facility on Healthcare Automation at AIIMS and Centres: Current status and vision, to the Hon'ble Union Minister of Health and Family Welfare, Government of India.

Members of the department are involved in the National Knowledge Management Network group at AIIMS.

Administrative computerization

Developed/maintained software for AIIMS finance and administration and electronic filing of tax, analysed/designed/developed Personnel Information System (PIS).

Examination section computerization

Computer facility has twice, coordinated and conducted online counseling for MD/MS/MDS and the selection of Junior Residents (non academic) for 2010–11. Hosted all examination results and notices online in the AIIMS website servers.

IT Infrastructure and Networking, Internet and Intranet management activities

1. Implemented the User Id based internet access system.
2. Provided network based endpoint antivirus system for users.

3. Facility management for wireless networking: system requirement, contract development, implementation of support systems and call centres for student support.
4. New webmail system testing and installation done.
5. Unified threat management system version upgradation and installation done for the security of computer networks.
6. Successfully implemented Wireless networking zones at around 18 hotel locations on the campus, creating Wi-Fi zones for Internet, information and online-journals access for students and resident doctors. Around 1200 students have availed this facility.

Details of wireless connection users up to March 2011

Users	Number
MBBS	289
MD	23
MS	8
Junior resident	260
DM	8
MCh	8
Senior resident	220
BSc	72
MSc	89
PhD	193
DO,DDA,CF	14
Total	1184

Details of wireless connection users (location-wise) up to March 2011

Location	Number
<i>Hostel</i>	
Number 1	43
Number 2	40
Number 3	50
Number 4	47
Number 5	38
Number 6	57
Number 7	127
Number 8	114
Number 9	79
Number 10	78
Number 11	22
RPC -1	53

RPC-2	31
F-Type residences	17
Faculty transit accommodation	37
Type III, Ayurvigyan Nagar	70
Computer facility	17
Masjid Moth Resident doctors hostel	177
Masjid Moth nurses hostel	87
Total	1184

1. Co-ordination of the training programme for concerned staff and officers on the Indian Government tenders information system for online tender information.
2. Continued Wi-Fi zone at B. B. Dikshit Library, for internet and online journal access for students.
3. Continued UTM based perimeter network security and webmail facility.
4. The websites *www.aiims.edu*, *www.aiims.ac.in* are maintained in-house.
5. Internet facility for the faculty, students (including scientists and residents), and other members of staff of AIIMS is maintained 24x7 at around 2500 nodes
6. Full commissioning of 45 Mbps (1:1) leased line from education and research network (ERNET India, Ministry of Information and Communication Technology, GOI)
7. Creation and maintenance of users accounts for 720 aiims.ac.in domain email users.
8. The total visitors to the AIIMS website were approximately 25 lakhs during the year.
9. Maintenance of Web server, UTM server, messaging server, Wi Fi server around the year.
10. Provision of new internet connections to faculty, students and other members of staff on regular basis.
11. Facility management and call maintenance for Internet and network users complaints and resolution.
12. The software modules for the website are developed in house. Some of the modules developed are: Design, Development and Modifications in the entrance examinations online information system.

Total number of pages updated and created on AIIMS website

Item	Number
1. Total under departments and centers	416
2. Conferences, workshops, lectures and orations	104
3. Recruitment for faculty and other posts	64
4. Admission notices and results and others under current events Director's speech, Members of Institute body, etc.	648
5. RTI Information, notices, health information, hostel, central facilities, etc.	201
6. Administration, Academic, About AIIMS, Annual report, etc.	1022
7. Intranet	30
Total	2485

Other web-based activities

- | | |
|---|------------------------|
| a) Data uploaded on Exam Server | 125 MB (approx) |
| b) Number of email users at aiims.ac.in = | 720 |

- | | | |
|----|---|-----------------------|
| c) | Number of tenders uploaded on http://tenders.gov.in website = | 4073 |
| d) | Number of virus mails detected = 383x12 = | 4596 |
| e) | Number of valid mails = | 508908 |
| f) | Number of spam mails detected and filtered = | 3663862 |
| g) | Total data transferred = | 687258 MB x 12 ~ 8 TB |
| h) | Number of Internet nodes = | 2500 approx. |
| i) | Technical co-ordination for online journal access and provision of journal access using internet and PC at the duty rooms and common rooms for scholars and senior/Junior resident doctors. | |
| j) | The other facilities maintained during the year were Email and FTP facility, medical and educational information access facility, Laser printing and scanning and consultancy for software and hardware | |

SIGNIFICANT EVENTS

Mr S. Kailash was nominated member by the Ministry of Communication and Information Technology, Government of India to attend meeting of Project Review and Steering Group (PRSG) for Projects Development of Framework for Logging and Analysis of Network Traffic for Securing Network Infrastructure at Assam, Gauhati and Manipur University; Project Leader for system study, analysis, design, software development, and implementation of software for main hospital, BRA IRCH, CN, CT Centre; Delivered a lecture on Telemedicine in Science, Education and Research, National workshop on research methodologies 16 August 2010–21 August 2010. Organized by Department of Pharmacology, AIIMS; Had a paper accepted for presentation at World Medical Informatics Conference (MEDINFO 2010), Cape Town, South Africa, August 2010: Automation of Daycare Ward Chemotherapy Services in a Super Specialty Tertiary Care Hospital: An experience and analysis of data captured using the system. Mallika Roy Barman, Shyamal Barua, S. Kailash, Vijeyata Sinha, Prasanth Ganesan, Sameer Bakhshi, Vinod Raina; Member, National Knowledge Management Network group, AIIMS; Member, Team for implementation of automation at gastroenterology for preparation of requirement analysis; Team member for study and to introduce cashless card operation for patient related transaction for OPD and inpatient transactions and also prepared the user requirement specification document for the CTNS Centre with Accounts Officer, CN Centre; presented the Patient Care System automation done at IRCH to the members of Indian Association of Medical Informatics, New Delhi

Mr Satish Prasad was Database administrator of Administrative Local Area Network (Netware server) which caters to Administration and Finance with more than 70 nodes; Course Coordinator and teaching faculty of MSc, BSc and post certificate information technology classes of Nursing College; Took classes of Windows, MS Office and Internet for the Disaster Management course conducted by Indian Red Cross Society (master course affiliated to I.P. University).

Mr Vinay Pande developed/maintained Software for AIIMS Finance and Administration and electronic filing of Institutes Tax, Analysed/Designed/Developed Personnel Information System (PIS); Took MBiotech, MSc, BSc Computer Science, Medical Informatics classes at AIIMS; Took classes of 'Information Technology in Disaster Management', 'Cyber Terrorism' and 'Knowledge Management for Disaster Management' for the course conducted by Indian Red Cross Society (Masters course affiliated to I.P. University); Delivered lecture on (i) 'Biomedical Information Retrieval', in the workshop for scientists/faculty, organized by Department of Biophysics, AIIMS, sponsored by ICMR, (ii) 'Medical Informatics and Biomedical Information Retrieval', in the workshop for medicos, organized by Department of Biophysics, AIIMS, sponsored by ICMR, (iii) 'Management Information System (MIS)', in Workshop on 'Management Techniques and effective human relations in Nursing', organized by College of Nursing, AIIMS, in collaboration with Ministry of Health and Family Welfare.

Mr S.K. Meher participated in the following International Conferences/workshop/ symposium (i) 'Concern of legal issues among doctors in Telehealth: A study conducted at AIIMS, New Delhi, India', published in the conference proceedings, eHealth and Telemed 2010 – Evidence in Action organized by Royal Society of Medicine, London, UK,

(ii) 'eSurveillance and eMonitoring for the epidemic of Chikungunya Dengue diseases in capital City New Delhi, INDIA' (A Biswas, SK Meher, B Ratha) published in the proceedings and presented in *Medinfo 2010*, 13th World Congress on Medical and Health Informatics, Held in Capetown, South Africa in September 2010, (iii) 'Information Technology-based Process Model for Health Insurance – Adoption and Implementation' (S.K. Meher, B. Ratha), published in the proceedings and presented in *Medinfo 2010* – 13th World Congress on Medical and Health Informatics, Capetown, South Africa, September 2010; Invited as speaker in the session on 'Role of Bioinformatics in Pharmacology', DST workshop was organized by Department of Pharmacology, AIIMS, New Delhi; Talked on 'Database Architecture and use of Database in Bio-Medical Informatics' in the ICMR sponsor workshop, organized by Department of Biophysics, AIIMS, New Delhi; Delivered talk to the 1-year postgraduate diploma *course in disaster* preparedness and rehabilitation students on DMIS (Disaster Management Information System) and life demonstration of SAHANA Application of Telemedicine in DMIS and Demonstration at AIIMS; Awarded scholarship for attending Medinfo2010 from Rockefeller Foundation, USA.

11.6 Electron Microscope Facility

Officer-in-Charge

Shashi Wadhwa

Additional Professors

Taposh K. Das

T.C. Nag

EDUCATION

1. Twelve M. Biotech students of the Department of Biotechnology, received two weeks training from 23 August to 3 September 2010.
2. Eleven MSc students of Zoology, North Bengal University, visited E.M. Lab on 11 November 2010 along with one faculty, Prof. T.K. Chaudhury.
3. Sixteen scientists attended SERC School of Biophysics in Medicine during 3–9 February 2011, and visited E.M. Lab along with 1 faculty and 2 PhD students from NMR, on 3 February 2011.
4. Four PG Anatomy students attended the EM Course from 14 January to 11 March 2011 (only on Fridays).
5. Five MSc. (2nd year) students from Physiology Department of Calcutta University visited E.M. lab on 25 March 2011 along with one faculty, Prof. T.K. Ghosh, Head, Department of Physiology.

Continuing Medical Education

1. The 26th National Training Programme in Electron Microscopy for Scientific Investigators was held from 8 to 20 November 2010. Eighteen candidates from different parts of the country participated in this training programme.
2. The 20th National Training Programme in Electron Microscopy for Technical Personnel was held from 7th to 17th February 2011. Six technical personnel, selected from 45 applicants from different parts of the country participated in this course. In all, 15 lectures were delivered by Prof. Shashi Wadhwa, Dr Taposh K. Das and Dr T.C. Nag for the participants of the above courses.
3. A Summer Training Course for Technical Personnel in Electron Microscopy was held for six weeks from 17th May to 30th June 2010. Two candidates, Dr Gayatri Misra, Bhubaneswar, Orissa and Ms Bindu A, Senior Technical Officer from Rajiv Gandhi Centre for Biotechnology, Trivandrum, were trained in sample processing, microtomy, CPD, sputter coating, TEM and SEM viewing, photography and routine maintenance.

RESEARCH

Funded Projects

Ongoing

1. Endemic fluorosis: Role of oxidative stress as a causative factor for skeletal fluorosis. Taposh K. Das. 3 years (2010–2013). Ministry of Environment and Forests. Funds: Rs 23 lakhs.
2. Cellular localization of markers of oxidative stress in aging human retina. T. C. Nag. 2 years (2010–2012). AIIMS. Funds: Rs 2 lakhs.

Departmental Projects

Ongoing

1. Effect of amyloid-beta on the morphology and protein profile of the rat hippocampus.
2. Correlation between Autophagy and Apoptosis in Ischemia-Reperfusion Injury model by Middle Cerebral Artery Occlusion in Rat Brain.

3. Possible effects of fluoride on kidney impairment in children from fluorosis endemic areas.
4. Alterations in fine structure of the human retina due to oxidative stress.

Collaborative Projects

Ongoing

1. A study to establish the role of T-helper 17 (Th-17) cells in the Asian Indian arthritis patients (with Orthopaedics).
2. Development of a potential biopolymer to serve as an alternative substrate of human amniotic membrane for ex-vivo expansion of corneal epithelial stem cells (with Stem Cell Facility).
3. Phenotypic, molecular and ultrastructural studies of coagulase negative *Staphylococcus* sp. and their biofilm in device-related infections (with RP Centre).
4. Studies on Pharmacological and molecular mechanisms to investigate an angiotensin type I receptor blocker Irbesartan in experimental model of ischemia-reperfusion injury (with Pharmacology).
5. Cardioprotective mechanism of telmisartan in experimental model of myocardial infarction in streptozotocin-induced diabetic rats (with Pharmacology).

PUBLICATIONS

Journals: 10

PATIENT CARE

Special laboratory facilities

During the year, special laboratory facilities provided for research and patient care are as follows.

Facility	Users (n)		Specimens analysed	
	Internal	External	Internal	External
Transmission electron microscope	101	184	644	1013
Scanning electron microscope	37	164	233	1026
Immuno-electron microscope	5	3	12	8
Elemental analysis (EDAX)	3	36	38	41

AWARDS, HONOURS AND SIGNIFICANT EVENTS

Professor Shashi Wadhwa was Member, National Advisory Committee. national seminar cum exposition of modern microscopes and their applications, USIC, Golapbag, Burdwan, West Bengal, 8–9 April 2010; was Chief Guest and delivered the Inaugural Lecture on ‘Biological advances with electronmicroscopy: an overview’ in the Workshop on Electronmicroscopy, BR Doshi School of Biosciences, Sardar Patel University, Vallabh Vidyanagar, Gujrat, 18 December 2010; was Chief Guest, delivered a guest lecture on ‘Electronmicroscopy in the advancement of Biology’, “1st refresher course in ‘Medical/Health Sciences’, Academic Staff College, BHU, February 10–2 March 2011.

Dr Taposh K. Das delivered a lecture on (i) ‘Emerging concepts in Electron Microscopy’ in the Department of Biotechnology, Jamia Milia Islamia, New Delhi, 13 March 2011, (ii) ‘Recent advances in Immunoelectron Microscopy’ in the Workshop on ‘Application of TEM in Advance Nanobiology and Life Science’ at IHBT (CSIR), Palampur, Himachal Pradesh, 5 October 2010. He also chaired a session in the aforesaid workshop.

Dr T. C. Nag participated and presented a talk at Fifth FAONS Congress and 28th Annual Meeting of the Indian Academy of Neurosciences, Lucknow, 25–28 November 2010; Reviewer for ‘Diabetes Obesity and Metabolism’.

11.7 Central Workshop

Faculty Co-ordinator

Shashi Kant

Chief Technical Officer

Adarsh Kumar Sharma

Senior Technical Officer

Kalu Ram

The Central Workshop is mainly engaged in the repair and the maintenance of instruments used for medical education, scientific research and hospital services. There are various branches looking after the above mentioned areas. Each section is headed by a technical officer with supporting staff. In spite of increased load of above mentioned activities, it has also continued to cater to fabrication and design of new instruments. It has the following sections.

- Electronic section
- Electrical section
- Refrigerating section
- Mechanical section – I and II
- Fine Instrument Section
- Painting ,Upholstery and Carpentry Section

The total strength of Group ‘C’ and ‘D’ staff in central workshop is as under:

Technician (Grade I)	6
Technician (Grade II)	4
Workshop Assistant (Painter)	2
Workshop Assistant (Fitter, Turner and Welder)	6
Khalasi	6
Store Clerk (UDC)	1
Assistant (NS)	1
UDC	1
Peon	1

FABRICATION AND GUIDANCE

The Central Workshop has been able to continue to help in the research activities of the institute with modifications of instruments and fabrications of useful gadgets. It has been possible in many cases to design and fabricate some of the items with locally available components, which were previously bought from outside, by the departments. The total 23 jobs (i.e. 211 items) were fabricated during the year 2010–11 as under:

<u>S. No.</u>	<u>Name of items</u>	<u>Qty</u>	<u>Department</u>
1.	Stillete	49	CNC CT-5
2.	Acrylic Box	4	Anatomy
3.	Cover of Machine	1	Centralize Lab CNC

4.	Formalin Chamber	1	COPD
5.	Handles for Surgical Instrument	6	Ortho OT
6.	T.R. Tube	92	CNC, IRCH,
7.	Top of Hammer	1	Ortho OT
8.	Handles for Osteotome	14	Ortho OT
9.	Clamps for OT Table	3	Main OT
10.	Cylinder Trolley	1	RP Centre
11.	Ploroglass Chamber	2	Anatomy
12.	Handles for Fine Cobs	1	Ortho OT
13.	Plastic Mold	9	Obstetrics and Gynecology
14.	Cap for Nylon Hammer	6	Main OT and ENT
15.	T. Piece	4	IRCH
16.	Rectangular Chamber	1	Anatomy
17.	Rat Cage	1	Biochemistry
18.	Regulator's Knob	1	Hospital Transport
19.	Pestle and Mortar	1	Nuclear Medicine
20.	T Maze	1	Forensic Medicine
21.	Elevated Maze	1	Forensic Medicine
22.	Slide Stand	1	Anatomy
23.	Sweat Test Machine with Box	10	Pediatric

REPAIR AND MAINTENANCE

The Central Workshop has been carrying out the repair and maintenance of all types of biomedical equipment, which include BP Instruments, Electrosurgical unit, ECG machine, Infusion pump, Multi parameter monitor, Defibrillator, Patient warmer, OT table, Refrigerators, Ice machine, Cold labs, Water chiller, Cryostat, Deep freezer, UV spectrophotometer, Electronic weighing machine, Audiometer, Ultrasound therapy unit, OT light, Tissue processor, Cold Centrifuge, Microscope, Needle Destroyer, Water Bath, X Ray View Box, OT Care Machine, Suction Machine, Oxygen Regulator Flow Meter, Servo Stabilizer, Boilers, Hot Plates, Table Top Centrifuge Microwave Ovens, Incubators, Patient Bed, Patient Trolley, Loading Trolley, IV Stands, Wheel Chair, Side Screen, Bed Side Locker, Push Carts, S.S. Drum, Surgical Instruments and many more.

The Central Workshop has economically and successfully repaired many electronic types of equipment, which were declared irreparable by manufacturing companies. These equipment include patient monitors, defibrillators, infusion pumps, patient warmer, etc.

The Central Workshop has been undertaking repair and painting jobs of all hospital furniture such as patient beds, patient lockers, IV stand, instrument trolleys, loading trolleys, and fowler beds, etc. During 2010–11, the Central Workshop has attended to a total number of 8348 repair jobs.

SHORT-TERM TRAINING

The Department has been actively involved in providing guidance and imparting short term summer training (4–6 weeks) to 15 BTech students from Echelon Institute of Technology (Faridabad), Manav Rachna Internal University (Faridabad), CRR Institute and Technology (Delhi), Kasturba Polytechnic for Women (Delhi).

11.8 Hostel Section

Superintendent

H.H. Dash

Deputy Superintendent

S. K. Khandelwal
Buddhadev Chowdhury
Mrs Nirmal Kalra

M. V. Padma
Puneet Mishra
Mrs Kamlesh Kumari Sharma

L. R. Murmu
C. Venkatarathikeyan

Senior Warden

S.P. Pandey

Warden

Mohan Sharma

Mrs Remani Thomas

Deputy Warden

Mrs Seema

Pruthi Satprakash Kalia

Assistant Warden

Mrs Suchita Kumari

Sukhpal Mallick
Mrs Tripta Sharma

Miss Rani Varghese

Junior Warden

Babu Lal Meena
Rajesh Rawat

Dinesh Desai
Mrs Sunil Devi

Mrs Nirmala

The AIIMS has several halls of residence with a capacity of over 1222 (approximate) single/double rooms and 195 accommodations for married and 388 accommodations for nursing students/staff nurses. These are spread over different hostels and residences in the AIIMS Main Campus, Masjid Moth, A. V. Nagar, FTA Hostel, JPNATC Hostel (Raj Nagar).

RESIDENCES

S.No.	Hostel	Location	Single room	Double/Three/Four/Five	Guest rooms (with 2 beds)	Total seater
GENTS HOSTEL						
1.	I (Charak)	Main Campus	62	3×2=6	–	68
2.	II (Jivak)	Main Campus	55	2×2=4	1	60
3.	III (Sushruta)	Main Campus	70	6×2=12	1	83
4.	IV (Madhava)	Main Campus	53	7×2=14	–	67
5.	V (Nagarjuna)	Main Campus	52	5×2=10	–	62
6.	VI (Vagbhatta)	Main Campus	69	7×2=14	–	83
7.	VII (Ashwini)	Main Campus	108	4×2=8	1	117
8.	VIII (Bharadwaj)	Main Campus	108	1×2=2	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
Total						942

MARRIED QUARTERS						
1.	F.Type	Ansari Nagar (West)	17			17
2.	MMRDH	Masjid Moth campus	42			42
3.	A.V. Nagar.	A.V. Nagar	80			80
4.	F.T.A.	A.V. Nagar	49			49
5.	JPNATC	Raj Nagar				07
Total						195
LADIES HOSTELS						
1.	IX (Saraswati)	Main Campus	62	16+1+1+0	1	102
2.	X (Pravati)	Main Campus	91	0+0+1+1	1	101
3.	RPC-II (Lakshmi)	Main Campus	20	13+0+0+0	1	47
4.	Ladies Hostel XI	Main Campus	15+0+0+0	-		30
Total						280
NEW NURSES HOSTEL, MASJID MOTH						
1.	Nursing Students	Masjid Moth	160	90+4+0+0	2	354
2.	Staff Nurses	Masjid Moth	34			34
Total						388
Grand Total						1,805

SIGNIFICANT EVENTS

1. A new committee room of superintendents of hostels and an anti-ragging control room for hostel section has been made.
2. 20 more flats in FTA/A.V. Nagar hostel added for married senior residents.
3. Renovated 7 quarters with floor tiles in Type III, AV Nagar Hostel.
4. Renovated the students' guest rooms, sick rooms and all the shafts with floor tiles in new nurses hostel, Masjid Moth.
5. Renovated the security booth for security guard in new nurses hostel, Masjid Moth.
6. Venation blinds fixed in office room, TV rooms, visitors rooms, sick rooms, guest rooms and 3 reading rooms in new nurses hostel, Masjid Moth.
7. Renovated students' rooms on 5th floor in new nurses hostel, Masjid Moth.
8. 3 New RO system installed in JPNATC hostel.
9. Exhaust grill fixed in all the married accommodation in JPNATC hostel.
10. Hostel No. V, toilets no. 2, 4 and 6 renovated.
11. Hostel No VI, toilets no. 1 to 6 renovated.
12. The ground floor corridor wall renovated with tiles in resident doctors hostel, Masjid Moth.
13. Store room constructed in MMRDH Mess.

14. Vertical blinds fixed in office room, TV room and recreation room in MMRDH.
15. Solar heater system introduced in ladies hostel no. X, IX and RPC-II.
16. Renovated toilets 5, 7 and 9 in ladies hostel no. IX.
17. The final no dues procedure has been simplified.
18. The credit system in the Mess/Café has been abolished for convenience of residents at the time of final no dues.

FUTURE PLANS

1. Construction of new hostel for students, resident doctors with modern amenities to accommodate 1000 students and residents.
2. Installation of air conditioners in hostel section or to shift the hostel section to any other building with proper roof as existing office is with tinned roof.
3. Provide new modern furniture in all the mess/café in all the hostels.
4. Mess dining hall of hostel no. VII and VIII to be beautified.
5. Chimney to be fixed in JPNATC mess.
6. Renovation of TV rooms in new nurses hostel, Masjid Moth.
7. Renovation of badminton court in new nurses hostel, Masjid Moth.

11.9 Institution Ethics Committee

Members till 12 July 2010

1. Professor J.P. Wali, New Delhi, Chairman
 2. Professor Rani Kumar, Dean, AIIMS, Member
 3. Professor Suneeta Mittal, Head, Department of Obstetrics and Gynaecology, AIIMS, Member
 4. Professor Y.K. Gupta, Head, Department of Pharmacology, Member
 5. Justice S.R. Singh, New Delhi, Member
 6. Dr Ganga Prasad Vimal, New Delhi, Member
 7. Dr Vijay Kumar, DDG, ICMR, New Delhi, Member
 8. Dr Sushma Yadav, Chair Professor, Dr.B.R Ambedkar Chair in Social Justice, Indian Institute of Public Administration, IP Estate, Ring Road, New Delhi, Member
 9. Dr Peush Sahni, Editor, NMJI, AIIMS, Member
 10. Professor Renu Saxena, Head, Department of Haematology, Member-Secretary
- Special Invitees: Dr Sunil Chumber, Dr Ravinder Kumar Batra and Dr A.B. Dey

Members w.e.f. 12 July 2010

1. Professor J.P. Wali, New Delhi, Chairman
 2. Professor Rani Kumar, Dean, AIIMS, Member
 3. Professor Kamal Buckshee, Former Head, Department of Obstetrics and Gynaecology, Member
 4. Professor Y.K. Gupta, Member, Head, Department of Pharmacology, Member
 5. Justice S.R. Singh, New Delhi, Member
 6. Dr Ganga Prasad Vimal, New Delhi, Member
 7. Dr Vijay Kumar, DDG, ICMR, New Delhi, Member
 8. Dr Sushma Yadav, Chair Professor, Dr.B.R Ambedkar Chair in Social Justice, Indian Institute of Public Administration, IP Estate, Ring Road, New Delhi, Member
 9. Dr Peush Sahni, Editor, NMJI, AIIMS, Member
 10. Dr V. Karthikeyan C, Assistant Professor, Department of ENT, Member
 11. Professor Hari Prakash, Former Chief, Centre for Dental Education and Research, AIIMS, Member
 12. Professor A.B. Dey, Professor, Department of Medicine, Member
 13. Professor Renu Saxena, Head, Department of Haematology, Member-Secretary
- Special Invitees: Dr Ravinder Kumar Batra and Dr Rakesh Yadav (w.e.f. 2 August 2010).

Members of institution ethics sub-committee till 7 July 2010

1. Professor Ravinder Kumar Batra, Anaesthesiology, AIIMS, Chairman
2. Professor Renu Saxena, Head, Haematology, AIIMS, Convenor
3. Professor Kamal Kishore, Pharmacology, AIIMS, Member

4. Dr Kalpana Luthra, Associate Professor, Biochemistry, AIIMS, Member
5. Professor Arvind Bagga, Paediatrics, AIIMS, Member.
6. Professor Ashok Kumar, Obstetrics and Gynaecology, MAMC, New Delhi, Member
7. Dr Vineet Ahuja, Associate Professor, Gastroenterology, AIIMS, Member
8. Professor Praveen Aggarwal, Emergency Medicine, AIIMS, Member
9. Dr Raju Sharma, Additional Professor, Radiodiagnosis, AIIMS, Member
10. Dr Pradeep Venkatesh, Associate Professor, Ophthalmology, AIIMS, Member
11. Dr Rajinder Parshad, Additional Professor, Surgery, AIIMS, Member
12. Professor Shashi Kant, Centre for Community Medicine, AIIMS, Member
13. Dr Rakesh Yadav, Associate Professor, Cardiology, AIIMS, Member
14. Dr Rakesh Mahajan, Sr. Vascular Surgeon, Apollo Hospital, New Delhi, Member
15. Dr Sanjay Thulkar, Associate Professor, Radiology, IRCH, Member
16. Dr Sunil Chumber, Sub-Dean (Academic), AIIMS, Member-Secretary

Members of institution ethics sub-committee w.e.f. 07 July 2010

1. Professor Ravinder Kumar Batra, Anaesthesiology, AIIMS, Chairman
2. Professor Renu Saxena, Head, Haematology, AIIMS, Convenor
3. Professor Kamal Kishore, Pharmacology, AIIMS, Member
4. Dr Kalpana Luthra, Associate Professor, Biochemistry, AIIMS, Member
5. Professor Arvind Bagga, Paediatrics, AIIMS, Member.
6. Professor Ashok Kumar, Obstetrics and Gynaecology, MAMC, New Delhi, Member
7. Dr Vineet Ahuja, Associate Professor, Gastroenterology, AIIMS, Member
8. Professor Praveen Aggarwal, Emergency Medicine, AIIMS, Member
9. Dr Raju Sharma, Additional Professor, Radiodiagnosis, AIIMS, Member
10. Dr Pradeep Venkatesh, Associate Professor, Ophthalmology, AIIMS, Member
11. Dr Rajinder Parshad, Additional Professor, Surgery, AIIMS, Member
12. Professor Shashi Kant, Centre for Community Medicine, AIIMS, Member
13. Dr Rakesh Yadav, Associate Professor, Cardiology, AIIMS, Member
14. Dr Rakesh Mahajan, Sr. Vascular Surgeon, Apollo Hospital, New Delhi, Member
15. Dr Sanjay Thulkar, Associate Professor, Radiology, IRCH, Member
16. Dr Rakesh Yadav, Sub-Dean (Academic), AIIMS, Member-Secretary

EDUCATION

Conference organized

1. Third IJME National Bioethics Conference 2010 Governance of Healthcare – Ethics, Equity and Justice on 17–20 November 2010 at AIIMS.
2. Co-organized CME on ‘Bedside Teaching, Research Methods including Ethics and Evaluation for Consultants’ on 5–6 June 2010 at Southern Railway Headquarter Hospital, Perumber, Chennai

Lectures delivered in CME/ National and International conferences : 4

Short term Training

Six months training in “Ethics in Research” was provided to two students of M.Sc. Clinical Research and three months training to two students.

Meetings

The number of meetings held were:

Institution Ethics Committee: 12

Institution Ethics Sub-Committee for Thesis and Dissertation: 13

Number of projects reviewed by the Institution Ethics Committee

New projects:	354	Old projects:	147
Progress Report:	40	Completion Report:	4

Number of thesis reviewed by Institution Ethics Sub-committee

Thesis: 402 Review Thesis: 332

In addition the ethics committee continued to receive notifications of serious adverse reactions, serious adverse events, six monthly progress report, completion report, etc.

The Institutional Ethics Committee Standard Operating Procedures (SOPs) were modified as per the need and made available on the AIIMS website.

SIGNIFICANT EVENTS

Digitalization of all minutes and approval letters of projects/thesis (available with ethics committee office) since 1993 to till date was carried out.

Dr Ravinder Kumar Batra

1. Member, Thesis Ethics Committee, National Board of Examinations, Ministry of Health, Government of India.
2. Member, Examination Ethic Committee, National Board of Examinations, Ministry of Health, Government of India.

12. Publications

Journals

1. 2nd BNF Symposium on India's Malnutrition: Combating the Hard Core on September 1, 2010, New Delhi prepared by Prof. C.S. Pandav, Dr. Archana S., Dr. J. Lobo, Dr. Arvind Kumar Singh, Dr. Kapil Yadav & Dr. Nikhil S.V.
2. Aboobakur M, Latheef A, Mohamed AJ, Moosa S, Pandey RM, et al. Surveillance for non-communicable disease risk factors in Maldives: results from the first STEPS survey in Male. *Int J Public Health*. 2010 Oct; 55(5):489-96.
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10. Adkoli BV. An educationist teaching health care professionals? *Natl Med J India* 2009;22:163-4.
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18. Agarwal S, Gupta R, Iyer VK, Mathur SR, Ray R. Cytopathological diagnosis of alveolar soft part sarcoma, a rare soft tissue neoplasm. *Cytopathology* 2011;22:318-22.
19. Agarwal S, Iyer VK, Agarwala S, Mathur SR, Aron M, Datta Gupta S, Verma K. Apoptotic protein expression in favorable-histology Wilms tumor correlates with tumor recurrence. *Pediatr Surg Int* 2010;27:303-8.
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1018. <http://www.yhrd.org/YA003548> for Himachal Saraswat Brahmins,
1019. <http://www.yhrd.org/YA003549> for Jammu Saraswat Brahmins,
1020. <http://www.yhrd.org/YA003550> for Kashmir Saraswat Brahmins,
1021. <http://www.yhrd.org/YA003551> for Punjab Saraswat Brahmins,
1022. <http://www.yhrd.org/YA003562> for Rajasthan Saraswat Brahmins population.
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13.1 Finance Division

Sr. Financial Advisor

Sandeep Lall

Financial Advisor

Basanti Dalal

F. & C.A.O.

Sunil Kumar Kedia

Satish Khurana
(w.e.f. 15/3/2011)

Accounts Officers

D.P. Gangal

Bhom Singh

S.S.Yadav

M.S.Negi

M.J.Razdan

M.K.Bhatt.

R.K.Sharma

The Institute gets grants under the Heads "Plan" and "Non-Plan" from the Govt. of India, Ministry of Health & family Welfare. Plan grants are 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 & payment to contractors/suppliers. While making payments, all the checks prescribed by to government of India are being exercised by the respective DDOs. Financial Advisor is also being rendered assistance by the Finance & Chief Accounts Officer and Accounts Officer wherever required.

All the above works are executed by Financial Advisor, finance & Chief Accounts Officers (F&CAOs)/Accounts Officers under overall control of Senior Financial Advisor. Following officers were holding the charge of posts noted against each during the year 2010-11:-

ALL INDIA INSTITUTE OF MEDICAL SCIENCES

STATEMENT SHOWING REVENUE RECEIPT FROM APRIL 2010 TO MARCH 2011

(Rs. in Lakhs)

HEAD	AIIMS(M)	C.N.C.	R.P.C.	I.R.C.H.	Trauma	C.D.E.R.	TOTAL
Hospital Receipts	4732.65	834.37	1398.07	188.25	239.62	31.53	7424.49
TOTAL	4732.65	834.37	1398.07	188.25	239.62	31.53	7424.49

GRANTS RECEIVED DURING (2010-2011)

(Rs. in crores)

S.NO.	HEAD	PLAN	NON-PLAN
1	AIIMS	380.00	605.00
2	N.D.D.T.C	7.90	-
	TOTAL	387.90	605.00

ALL INDIA INSTITUTE OF MEDICAL SCIENCES

RECEIPTS & PAYMENT ACCOUNT FOR THE YEAR 2010-2011

AIIMS(Main) (A)

<u>RECEIPTS</u>	<u>2010-11</u>	<u>2009-10</u>	<u>PAYMENTS</u>	<u>2010-11</u>	<u>2009-10</u>
1 <u>OPENING BALANCES</u>			1 <u>Grants transferred to the Centres/ Schemes Cell</u>		
A <u>Cash at bank</u>			A <u>Dr. R.P. Centre</u>		
i) (a) AIIMS (MAIN) 569420504			i) PLAN 150000000		
(b) Unspent Balance of specific grants remained with AIIMS(M) 265639973	835060477	833296039	a) Capital (New) 200000000		
ii) Scheme Cell 168733316	131137563		b) Revenue General 45000000		
			ii) Non-Plan 428500000	480000000	
B <u>CASH IN HAND (IMPREST)</u>			B <u>C.N. Centre</u>		
i) AIIMS (Main)			i) Plan 280000000		
(a) Balance as per cash book of the cashier 588950	281524	246024	a) Capital (New) 534110000		
(b) Excess paid by the cashier 307426	44500		b) Revenue General 100000000		
			ii) Non-Plan 974600000	1075900000	
C <u>AMOUNT LYING UNDISBURSED</u>			C <u>N.D.D.T.C.</u>		
i) AIIMS (Main)			i) Plan 790000000		833000000
ii) Scheme Cell 325606			D <u>Scheme Cell</u>		
D <u>POOR PATIENT A/C</u>			i) Grants against receipts 370844809		478286742
i) AIIMS (Main)			ii) Non Plan grant for National Service Scheme 50000		
a) Cash/Bank 1175983	1137133	943112	E <u>Dr.B.R.A.I.R.C.H.</u>		
b) FDRs 984180			a) Plan 900000000		
E <u>PATIENT TREATMENT A/C</u>			a) Capital (New) 118000000		
AIIMS 49928749	37120305		b) Revenue General 17000000		
F <u>Hostels</u>			b) Non-Plan 388600000	420800000	
a) Cash in hand 18666			F <u>J.P.N. APEX TRAUMA CENTRE</u>		
b) Cash at bank 304695			Plan 794400000		
c) FDR's 3792601			a) Capital (New) 360000000		
2 <u>GRANTS FROM GOVT. OF INDIA</u>			b) Revenue General 649600000	1009600000	
a) PLAN			G <u>CENTRE FOR DENTAL EDUCATION & RESEARCH</u>		
i) Capital (NEW) 2490000000			Plan 822000000		
ii) Revenue General 1310000000	2505100000		a) Capital (New) 28000000		
b) NON-PLAN 6050000000	6360000000		b) Revenue General 46900000	74900000	
c) N.D.D.T.C. 79000000	83300000		2 <u>ADMINISTRATIVE EXPENDITURE AIIMS (MAIN)</u>		
d) Oversight Committee 317500000			a) Pay and allowances 2546333850		2999687905
3 Miscellaneous Receipts 149321385			b) Travelling Allowances 20592177		16426033
4 Hospital Receipts 129321693			c) Stipend 12510578		7867010
5 Interest 59429152			d) Leave salary & Pension contribution 3264658		158228
6 Licence Fee 21945641			e) Pensionary Benefits 417243159		428910438
7 Tution Fee /Examination Fee 13364877			3 Office Contingency 390215797		308552136
8 Employees Health Scheme (EHS) 29459258			4 Material & Supply (Non-Plan) 1072307522		942713707
9 Pot Fund 407585			5 Repair and maintenance of Machinery & Equipment 57160004		45712951
10 Employees Insurance Scheme 15509969			6 Maintenance of buildings 95161141		83429751
11 GPF 358861099			7 Employees Insurance Scheme 15725503		15892236
12 Out side recoveries 302996544			8 G.P.F. 358861099		349108915
13 Security Deposits/ Earnest Money 39561396			9 Recoverable Advances		
			a) Car 180000		831200
			b) Scooter/Motor Cycle 628000		680000
			c) Bicycle 6000		6000

14	Caution Money	45300	57000	d) House Building Advance	2525300	2066850
				e) Computer	750000	1325200
				f) Festival	2400000	
15	Leave Salary & Pension contribution			10 Expenditure out of grant received for specific purpose (Scheme Cell)		
16	Recoverable Advances			i) Appendix-A	519689837	
	a) Car	909476	830651	ii) Add undisbursed for 2009-2010 paid now	325606	
	b) Scooter/Motor Cycle	653059	561020	iii) Less undisbursed for 2010-11	384882	519630561
	c) Bicycle	7740	3997			475404100
	d) H.B.A.	3659377	4852532	11 Post Partum programme (Incentive money)	684780	637275
	e) Computer	1205970	1072459	12 Furniture & Fixture	2339116	2788245
	f) Festival	1665700		13 Books & Publications	16783481	14302686
17	Post Partum Programme (Incentive money)	600000	1200000	14 <u>PLAN</u>		
18	Encashment of Short Term Deposit		2500000000	a) Salary	117141981	
19	Grants received for specific purpose Appendix-A (Scheme Cell)	513437406	520463834	b) Spares & Accessories	22803071	
20	Schemes			c) Machinery & Equipment	375775377	353380219
	i) Grants against receipt	370844809	478286742	d) Building Construction		
	ii) Grants transfer from A.I.I.M.S. Non-Plan		50000	i) Major Works	67506447	
	iii) Direct received	42186657	34944217	ii) Minor Works	200344038	267850485
21	Miscellaneous Donations (Appendix-D)	290450	567040	15 Purchase of Vehicles (a) Transport Office		2293778
22	Revolving Funds	70164253	66966878	16 <u>Advance Payments</u>		
23	New Pension Scheme	32865457	20947206	a) Material & Supply (NP) for foreign purchase	13495899	16023211
24	Cochelar Inplant Patient Treatment A/c	36724000	30852600	b) Machinery & Equipment (Plan) for foreign purchase	420062408	473641302
25	Deposit Work (a) Rajgarhia Vishram Sadan		69000	c) PAO for procurement of Stores	4000000	2600000
26	Recovery of excess paid by Cashier			d) P. & A.O. etc. for Building material	-	4927237
	a) Recovery	307426		e) Temporary/Contigent Advances	22974388	8257502
	b) Interest	175542	482968	f) Private firms for stores	3037061	2912705
27	Resource Maint. Grant (Obst. & Gynae)		557700	g) Custom Duty for Machinery & Equipment	79870853	41566242
28	Janani Suraksha Yojana(JSY)	26000	25000	h) For Books & Journals	37080547	35878527
29	Angio CTVS Patient A/c		91000	i) For cochelar Inplant Pt. Treatment		15453000
30	WHO-in-Country fellowship		1926000	j) M/s Indian Oil Corporation for lubricant Diesel Oil		2920253
				k) M/s HSCC for construction		1000000
				l) Secy., NDMC for construction		10600
				m) Justice Lokeshwar Prasad for arbitration fee		22201
				n) Registrar, Guru Govind Singh Univ. for consultancy fee		18000
				o) M/s Indian Oil Corporation for lubricant Diesel Oil (minor work)	2487842	
				p) M/s Indian Oil Corporation for lubricant Diesel Oil (major work)	457695	
				q) M/s HSCC for preparation of Master Plan (major work)	105874500	
				r) M/s HSCC for repair & renovation of RKAK OPD (major work)	136540015	
				s) M/s HSCC for facilitation block (Major work)	14500000	
				t) M/s HSCC construction of P.C. Teaching block (major work)	3000000	
				u) M/s Alpine Industries for p/o AC units (Major work)	36918	
				v) M/s Alpine Industries for p/o AC units (Minor work)	285376	

w)	M/s Sidwal Refregration for p/o A/c units (minor work)		290518	
x)	M/s Sidwal Refregration for p/o A/c (Major work)		481289	
y)	M/s Kohli & Co. for A/c (minor work)		253034	
z)	M/s Videocon Ind. Ltd. For p/o A/C (Minor work)		59622	
aa)	M/s Anu Solar Power (P).Ltd. for A/c (minor work)		1495194	
ab)	M/s Anu Solar Power (P).Ltd. for A/c (major work)		6454930	
ac)	M/s Universal Comfort for A/c unit (minor work)		1513900	
ad)	M/s LG Elect. For p/o A/c (major work)		1310504	
ae)	M/s LG Elect. For p/o A/c (minor work)		335815	
af)	Ex. Engg. SJH(CPWD) for sewage treatment plant (minor work)		12500000	
ag)	Ex. Engg. SJH(CPWD) for installation of additional lifts (major work)		4868896	
ah)	Ex. Engg. CPWD for installation of lift at ward block (major work)		1000000	
ai)	Ex. Engg. CPWD for sewage treatment plant (major work)		10900000	
aj)	Ex. Engg. CPWD for covering of Nallah Phase-II (major work)		50000000	
ak)	Ex. Engg. AIIMS CPWD for const. of Hostel (major work)		5000000	
al)	M/s Hitachi Homes Solutions for p/o A/c (minor work)		3823111	
am)	M/s Hitachi Homes Solutions for p/o A/c (major work)		488308	
an)	M/s Gurdev Singh Sons for A/c (minor work)		302357	
ao)	M/s Usha International Ltd. for A/c (minor work)		315020	
17	Security Deposit/ Earnest Money			
(i)	Payment made against the receipts upto the year 2009-10	34131812		33126289
(ii)	During 2010-11	665000	34796812	2070000
18	Outside recoveries		308313139	285174371
19	Investment of short term deposit			2500000000
20	Miscellaneous Donations (Appendix-D)		198250	307700
21	Revolving Funds		61303001	51937651
22	New Pension Scheme		102906967	69909349
23	Cochelar Implant Patient A/c		37227550	16722000
24	Deposit Work			
a)	Rajgarhia Vishram Sadan			62122

25	Deposit Linked Insurance Scheme			402697	120000
26	Oversight committee				
	a) Major works	317499700			
	b) Pay & Allowances	55100000	372599700		
27	VVIP			1086213	
28	Resource Maint. Grant. (Obst. & Gynae.)				557700
29	WHO-in-Country fellowship			345012	772729
30	WHO-in-country fellowship to RPC				14000
31	Angio CTVS Patient A/c				91000
32	Janani Suraksha Yojna(JSY)			25000	0

POOR PATIENT ACCOUNTS

1	a) AIIMS	367194	158815		
	b) Interest	42391	41068		
	c) FDRs				

PATIENT TREATMENT ACCOUNTS

1	(a) AIIMS	72062707	64246164		
	(b) Interest	2000738	1430530		

HOSTELS

1	i) Security Deposits	1415000	1406500		
	ii) Miscellenous Receipts	57575	67035		
	iii) Interest earned	42483	335943		

POOR PATIENT ACCOUNTS

1	AIIMS	109930	119965		
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PATIENT TREATMENT ACCOUNTS

1	AIIMS	59859552	52856486		
2	Bank clearing charges		4430		11764

HOSTELS

1	Security refunds		1127000		1070500
2	Miscellenous Expenditure		27960		360

CLOSING BALANCES

A CASH AT BANK

1	a) AIIMS(Main)	452534434			
	b) Unspent Balance of Specific Grants remained with AIIMS (Main)	408232569	860767003	835060477	
2	Schemes Cell		62074945		168733316

B CASH IN HAND (IMPREST)

1	AIIMS (Main)				
	a)Balance as per cash book of the cashier 599950				
	b)Excess paid by the cashier 307426	292524	281524		

C AMOUNT LYING UNDISBURSED

1	AIIMS (Main)				
2	Scheme Cell		384882		325606

D POOR PATIENT ACCOUNT

1	AIIMS (Main)				
	(a) Cash/Bank		1475638		1175983
	(b) FDR's		984180		984180

E PATIENT TREATMENT A/C

AIIMS	64128212	49928749		
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F HOSTELS

1	Cash in hand		32881		18666
2	Cash at Bank		322179		304695
3	FDR's	4121000	3792601		

Sub-Total(A) 13579041106 14939348746 13579041106 14939348746

DR. RAJENDER PRASAD CENTRE FOR OPHTHALMIC SCIENCES(B)

OPENING BALANCE

A	Cash at Bank	57013488	32586560		
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B Cash in hand

i)	Imprest	20000	20000		
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C Poor Patient A/C

Cash/Bank	104014	116808		
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I A	Pay & Allowance	352614026	409251527		
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B	Pay & Allowance (Revenue General)	24777754			..
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C	Daily Wages		..		4172866
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II	Travelling Expenses	2382037	2281696		
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III	Office Expenses	15905165	12770927		
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IV	Capital Works (Revenue General)	15514496	3820317		
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V	Maintenance of buildings	5584625	4651014		
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II	GRANT IN AID			VI	Material & Supply			
	i) Capital (New)	200000000			i) Material & Supply	160058074		
	ii) Revenue General	450000000			ii) Advance Payment	16508202	176566276	170566992
	iii) Non-Plan	428500000	630000000	VII	Refund of Security		285000	30000
III	Security Deposits received	35000	450000	VIII	Repair & Maintenance of Mach. & Equip.		465472	3424512
IV	NSPB	4000000	..	IX	Mach. & Equipment (Plan)			
					i) Actual Payment	42312873		
					ii) Adv. Payment made to foreign purchase	175006602	217319475	145672806
				X	Vehicle purchase dg.10-11		1606756	
				XI	Furniture & Fixture		558173	447742
				XII	NSPB	3999173	..	
V	GRANT IN AID (NON-RPC SCHEMES)			XIII	PAYMENTS TOWARDS NON RPC SCHEMES			
1	ABN AMRO Natra Raksha	..	..	1	ABN AMRO Natra Raksha		..	10000
2	Acuate Bacterial Conjunctivities	..	39900	2	Acuate Bacterial Conjunctivities		55633	188062
3	Administrative charges received through Priojects	1658011	735323	3	Administrative Charges		585284	564725
4	Akrosoft6 Bausch & Lomb	..	..	4	Akrosoft6 Bausch & Lomb		798	..
5	AMD View Study	3972557	8405422	5	AMD View Study		3495439	1175701
6	Bacterial Corneal Ulcer Eye	97200	108000	6	Bacterial Corneal Ulcer eye		200133	3240
7	Brimiridine DS/DDS	208980	..	7	Brimiridine DS/DDS		20899	..
8	Catract Patient (IOL)	556152	..	8	Catract Patient (IOL)		315588	..
9	Clinical Evaluation Polyherbal AOD	..	150000	9	Clinical Evaluation AOD		74402	49477
10	Clinical Evaluation on Blink & Clean (AMO)	50000	117600	10	Clinical Evaluation on Blink & Clean (AMO)		50000	134813
11	Clinical Evaluation OZONE	..	107640	11	Clinical Evaluation OZONE		..	108255
12	Clinical study of keratitis Conjunctivities (Allergen India Pvt. Ltd.)	..	45000	12	Clinical study of keratitis Conjunctivities (Allergen India Pvt. Ltd.)		..	45000
13	CRP	..	47000	13	CRP	1194	54000	..
14	CSIR	2766856	2649412	14	CSIR	2766856	2649412	..
15	DBT/ MA	..	717000	15	DBT/MA		211848	731507
16	DCDRF	10000	..	16	DCDRF	10000	..	..
17	DEGAS	926550	888562	17	DEGAS	922073	574926	..
18	DME	1052055	1242106	18	DME	1180927	1221790	..
19	DST Cyclosporine	..	..	19	DST Cyclosporine		22186	..
20	DST Evaluation of Tear fluid	375000	..	20	DST Evaluation of Tear fluid		375000	417077
21	DST/FIST	250000	..	21	DST/FIST		250000	..
22	ENDURE Study	545400	..	22	ENDURE Study		375780	..
23	ESG Evaluation Study on Gloucoma	..	..	23	ESG Evaluation Study on Gloucoma		5800	..
24	FAME Study	615075	1004730	24	FAME Study		1940465	1206297
25	FTG	189595	244441	25	FTG	119698	244441	..
26	High Precision Bil Analitital (HP-BAF)	412421	68810	26	High Precision Bil Analitital (HP-BAF)		233851	..
27	ICMR	12081998	2512750	27	ICMR		5199984	1183771
28	INDEGEN (LSTM)	..	939076	28	INDEGEN (LSTM)		20897	1900437
29	INDEYE	..	..	29	INDEYE		3559	..
30	INMAS Biomedical Dispensing Products	460000	..	30	INMAS Dispensing Biomedical Products		859958	55042
31	INMAS Human Pharmacology	475000	..	31	INMAS Human Pharmacology		480549	260000
32	LCIF	..	..	32	LCIF		3044	..
33	LUX 201 Omnicare	187704	925207	33	LUX 201 Omnicare		147930	247237
34	LUX 211 PRA International	..	173901	34	LUX 211 PRA International		47810	129905
35	MA Foundation	308400	..	35	MA Foundation		158681	..
36	MBDL ILLY- LILLY	207720	38800	36	MBDL ILLY LILLY		239777	61164
37	M.K. Media corneal Transplant (Min. of Finance)	..	1397660	37	M.K. Media Corneal Transplant (Min. of Finance)		556388	78944
38	Multifocal IOL	..	..	38	Multifocal IOL		4675	92561
39	NAB	500000	1260000	39	NAB		261065	495854
40	NCDRC	..	25079	40	NCDRC	..	25079	..
41	Neema International	..	..	41	Neema International		14343	..
42	Novartis Shield study	157500	90000	42	Novartis Shield Study		237930	2700
43	Novartis Visudyme	179551	..	43	Novartis Visudyme		184943	..
44	NPCB DOS Training	976050	856700	44	NPCB DOS Training		470501	900000
45	NPCB Eye Camp Godda Jharkhand	248642	160221	45	NPCB Eye Camp (Godda Jharkhand)		248642	362585
46	NPCB/DBCS	877250	310500	46	NPCB/DBCS		115600	297915
47	NPCB-NSU	300000	..	47	NPCB-NSU		10000	..
48	NPCB-SSU	303385	114693	48	NPCB-SSU		163250	148070

49	OEU	340054	270000	49	OEU	378852	114670		
50	ORBIS PECP	114956	..	50	ORBIS PECP		87268	30000	
51	Pharmacokinetic Quinacrine	443765		51	Pharmacokinetic Quinacrine		154313	..	
52	Phase II age related macular degeneration menet study (ARMD)	849815	360000	52	Phase II age related macular degeneration menet study (ARMD)		839650	141273	
53	Pink Eye (Bausch & Lomb)	..	..	53	Pink Eye (Bausch & Lomb)		..	119176
54	Polyherbal Evaluagion DES	..	..	54	Polyherbal Evaluagion DES		2323	143000
55	Posudurex Allergan International	358262	742476	55	Posudurex Allergan International		243940	127919	
56	PVD /VRT Study	..	650450	56	PVD /VRT Study		936058	222014	
57	Reliance Relinatra	80100	55419	57	Reliance Relinatra		154375	56663	
58	ROP Macugen	..	110000	58	ROP Macugen		2335	107665	
59	ROP Workshop	187042	181532	59	ROP Workshop		214661	159203	
60	RII	..	3200	60	RII		..	3200	
61	Sight Saver	583750	757333	61	Sight Saver		749327	1120971	
62	SSMI-VFA	585864		62	SSMI-VFA		269984	..	
63	Symposium Workshop	60000	343000	63	Sysposium Workshop		60800	342200	
64	Treatment of Dry eye Allergan International	..	75000	64	Treatment of Dry eye Allergan International		28400	46600	
65	USP	..	34808	65	USP	..	2638927		
66	WHO Gujrat Survey	..	..	66	WHO Gujrat Survey		15956	..
67	WHO-SEIND	..	..	67	WHO-SEIND		12050	..
68	WHO Short term training	..	..	68	WHO Short term training		1191	..
69	Workshop	..	8900	69	Workshop		..	2234	
VI	NIAF	30000	65000	XII	NIAF	3372	22745		
VII	Hospital Receipts including various kits	130553120	128281488	XIII	AIIMS Recoveries Remitted		84311143	75507347	
VIII	Interest on Recoverabl Adv.	411582	219997	XIV	Outside Recoveries remitted		25223098	37952102	
IX	Misc. Receipts	3665349	3866075						
X	AIIMS Recoveries Received	84312643	75507347	XV	Difference of Dr./Cr. Advice		..	99519	
XI	Outside Recoveries Received	25223098	37952102						
XII	Interest on CLTD	5177059	1265364						
XIII	Difference of Dr./Cr. Advice (LC Margin)	..	9297856						
XIV	<u>RECOVERABLE ADVANCE</u>			XVI	<u>RECOVERABLE ADVANCE</u>				
a)	Car	35652		a)	Car		..		
b)	Scooter	24000		b)	Scooter	48000			
c)	Cycle	..		c)	Cycle	..			
d)	H.B.A.	228740		d)	H.B.A.	..			
e)	Computer	43500		e)	Computer	90000			
d)	Festival	567564	899456	490972	d)	Festival	657000	795000	249000
	<u>Poor Patient A/C</u>				<u>Poor Patient A/C</u>				
	Receipts				Payment		98209	115143	
a)	Interest	5507	5168						
b)	Donation	174295	97181						
c)	Misc. Receipts	497							
				XVII	<u>CLOSING BALANCE</u>				
				a)	Cash at Bank	64667551	57013488		
				b)	Cash in hand (Imprest)	20000	20000		
					<u>Poor Patient A/c</u>				
					Cash / Bank	186104	104014		
	Sub-Total (B)	1019677768	949189569			1019677768	949189569		

CARDIO-THORACIC & NEURO SCIENCES CENTRE (C)

1	<u>OPENING BALANCES</u>			1	<u>ADMINISTRATIVE EXPENDITURE</u>			
A	<u>Cash at bank</u>			a)	Pay & Alowances (Non-Plan)	801287255	884276127	
i)	C.N. Centre	168444476	171281243	b)	Wages	4157262	12748740	
ii)	CT Patient A/c			c)	Travelling Allowance	1648750	1510335	
a)	Bank	19675665	16978464	2	<u>Stores (Non-Plan)</u>			
b)	FDR	306900000	250000000	a)	Repair & Maintenance of Machinery & Equipment	12608203	10772465	
iii)	Angiography A/c			b)	Material & Supply	199659278	209326361	
a)	Bank	13114110	32769115					
b)	FDR	74300000	50000000	3	<u>Stores (PLAN)</u>			
iv)	Gamma Knife patient A/c			a)	Machinery & Equipment (Advance Payment)	458864463	195803931	
a)	Bank	27927424	21748291	b)	Machinery & Equipment (Ind.)	64861614	65339793	
b)	FDR	136800000	117500000					
v)	Neuro Surgery patient A/c							
a)	Bank	3410417	3831850					

	b) FDR	31800000	32000000	c) Furniture & Fixtures	1258424	1629210
B	<u>CASH IN HAND (IMPREST)</u>			d) Spares & Accessories of Machinery & Equipment	20678764	
i)	C.N. Centre	40000	40000	e) Salary (Plan)	38956350	
ii)	Cash in hand with Cashier	1000	4400	4 Building maintenance	20853476	18023034
C	<u>POOR PATIENT A/C</u>			5 Building construction (Plan)		20297693
i)	N.S. Centre			6 Minor Work	42103117	
a)	Cash/Bank	104900	95562	7 Office Contingencies	10280555	
2	<u>GRANT-IN-AID</u>			(i) Payment of undisbursed amount for 2009-10	1000	
a)	Capital (New)	534110000	280000000	(ii) Less amount due but not paid due but not paid during 2010-11		10281555 4202395
b)	Revenue General	100000000		8 <u>Recoverable Advance (Non-Plan)</u>		
c)	Non-Plan	974600000	1075900000	a) Car	180000	-
3	a) Miscellaneous Receipts	10633920	14889154	b) Scooter/Motor Cycle	150000	294000
b)	Private Ward	28539346	29094008	c) House Building Advance	648500	1248100
c)	X-Ray	1046825	2469420	d) Computer	270000	570000
d)	C.T.Scan charges	2022170	1633490	e) Bi-cycle		-
e)	Ultra sound	106405	115800	f) Festival	1116000	
4	Interest on F.Ds.	22141634	3870381	9 Refund of Security Deposit	6634000	4910000
5	Security Deposit/ Earnest Deposit	10110000	8335000	10 Donation	272190	258928
6	Donations	6020	-	11 Neurology Patient A/c	14416146	16215915
7	Refund and Recoveries	1833470	1325749	12 Blood Test	9526353	3073572
8	Neurology Patient A/c	15034509	20965829	13 Cardio Test	3335063	4361997
9	Thallium Test	1799000	1481250	14 Thallium Test	168525	1311596
10	Levy charges	275240	520870	15 Amount sent to P.A.O.(GPF)	395500	492000
11	Rent Charges/Licence Fee	748467	774021	16 GPF	94461024	96184457
12	GPF	94856524	96676457	17 New Pension Schemes	16209625	11422743
13	New Pension Schemes	16209625	11422743	18 EHS	4934945	3784030
14	<u>Recoverable Advances</u>			19 Outside Recovery	85385914	98618546
a)	Bicycle		450	20 Amount Sent to PAO (E.I.S.)	1440	1440
b)	Scooter	331608	325226	21 Pot Fund	35592	33600
c)	Car	97320	91192	22 Water charges	41366	39922
d)	House Building	1103545	1748621	23 Amount sent to Main Institute(Computer Advance)	15400	2400
e)	Computer	208900	103100	24 Amount sent to PAO (Computer Advance)	2466	12000
f)	Festival	1005450		25 NACO Fund(Expenditure)	100000	101500
15	Cardio Test	4326420	3974650	26 Amount sent to DARC Gzb. (Con. Adv.)	12000	6000
16	Blood Test/Lab. Charges	6864220	5715905	27 HBA Sent to Main Instt.	11000	
17	EHS	4935070	3783960	28 Scooter Advance Sent to Main Instt.	2300	
18	Outside Recovery	85387354	98619926	29 P.M Relief Fund	804279	
19	Institute Recovery (Computer Advances)		2400			
20	Water Charges	41366	39910			
21	Pot Fund	35592	33600			
22	Institute Recovery (Computer Advances)	17866	12000			
23	NACO Fund Receipt	100000	101551			
24	Institute Recovery (Festival Advance)		6000			
25	Institute Recovery Scooter Advance	14300				

26	Institute Recovery			
	HBA		11000	
27	Transport		1516	
28	P.M Relief Fund		804279	

C.T. PATIENT A/C

1	a) Patient's Receipts during 2010-11	285412734		
	b) Patients' Refund 10-11	56016456		
	c) Add poor patient treatment out of interest earned during 2010-11	7599388	236995666	253684579
2	a) Interest during 2010-11	19785577		
	b) Poor patients treatment expenditure 10-11	7599388	12186189	18921758
3	Cancelled Cheques		2827600	3068749

ANGIOGRAPHY PATIENT A/C

1	a) Patient's Receipts 2010-11	198420934		
	b) Patients refunds	28611774		
	c) Poor Patient's treatment out of interest earned during 2010-11	1900673	171709833	157785614
2	a) Interest dg.2010-11	5107066		
	b) Poor Patient's treatment expenditure 2010-11	1900673	3206393	4655494
3	Cancelled Cheques		1188603	2189121

GAMMA KNIFE PATIENT A/C

1	Patient Receipts 2010-11	14440000		
	Refund to Patients	1640000	12800000	17756030
2	Interest		9289361	14091092
3	Cancelled Cheque		-	

NEURO SURGERY PATIENT A/C

1	a) Patient Receipts 2010-11	64711887		
	b) Patient Refund	12436660		
	c) Add Poor patient Treatment out of interest earned during 2010-11	2008252	54283479	38716096
2	Fixed/CLTD			
	a) Interest 10-11	2037766		
	b) Poor patient treatment expenditure 2010-11	2008252	29514	1913283
3	Cancelled Cheques		101313	211040

POOR PATIENT A/C

	N.S. Centre Donation		6232	23729
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C.T. PATIENT A/C

1	Purchase of Stores	255304927	214173507
2	Bank Charges		50
3	Fresh Cheque	2254413	1904328

ANGIOGRAPHY PATIENT A/C

1	Purchase for stores	168999058	159186415
2	Bank Charges		100
3	Fresh Cheque	575365	798719

GAMMA KNIFE PATIENT A/C

1	Purchase for Stores	2188300	5426989
2	MRI Charges	885000	941000
3	Fresh Cheque	75000	-

NEURO SURGERY PATIENT A/C

1	Purchase for Stores Store payment N/S PT. A/c instead of CNC A/c	47702234	41173076 65000
2	Bank charges	195	50
3	Fresh Cheques	207081	223726

POOR PATIENT A/C

	N.S. Centre	9200	14391
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CLOSING BALANCES

A	<u>CASH AT BANK</u>		
i)	C.N. Centre	171455298	168444476
ii)	C.T. Patient A/c		
	(a) Bank	21625780	19675665
	(b) FDRs	299400000	306900000

iii) Angiography A/c				
a) Bank			14744516	13114110
b) FDRs			79200000	74300000
iv) Gamma Knife Patient A/c				
a) Bank			57268485	27927424
b) FDRs			126400000	136800000
v) Neuro Surgery Patient A/c				
a) Bank			9915213	3410417
b) FDRs			31800000	31800000
B C.N. Centre				
i) Imprest	41000		40000	
ii) Cash in Hand with cashier				1000
D POOR PATIENT ACCOUNT				
i) N.S. Centre				
Cash at Bank			101932	104900

Sub-total (C)	3206501136	2873298173	3206501136	2873298173
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Dr. B.R.A. INSTITUTE ROTARY CANCER HOSPITAL (D)

				Head			
1	<u>OPENING BALANCES</u>			1	Pay & Allowances	249539942	279047433
A	<u>Cash at bank</u>	46936817	27792396	2	Festival Advance	213000	
B	<u>POOR PATIENT A/C</u>			3	Expenditure under TA/DA	2417297	1401876
	a) Cash/ Bank	2419552	2036817	4	Contingency Bills	2507227	2743069
C	<u>PATIENT TREATMENT A/C</u>			5	Medical Oncology	1144373	
	a) Cash/ Bank	32686499	28571796	6	RT Revolving Funds	4416053	765861
	b) Short Term Investment			7	Maintenance of Building	10772244	7711653
	c) FDR's	6000000	6000000	8	Repair & Maintenance of M & E	7856542	
D	<u>HMCPE A/C</u>			9	Computer Advance	60000	268000
	a) Cash/ Bank	40463	11000	10	Scooter/Motorcycle Advance	60000	
B	<u>Grant in Aid</u>			11	Material & Supply	124918747	122035355
1	Capital (New)	118000000	90000000	12	Outsourcing	18889519	15128033
	Revenue general	17000000		13	Refund of EMD/SD	10000	
2	NON-PLAN	388600000	420800000	14	PLAN		
3	ICMR	375000	375000	(i)	Advance Payment to foreign purchase for M&E	90877918	43688249
4	Interest Received	1936937	1097828	(ii)	Machinery & Equipment	15235705	35040522
5	Misc. Hospital Receipt	13454596	18726744	(iii)	Custom Duty & PDA (Advance)	15415762	3800000
6	RT Revolving Fund	2824110	3346830	(a)	Spare & Accessories of M & E	13413900	
7	Medical Oncology Fund	609725	634910	(b)	Capital (Minor works)	3523029	4188937
8	Computer Advance Recoveries	69800	42243	(vi)	Furniture and Fixtures	19795	111476
9	Recoverable Advances Car	18000	18000	15	AIIMS Recoveries Remitted	30752418	35856357
10	Festival Advances	180300		16	Outside Recoveries Remitted	26502822	23632782
11	Scooter/Motor cycle Advance Recoveries	102816	33330				
12	EMD & Security deposit	94000					
	AIIMS Recoveries Remitted	30752418	35856357				
	Out side Recoveries Remitted	26502822	23632782				
	<u>POOR PATIENT ACCOUNT</u>				<u>POOR PATIENT ACCOUNT</u>		
a)	I.R.C.H.	442981	353560	a)	During 10-11	632962	580237
b)	Interest on FDR's	316840	609412	b)	Miscellaneous	2000	
c)	Excess Credited	2000					
	<u>PATIENT TREATMENT ACCOUNT</u>				<u>PATIENT TREATMENT ACCOUNT</u>		
	Receipt during 10-11	36393493	48549953	a)	During 10-11	38089221	44788934
a)	Cheque Cancelled	114324	353853	b)	Miscellaneous	362700	82463
b)	Interest	4589	82294				
	<u>HMCPE ACCOUNT</u>				<u>HMCPE ACCOUNT</u>		
a)	Receipt during 2010-11	3000000	1006074	a)	During 2010-11	2063808	958886
b)	Cheque book & Account keeping charges received from bank	20550	3000	b)	Miscellaneous	650	20725

CLOSING BALANCE

A CASH AT BANK			28911048	46936817
B POOR PATIENT ACCOUNT			2546411	2419552
C PATIENT TREATMENT ACCOUNT				
a) Cash/Bank			30746984	32686499
b) FDRs			6000000	6000000
D HMC PF ACCOUNT				
Cash/Bank			996555	40463
Sub-Total (D)	728898632	709934179	728898632	709934179

NATIONAL DRUG DEPENDENCE TREATMENT CENTRE & UNDCP PROJECT (E)**1 OPENING BALANCES****A Cash at bank**

i) a) N.D.D.T.C.	11047879	17215421	1 Pay & Allowances	49627028	54505378
b) UNDCP	464680	239532	2 Material & Supply	24684784	28215267
1 Grant-in-Aid (DAC)	79000000	83300000	3 Wages	4226506	5818040
2 Hospital Receipt	309370	353520	4 Books & Publication	423698	636026
3 Miscellenous Receipt	56298	3103073	5 Furniture		248757
4 Car Advance Recovery		17280	6 Machinery & Equipment	3932193	727083
5 Security Earnest Money		15000	7 Security Refund	5000	25000
6 Transfr from UNDCP		86500	8 Temporary Advance	48932	365000
			9 Books & Publications advance	2538050	2102364
			10 Custom Duty Adv.		400000
			11 Motar Vehicle	3669738	
Institute Recovery			Institute Recovery Remitted		
1 GPF Subscription & Advance	7502439	7384074	1 GPF Subscription & Advance	7502439	7384074
2 Conveyance	15190	20500	2 Conveyance	15190	20500
3 HBA	68640	206288	3 HBA	68640	206288
4 Licence fee	47182	57975	4 Licence fee	47182	57975
5 Officer Association	2360	2600	5 Officer Association	2360	2600
6 EIS	42465	44645	6 EIS	42465	44645
7 EHS	253775	219630	7 EHS	253775	219630
8 Computer Recovery	11870	8004	8 Computer recovery	11870	8004
9 Faculty Club	700	800	9 Faculty Club	700	800
10 P.M Relief fund	28461		10 New Pension Scheme	549038	438391
11 New Pension Scheme	549038	438391	11 PM Relief fund	28461	
Outside Recovery			Outside Recovery		
1 Income Tax	2882758	4770311	1 Income Tax	2882758	4770311
2 LIC	48492	45236	2 LIC	48492	45236
3 Court Rec.	51996	46411	3 Court Recovery	51996	46411
4 Society	2895684	2368008	4 Society	2895684	2368008

**NATIONAL DRUG DEPENDENCE
TREATMENT
CENTRE (N.D.D.T.C.)
(UNDCP PROJECT)**

1 Grant-in-Aid	7525450	1358496	1 a) TA	170000	121097
2 Miscellenous Receipt	37808	24866	b) DA		11900
			c) Pay & Allowances		21400
			2 a) Office contingency	231073	57900
			b) Refreshment	28900	37990
			c) Accommodation	68727	
			d) Printing material Stationary		19973
			e) Salary		549662
			f) Transportation	33090	
			g) Medicine		92477
			3 Refund to WHO		180715
			4 Transfer to NDDTC		86500

CLOSING BALANCES**A CASH AT BANK**

i) N.D.D.T.C.			1257618	11047879
ii) UNDCP			7474748	464680
Sub-Total (E)	112842535	121326561	112842535	121326561

J.P.N. APEX TRAUMA CENTRE (F)

1	<u>Opening Balance</u>			1	(a) Bulding Cons.-Capital works	21279035	56619050
	Cash at bank	7809730	445047		(b) Engg. Maintenance etc	84730316	61599882
2	<u>GRANT-IN-AID</u>				(c) Security Deposite to NDMC	5979000	
i)	Capital (New)	360000000			(d) Security Deposite to IGL	1200000	
ii)	Revenue General	649600000	794400000		(e) Security Deposite 50% to IGL	104680	
					(f) Advance payment to "TRIGEN" (Min. of power) as per MOU.)	1170000	
					(g) Payment to HSCC	13500000	
3	<u>Other Receipts</u>			2	<u>Machinery & Equipment*</u>	110222922	98643429
a)	Hospital Receipt	18574399	7804224		<u>Manpower</u>		
b)	Security deposit(EMD)	7648000	5155000		Recurring & Out Sources	35875309	25993570
c)	Interest on TDR	3665413	740317		Pay & Allowances	290394817	274857146
d)	Miscellenous Receipt (PT A/C,ATLAS/other Transferable Dues)	1722781	12190988	3	Festival Advance	30000	
	Festival Advances Recoveries	9600			Material & Supply/Contingency Furniture & Fixtures	196834112	115224004
						342449	1004941
				4	<u>Machinery & Equipment</u>		
					(a) Advance Payment made to Foreign Purchases	184766328	154658421
					(b) Advance paid as Custom Duty	70000000	10000000
					(c) Advance paid as PDA	500000	
				5	<u>Refunds</u>		
					Security Refunds	5970000	6770000
					(PT A/C,ATLAS/other Transferable Dues)	5004694	7555403
				6	<u>CLOSING BALANCES</u>		
					CASH AT BANK	21126261	7809730
Sub-Total (F)		1049029923	820735576			1049029923	820735576

CENTRE FOR DENTAL EDUCATION AND RESEARCH (G)

A	<u>Cash at Bank</u>			1	Pay & Allownces	11775860	7491000
(i)	CDER	2107815	4800935		Office expences	1691812	2154000
	Cash in Hand	5000	5000		Bank charges	3175	13972
1	<u>Grant -in-Aid</u>			2	Machinery & Supply	23408061	27379000
i)	Capital (New)	28000000		3	(a) Maint. Of Building		4576411
ii)	Revenue General	46900000	82200000		(b) Maintenance	5282751	2199000
					(c) Capital works	5770563	
2	Security Deposite	755000	2084000	4	Mach. & Equipment		
					(i) Actual payment	22067175	15883986
3	Interest on STDR by bank	1499528	485612		(ii) Advance payment made to Foreign Purchases		25438345
					Advance paid to NDMC		3040000
4	Miscellenous Receipt	25900	535178	6	Advance paid to Voltas ltd.		184589
				7	Security refund	1094825	1455027
5	Hospital Receipt	1628070	1817420				
					<u>Closing Balance</u>		
					A Cash at Bank	9822091	2107815
					B Cash in Hand (Imprest)	5000	5000
Sub-Total (G)		80921313	91928145			80921313	91928145
GRAND TOTAL (A) TO (G)		19776912413	20505760949			19776912413	20505760949

Financial Advisor

Senior Financial Advisor

DIRECTOR

ALL INDIA INSTITUTE OF MEDICAL SCIENCES

INCOME AND EXPENDITURE ACCOUNT FOR THE YEAR 2010-2011

AIIMS(Main) (A)

<u>EXPENDITURE</u>	<u>2010-11</u>	<u>2009-10</u>	<u>INCOME</u>	<u>2010-11</u>	<u>2009-10</u>
<u>NON-PLAN</u>			<u>GRANT-IN-AID</u>		
1 Pay & Allowances	2546333850	2999687905	Plan	117141981	
2 Stipend	12510578	7867010	Non-Plan	4258300000	4383250000
3 Travelling Allowances	20592177	16426033	<u>REVENUE RECEIPTS</u>		
4 Pensionary Benefits	417243159	428910438	1 Hospital Receipts	129405501	119638125
5 Material & Supply	1100081001	959221285	2 Tution Fee and Examination Fee	13364877	5288069
6 Office Contingency	398106891	311132501	3 Employees Health Scheme	29459258	22604568
7 Repair & Maintenance of Machinery & Equipment	57160004	45712951	4 Licence fee	21945641	21341031
8 Maintenance of Buildings	95161141	83429751	5 Interest	59604694	40379679
9 New Pension Scheme	102906967		6 Miscellaneous Receipts	149321385	302475713
i) Less Receipts	32865457	48962143			
10 L.S.P.C.	3264658	158228			
11 Deposit Linked Insurance Scheme	402697	120000			
12 Pay & Allowances (Plan)	117141981				
13 <u>Oversight Committee</u>					
Pay & Allowances	55100000				
<u>HOSTELS</u>			<u>HOSTELS</u>		
1 Miscellenous Expenditure	27960	360	1 Miscellenous Receipts	57575	67035
			2 Interest	42483	335943
<u>EXCESS OF INCOME OVER EXPENDITURE</u>			<u>EXCESS OF EXPENDITURE OVER INCOME</u>		
1 AIIMS (Main)			1 AIIMS(Main)	114596310	6651060
2 Hostel	72098	402618			
Sub-Total (A)	4893239705	4902031223		4893239705	4902031223

DR. RAJENDER PRASAD CENTRE FOR OPHTHALMIC SCIENCES(B)

1 Salaries	352614026		409251527	1 i) Grant in Aid (Non-Plan)	428500000	480000000
Salaries(Revenue General)	24777754	377391780		ii) Revenue General	24777754	
2 Daily Wages			4172866	2 Hospital Receipts i/c kits	453277754	128281488
3 Travelling Expenses	2382037		2281696	3 Interest on Recoverable Adv.	411582	219997
4 Material & Supply				4 Miscellenous Receipts	3665349	3866075
i) Reg. payment	160058074			5 Interest on CLTD	5177059	1265364
ii) Material received during 2010-11	14979927	175038001	164914894			
5 Office Expenses		15905165	12770927			
6 Maintenance of Buildings		5584625	4651014			
7 i) Repair & Maintenance of Machinery & Equipment		465472	3424512			
<u>EXCESS OF INCOME OVER EXPENDITURE</u>						
Dr. R.P. Centre		16317784	12165488			
Sub-Total (B)		593084864	613632924		593084864	613632924

CARDIO-THORACIC & NEURO SCIENCES CENTRE (C)

<u>Non-Plan</u>				1 Grant-in-Aid			
				(a) Plan (Salary)	38956350		
1	Pay & Allowances & Wages	805444517	897024867	(b) Non-Plan	974600000	1075900000	
2	Travelling Expenditure	1648750	1510335	2 Revenue Receipts			
3	Material & Supply	199659278	209326361	a) Hospital Receipts	31714746		
4	Office Contingency	10280555	4198995	b) Amount received from outside patients 2010-11	-		
5	Repair & maintenance of Machinery & Equipment	12608203	10772465	c) Amount due 2010-11	153635	31868381	33036902
6	Maintenance of Buildings	20853476	18023034	3 Misc. Receipts			
7	Salary Plan	38956350			10633920	14889205	
				4 Rent Charges/ Licence Fee	748467	774021	
				5 Refund & Recoveries	1833470	1325749	
				6 Interest earned	22141634	3870381	
				7 Levy Charges	275240	520870	
				8 Transport	1516		
<u>C.T. PATIENT A/C</u>				<u>C.T. PATIENT A/C</u>			
1	Purchase for Stores	255304927	214173507	1 Patient's Receipts	236995666	253684579	
2	Bank Charges		50	2 Interest during 2010-2011	12186189	18921758	
				3 Cancelled Cheque	2827600	3068749	
<u>ANGIOGRAPHY PATIENT A/C</u>				<u>ANGIOGRAPHY PATIENT A/C</u>			
1	Purchase for Stores	168999058	159186415	1 Patient's Receipts	171709833	157785614	
2	Bank Charges		100	2 Interest during the year 2010-2011	3206393	4655494	
				3 Cancelled Cheques	1188603	2189121	
<u>GAMMA KNIFE PATIENT A/C</u>				<u>GAMMA KNIFE PATIENT A/C</u>			
1	Purchase of Stores	2188300	5426989	1 Patient Receipts	12800000	17756030	
2	MRI Charges	885000	941000	2 Interest	9289361	14091092	
3	Fresh Cheques	75000					
<u>NEURO SURGERY PATIENT A/C</u>				<u>NEURO SURGERY PATIENT A/C</u>			
1	Purchase of Stores	47702234	41173076	1 Patient Receipts	54283479	38716096	
	Store payment from N/S Pt. A/c instead of CNC A/c		65000	2 Fixed/CLTD Interest	29514	1913283	
2	Bank Charges	195	50	3 Cancelled Cheques	101313	211040	
<u>EXCESS OF INCOME OVER EXPENDITURE</u>				<u>EXCESS OF EXPENDITURE OVER INCOME</u>			
2	CT PATIENT A/C		61501529	1 CNC	8392151	10538929	
3	ANGIO PATIENT A/C	7105771	5443714	2 CT PATIENT A/C	3295472		
4	GAMMA KNIFE PATIENT A/C	18941061	25479133	3 NEURO SURGERY PT. A/C		397707	
5	NEURO SURGERY PT. A/C	6711877					
	Sub-Total (C)	1597364552	1654246620		1597364552	1654246620	

Dr. B.R.A. INSTITUTE ROTARY CANCER HOSPITAL (D)

1	Pay & Allowances	249539942	279047433	1	Grant-in-aid (Non-Plan)	388600000	420800000
2	Expenditure of TA/DA	2417297	1401876	2	Hospital Receipts	13454596	18726744
3	Material & Supply	124918747	122035355	3	ICMR	375000	375000
4	Maintenance of Building	10772244	7711653	4	Interest Receipts	1936937	1097828
5	Outsourcing	18889519	15128033				
6	Contingency Expenditure	2507227	2743069				
7	Repair & Maintenance of Mach. & Equip.	7856542					
	<u>EXCESS OF INCOME OVER EXPENDITURE</u>				<u>EXCESS OF EXPENDITURE OVER INCOME</u>		
	I.R.C.H.		12932153		I.R.C.H.	12534985	
	Sub-Total (D)	416901518	440999572			416901518	440999572

NATIONAL DRUG DEPENDENCE TREATMENT CENTRE & UNDCP PROJECT (E)

1	Pay & Allowances	49627028	54505378	1	Grant-in-aid (Plan)	68436321	79185770
2	Wages	4226506	5818040	2	Hospital Receipt	309370	353520
3	Material & Supply 2010-11	24884784	28215267	3	Miscellaneous Receipt	56298	3103073
				4	Transfer(UNDCP)		86500
	<u>NATIONAL DRUG DEPENDENCE TREATMENT CENTRE (N.D.D.T.C.) (UNDCP PROJECT)</u>				<u>NATIONAL DRUG DEPENDENCE TREATMENT CENTRE (N.D.D.T.C.) (UNDCP PROJECT)</u>		
1	TA/DA	170000	132997	1	Grant-in-aid (Plan)	7525450	1358496
2	Misc./Office Contingency	231073	77873	2	Miscellaneous Receipt	37808	24866
3	Transfer to NDDTC a/c		86500				
4	Refund to WHO		180715				
5	Pay & Allowances	21400	549662				
6	Accommodation	68727					
7	Refreshment	28900	37990				
8	Transportation	33090					
9	Medicine		92477				
	<u>EXCESS OF INCOME OVER EXPENDITURE</u>				<u>EXCESS OF EXPENDITURE OVER INCOME</u>		
1	UNDCP Project	7010068	225148	NDDTC		9936329	5809822
	Sub-Total (E)	86301576	89922047			86301576	89922047

J.P.N. APEX TRAUMA CENTRE (F)

1	Material & Supply /Contingency	196834112	115224004	1	Grant -in -Aid Revenue (G) (Man power /Essentials services)	600535586	473474159
2	Manpower /Out sources	35875309	25993570	2	Hospital Receipts	18574399	7804224
3	Pay & Allowances	290394817	274857146	3	Interest on TDR	3665413	740317
4	Engg. Maintenances etc.	84730316	61599882				
	<u>EXCESS OF INCOME OVER EXPENDITURE</u>						
	J.P.N. APEX TRAUMA CENTRE	14940844	4344098				
	Sub-Total (F)	622775398	482018700			622775398	482018700

CENTRE FOR DENTAL EDUCATION AND RESEARCH (G)

1	Pay & Allowances	11775860	7491000	1	Grant in Aid (Plan) (RG)	46900000	40975173
2	Material & Supply	23408061	31955411	2	Interest on STDR by Bank	1499528	485612
3	Maintenance of Building	5282751	2199000	3	Miscellaneous Receipts	25900	535178
4	Office Expenses	1691812	2154000	4	Hospital Receipts	1628070	1817420
5	Bank Charges	3175	13972				
	<u>EXCESS OF INCOME OVER EXPENDITURE</u>				<u>EXCESS OF EXPENDITURE OVER INCOME</u>		
	CENTRE FOR DENTAL EDUCATION & RESEARCH	7891839					
	Sub-Total (G)	50053498	43813383			50053498	43813383
	Grand Total (A) to (G)	8259721111	8226664469			8259721111	8226664469

Financial Advisor

Senior Financial Advisor

DIRECTOR

ALL INDIA INSTITUTE OF MEDICAL SCIENCES

BALANCE SHEET AS ON 31.3.2011

AIIMS(Main) (A)

<u>LIABILITIES</u> <u>AIIMS (MAIN)</u>	<u>2010-11</u>	<u>2009-10</u>	<u>ASSETS</u> <u>AIIMS (MAIN)</u>	<u>2010-11</u>	<u>2009-10</u>
1 BALANCE			1 CASH IN HAND		
a) Amount due but not paid (Scheme Cell)	384882	325606	a) Imprest (AIIMS CASHIER)	292524	281524
2 A) CAPITAL GRANTS FROM GOVT. OF INDIA			b) Amount due but not paid (Scheme Cell)	384882	325606
i) Upto 2009-10	8734103764		2 Cash at Bank		
ii) During 2010-11	1679973887		a) (i) AIIMS (Main)	452534434	
iii) Less on account of Machinery & Equipment condemned during 10-11	80461385		(ii) Unspent Balance of Specific Grants remained with AIIMS (Main)	408232569	860767003
iv) Less Books weeded out during 2010-11	4249		b) Scheme Cell	62074945	168733316
v) Less on account of furniture condemned during 2010-11	1797110		3 GPF BANK ACCOUNT	67558097	180803780
vi) Less on account of vehicle condemned during 10-11	929000	10330885907	4 NPS Bank Account	10867288	111781410
B) Oversight Committee Grant dg. 10-11	317500000	8734103764	5 Investment (Appendix-C)	3014594656	2275611889
3 Grant received from Ministry of Welfare for P.M.R. ADIP Scheme	1218	1218	6 Silver Jubilee Fund	200000	200000
4 Centralised Accident and Trauma Services	29142	29142	7 Sundry Debtors Scheme Cell (Appendix-B)	3476841	3287461
5 Diabetes Control	420000	420000	8 Misc. Deposits (Appendix-E)	330986	330986
6 AIDS	2400000	2400000	9 Recoverable Advances		
7 NON-INSTITUTE SCHEMES			i) Car	1806789	2536265
Unspent balance of grants received for specific purpose (APPENDIX-A)	473784355	437660749	ii) Motor Cycle-Scooter	1064104	1089163
8 Donated Vehicles			iii) Bicycle	129291	131031
a) Up to 2009-10	3036507	3036507	iv) Computer Advance	3391264	3847234
b) During 2010-11	693380		v) House Building Advance	14852641	15986718
c) Vehicle condemned dg10-11	221690	3508197	vi) Festival	1751675	
9 Donated books			10 Outside Recoveries		
a) Up to 2009-10	152608		11 Employee Insurance Scheme	814015	598481
b) During 2010-11	13630	166238	12 Furniture & Fixture (AIIMS)		
10 Donations (Appendix-C)	10902514	10902514	a) Upto 2009-2010	182079	
11 Miscellaneous Donations (Appendix-D)			b) During 2010-2011	2339116	
a) Up to 2009-10	2781276		c) Furniture condemned During 2010-2011	1797110	724085
b) Receipts during 2010-11	290450		13 Machinery & Equipment		
c) Less Expenditure During 2010-11	198250	2873476	A AIIMS (MAIN)		
12 Employees Insurance Schemes			a) Upto 2009-2010	4726236653	
			b) During 2010-2011	398578448	
			c) Equipment received during 2010-2011	610374508	
			d) Machinery Condemned during 2010-11	80461385	5654728224
			B AIDS	820600	820600
			C NACO Machinery & Equipment purchased	1932605	1932605

13	Outside Recoveries		41567597	46884192	14	Advance Payments				
14	Deposit Work				A	Material & Supply (Non-Plan)				
(a)	Starford India		1589098	1589098	a)	Upto 2009-2010	10368856			
			-		b)	During 2010-2011	13495899			
(b)	Rajgarhia Vishram Sadan		1483711	1483711	c)	Less Material & Supply received				
(c)	Surekha Vishram Sadan		1985	1985		During 2010-2011	16512244	7352511	10368856	
15	Security Deposits/ Earnest Money				B	For Foreign purchase of Machinery & Equipment (PLAN)				
a)	Upto 2009-10	92150129			a)	Upto 2009-2010	446022206			
b)	During 2010-11	39561396			b)	During 2010-2011	420062408			
c)	Payment against receipts Upto 2009-10	34131812			c)	Less equipment received During 2010-2011	610374508	255710106	446022206	
d)	Payment against receipts of year 2010-11	665000	96914713	92150129	C	Advance payment to P&AO for purchase of Building Material				
16	Caution Money				a)	Upto 2010-11		35479228	35479228	
a)	Upto 2009-10	1279133			D	Temporary Contingent Advance				
b)	Receipts during 2010-11	45300	1324433	1279133	a)	Upto 2009-2010	8541158			
17	G.P.F. Account (Appendix F)		2729734329	2353997245	b)	During 2010-2011	22974388			
18	NPS (Appendix F)		352767288	203681410	c)	Adjustment during 2010-2011 of previous year	7891094	23624452	8541158	
19	Pot Fund				E	Private Firms for stores				
i)	Upto 2009-10	1555792			a)	Upto 2009-2010	6455784			
ii)	During 2010-11	407585	1963377	1555792	b)	during 2010-2011	3037061			
20	N.A.C.O.				c)	Less adjustment during 2010-2011	5883525	3609320	6455784	
a)	Machinery & Equipment	-	1932605	1932605	F	Secretary, NDMC for security for electric connection		670950	670950	
21	Revolving funds				G	P. & AO (for procurement of stores)				
a)	Upto 2009-10	106643201			a)	Upto 2009-10	4611967			
i)	Receipt dg. 10-11	70164253			b)	During 2010-11	4000000			
ii)	Expenditure dg. 10-11	61303001	115504453	106643201	c)	Less adjustment during 2010-2011	5377710	3234257	4611967	
22	Post Partum Programme				H	Custom duty for Machinery & Equipment				
a)	Upto 2009-10	649830			a)	Upto 2009-10	50111963			
b)	Receipts during 2010-11	600000			b)	Add during 2010-2011	79870853	129982816	50111963	
c)	Expenditure during 2010-11	684780	565050	649830	I	For Books & Journals				
23	V.V.I.P.		120842	1207055	a)	Upto 09-10	64220729			
24	VVIP Care at Parliament House Annexe Upto 10-11		7600	7600	b)	Add during 10-11	37080547			
25	Cochelar Patient treatment A/c				c)	Adjustment of advances made in previous years	60528455	40772821	64220729	
	Upto 2009-10	26684126			J	For Cochelar Implant Patient Treatment A/c				
a)	Receipt dg. 10-11	36724000			a)	Upto 09-10	25369000			
b)	Expenditure dg. 10-11	37227550			b)	Add during 10-11	-			
c)	Expenditure against advance payment	25369000	811576	26684126	c)	Adjustment during 10-11	25369000	0	25369000	
26	Janani Suraksha Yojana(JSY) A/c				K	Central Public Works Department, SJHPD for Nallah		118000000	118000000	
a)	Upto 09-10	25000			L	Central Public Works Department, SJHPD for Dr.Hostel		1181250	1181250	
b)	Receipt dg. 10-11	26000			M	Central Public Works Department, SJHPD for construction of sub-station		5000000	5000000	
c)	Expenditure dg. 10-11	25000	26000	25000	N	M/s Delhi Metro Rail Corporation		60842700	60842700	
27	WHO-in-Country Fellowship A/c				O	New Delhi Municipal Corporation for augmenting L.T-Line in Eastern & Western Campus		12755500	12755500	
a)	Upto 09-10	1139271								
b)	Receipt dg. 10-11	-								
c)	Expenditure dg. 10-11	345012	794259	1139271						

P	New Delhi Municipal Corporation for HT Transformer and laying of cable	7463500	7463500
Q	Covering of Nallah	153383000	153383000
R	Central Public Works Department for Lift	14000000	14000000
S	Central Public Works Department for Surgical Ward	1711770	1711770
T	Caryair Equipment India Private limited for building construction	192602	192602
U	Indian Oil Corporation for Lubricant Diesel Oil	7895039	7895039
V	New Delhi Municipal Corporation for Building Construction	18733600	18733600
W	Upgrading Architectural cell of Engineering Services Department at AIIMS	45132	45132
X	Chief Controller of Accounts (M/s Deepak Elect. Co.) for Electric works	190890	190890
Y	Chief Controller of Accounts (M/s Sanico Ind.) for Electric works	98486	98486
Z	Chief Controller of Accounts (M/s Surya Roshni) for Electric works	266165	266165
AA)	M/s Blue Star Ltd.(for A/c works) for maintenance	1742488	1742488
AB)	M/s Blue Star Ltd.(for A/c works) for Const.	222853	222853
AC)	M/s Compton Greaves Ltd.(for Electric Works)	180807	180807
AD)	M/s Universal comfort (for A/c work)	1262512	1262512
AE)	M/s Carrier Air Conditioning (for A/c work)	2415422	2415422
AF)	M/s Videocon Ind. Ltd.(A/c work)	1083247	1083247
AG)	M/s Voltas Ltd. for A/c work	859688	859688
AH)	Chief Controller of Accounts for purchase of stores	3343957	3343957
AI)	M/s Inderprastha for CNG Pipeline	10405000	10405000
AJ)	Directorate General Supply & Disposal M/s Rashmi Industry for A/c work	2976242	2976242
AK)	M/s LG Elect. Split A/c for A/c & Electric Work	1192355	1192355
AL)	Ex. Engg. SJH(CPWD) for sewage Treatment plant	11344542	11344542
AM)	M/s Hitachi flames for A/c work)	1032950	1032950
AN)	M/s HSCC Ltd. for construction	1000000	1000000
AO)	Justice Lokeshwar Pd. for Arbitration fee	22201	22201
AP)	Registrar, Guru Govind Singh Univ. for consultancy fee	18000	18000
AQ)	M/s Indian Oil Corporation for lubricant Diesel Oil (minor work)	2487842	
AR)	M/s Indian Oil Corporation for lubricant Diesel Oil (major work)	457695	
AS)	M/s HSCC for preparation of Master Plan (major work)	105874500	
AT)	M/s HSCC for repair & renovation of RKAK OPD (major work)	136540015	
AU)	M/s HSCC for facilitation block (Major work)	14500000	

AV)	M/s HSCC construction of P.C. Teaching block (major work)		3000000	
AW)	M/s Alpine Industries for p/o AC units (Major work)		36918	
AX)	M/s Alpine Industries for p/o AC units (Minor work)		285376	
AY)	M/s Sidwal Refregration for p/o A/c units (minor work)		290518	
AZ)	M/s Sidwal Refregration for p/o A/c (Major work)		481289	
BA)	M/s Kohli & Co. for A/c (minor work)		253034	
BB)	M/s Videocon Ind. Ltd. For p/o A/C (Minor work)		59622	
BC)	M/s Anu Solar Power (P).Ltd. for A/c (minor work)		1495194	
BD)	M/s Anu Solar Power (P).Ltd. for A/c (major work)		6454930	
BE)	M/s Universal Comfort for A/c unit (minor work)		1513900	
BF)	M/s LG Elect. For p/o A/c (major work)		1310504	
BG)	M/s LG Elect. For p/o A/c (minor work)		335815	
BH)	Ex. Engg. SJH(CPWD) for sewage treatment plant (minor work)		12500000	
BI)	Ex. Engg. SJH(CPWD) for installation of additional lifts (major work)		4868896	
BJ)	Ex. Engg. CPWD for installation of lift at ward block (major work)		1000000	
BK)	Ex. Engg. CPWD for sewage treatment plant (major work)		10900000	
BL)	Ex. Engg. CPWD for covering of Nallah Phase-II (major work)		50000000	
BM)	Ex. Engg. AIIMS CPWD for const. of Hostel (major work)		5000000	
BN)	M/s Hitachi Homes Solutions for p/o A/c (minor work)		3823111	
BO)	M/s Hitachi Homes Solutions for p/o A/c (major work)		488308	
BP)	M/s Gurdev Singh Sons for A/c (minor work)		302357	
BQ)	M/s Usha International Ltd. for A/c (minor work)		315020	
15	Books & Publications			
i)	Books & periodicals (purchased)			
a)	Upto 2009-2010	226722956		
b)	During 2010-2011	16783481		
c)	Less books weeded out during 2010-11	4249		
c)	Adjustment of advances made in previous year	60528455	304030643	226722956
ii)	Books donated			
a)	Upto 2009-2010	152608		
b)	During 2010-2011	13630	166238	152608
16	Building Construction			
	AIIMS (Main)			
a)	Upto 2009-2010	2532421369		
b)	during 2010-2011	267850485	2800271854	2532421369
18	Advance Payment			
i)	Indian Iron & Steel Company		572139	572139
ii)	Tata Iron & Steel Company		654154	654154
iii)	Hindustan Steel Limited		520295	520295
iv)	Indian Iron & Steel Company		594000	594000
19	Land Account			
	Upto 2010-11		112832263	112832263
20	Vehicles			
A	Vehicle (purchased for AIIMS)			
a)	Upto 2009-2010	31944554		
b)	During 2010-11	-		

i)	Transport Office			
ii)	Hospital Store			
c)	Less Vehicles condemned during 10-11	929000	31015554	31944554
B	Vehicles donated for AIIMS			
a)	Upto 2009-10	3036507		
b)	During 2010-11	693380		
c)	Vehicle condemned dg10-11	221690	3508197	3036507
21	Hospital receipts recoverable from outside patients			
a)	Upto 2009-10	4295271		
b)	During 2010-11	4571061		
c)	Amount recovered during 2010-11	4487253	4379079	4295271
22	Amount recoverable from the cashier			
a)	Upto 2009-10	307426		
b)	Recovered from Cashier during 2010-11	307426	0	307426
23	Oversight Committee Major works Dg. 2010-11		317499700	

POOR PATIENT A/C

1	AIIMS (Main)			
a)	Opening Balance			
i)	Cash/Bank	1175983		
ii)	FDR's	984180		
b)	Receipts			
i)	Grants	367194		
ii)	Interest	42391		
iii)	Payments	109930		
c)	Closing Balance			
i)	Cash/Bank	1475638	1175983	
ii)	FDR's	984180	984180	

PATIENT TREATMENT ACCOUNTS

1	AIIMS			
a)	Opening Balance	49928749		
b)	Receipts			
(i)	Grants	72062707		
(ii)	Interest	2000738		
(iii)	Payments	59859552		
(iv)	Bank Charges	4430		
c)	Closing Balance	64128212	49928749	

HOSTELS

Security Deposits

i)	Upto 2009-10	1939780		
ii)	receipts during 2010-11	1415000		
iii)	less refunds during 2010-11	1127000	2227780	1939780

EXCESS OF INCOME OVER EXPENDITURE

1	AIIMS (Main)			
(i)	Upto 2009-10	303819792		
(ii)	Less Excess of Expd. over Income dg. 10-11	209304803	94514989	303819792
2	HOSTEL			
i)	Upto 2009-10	2176182		
ii)	During 2010-11	72098	2248280	2176182
	Sub-Total (A)	14655543924	12392749433	

POOR PATIENT A/C

1	AIIMS (Main)			
a)	Cash/Bank	1475638	1175983	
b)	FDR's	984180	984180	

PATIENT TREATMENT ACCOUNTS

AIIMS	64128212	49928749
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HOSTELS

1	Cash in hand	32881	18666
2	Cash at Bank	322179	304695
3	FDR's	4121000	3792601

DR. RAJENDER PRASAD CENTRE FOR OPHTHALMIC SCIENCES(B)

I Capital Grant from Govt. of India

i)	Upto 09-10	864299728
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1 CASH IN HAND

a)	Imprest	20000	20000
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ii)	During 10-11	220222246										
iii)	Furniture condemned during 10-11	68000	1084453974	864299728								
II	NPCB as per last year		25629000	25629000								
III	Donated vehicles (upto 10-11)		896357	896357								
IV	Vehicles purchased under DBCS/NPCB (upto 10-11)		455574	455574								
V	<u>NON RPC SCHEMES</u>											
1	<u>ABN AMRO Natra Raksha</u>											
i)	Upto 09-10	82080										
ii)	Rec. during 10-11	..										
iii)	Exp. during 10-11	..	82080	82080								
2	<u>Acuate Bacterial Conjectivities</u>											
i)	Upto 09-10	55633										
ii)	Rec. during 10-11	..										
iii)	Exp. during 10-11	55633	0	55633								
3	<u>Administrative Charges</u>											
i)	Upto 09-10	170598										
ii)	Rec. during 10-11	1658011										
iii)	Exp. during 10-11	585284	1243325	170598								
4	<u>Akrosoft (BAUCH & LOMB)</u>											
i)	Upto 09-10	798										
ii)	Rec. during 10-11	..										
iii)	Exp. during 10-11	798	0	798								
5	<u>AMD View Study</u>											
i)	Upto 09-10	9542949										
ii)	Rec. during 10-11	3972557										
iii)	Exp. during 10-11	3495439	10020067	9542949								
6	<u>Bacterial Corneal Ulcer</u>											
i)	Upto 09-10	104760										
ii)	Rec. during 10-11	97200										
iii)	Exp. during 10-11	200133	1827	104760								
7	<u>Brimiridine DS/DDS</u>											
i)	Upto 09-10	..										
ii)	Rec. during 10-11	208980										
iii)	Exp. during 10-11	20899	188081	..								
8	<u>Catract Patient (IOL)</u>											
i)	Upto 09-10	..										
ii)	Rec. during 10-11	556152										
iii)	Exp. during 10-11	315588	240564	..								
9	<u>Cloinical Evaluation AOD</u>											
i)	Upto 09-10	166552										
ii)	Rec. during 10-11	..										
iii)	Exp. during 10-11	74402	92150	166552								
10	<u>Clinical Evaluation on Blink & Clean (AMO)</u>											
i)	Upto 09-10	..										
ii)	Rec. during 10-11	50000										
iii)	Exp. during 10-11	50000										
11	<u>CGD in Primary Angle Closure Glacoma</u>											
i)	Upto 09-10	41445										
ii)	Rec. during 10-11	..										
iii)	Exp. during 10-11	..	41445	41445								
2	CASH AT BANK								64667551		57013488	
3	<u>RECOVERABLE ADVANCES</u>											
	a) <u>CAR</u>											
	i) Upto 09-10	134184										
	ii) Paid during 10-11	..										
	Recovered durng 10-11	35652						98532			134184	
	b) <u>SCOOTER</u>											
	i) Upto 09-10	38284										
	ii) Paid during 10-11	48000										
	iii) Recovered durng 10-11	24000						62284			38284	
	d) <u>H.B.A.</u>											
	i) Upto 09-10	1070945										
	ii) Paid during 10-11	..										
	iii) Recovered durng 10-11	228740						842205			1070945	
	e) <u>COMPUTER ADVANCE</u>											
	i) Upto 09-10	55500										
	ii) Paid during 10-11	90000										
	iii) Recovered durng 10-11	43500						102000			55500	
	f) <u>Festival Advance</u>											
	i) During 10-11	1001034										
	ii) Recovered during 10-11	567564						433470				
4	<u>Machinery & Equipment (PLAN)</u>											
	i) Upto 09-10	683267103										
	ii) During 10-11	42312873										
	iii) Received during 10-11	77061593										
	iii) M & E condemned during 10-11	-						802641569			683267103	
5	<u>Machinery & Equipment (Non-Plan)</u>											
	Upto 10-11							5872266			5872266	
6	<u>Capital Assets (Building)</u>											
	i) Upto 09-10	97518642										
	ii) During 10-11	15514496						113033138			97518642	
7	NPCB (M & E)								7002852		7002852	
8	ICMR (M & E)								605150		605150	
9	<u>Vehicles</u>											
	a) i) RPC Vehicles Up to 09-10	102982543										
	ii) Vehicle purchased 10-11	1606756						4589299			2982543	
	b) Donated Vehicles upto 10-11							1351931			1351931	
10	<u>Furniture & Fixtures</u>											
	i) Upto 09-10	2799076										
	ii) During 10-11	558173										
	iii) Furniture condemned during 10-11	3289249						2799076				
	during 10-11	68000										
11	Sundry Debtors								76253		76253	
12	<u>Advances Payment made to foreign purchases</u>											
	i) Upto 09-10	80175188										
	ii) During 10-11	175006602										
	iii) M & E received during 10-11 against adv. 09-10	77061593						178120197			80175188	
13	<u>Material & Supply (RPC)</u>											
	i) Upto 09-10	3082803										
	ii) Advances payment made to foreign purchase 10-11	16508202										
	iii) Material received (-) during 10-11	14979927						4611078			3082803	

12	CRP			
i)	Upto 09-10	1194		
ii)	Rec. during 10-11	..		
iii)	Exp. during 10-11	1194	0	1194
13	CSIR			
i)	Upto 09-10	..		
ii)	Rec. during 10-11	2766856		..
iii)	Exp. during 10-11	2766856	0	
14	DBT/MA			
i)	Upto 09-10	211848		
ii)	Rec. during 10-11	..		
iii)	Exp. during 10-11	211848	0	211848
15	DCDRF			
i)	Upto 09-10	..		
ii)	Rec. during 10-11	10000		
iii)	Exp. during 10-11	10000	0	..
16	DEGAS			
i)	Upto 09-10	313636		
ii)	Rec. during 10-11	926550		
iii)	Exp. during 10-11	922073	318113	313636
17	DME			
i)	Upto 09-10	387595		
ii)	Rec. during 10-11	1052055		
iii)	Exp. during 10-11	1180927	258723	387595
18	DNB Examination			
i)	Upto 09-10	5000		
ii)	Rec. during 10-11	..		
iii)	Exp. during 10-11	..	5000	5000
19	DST (CYCLO)			
i)	Upto 09-10	22186		
ii)	Rec. during 10-11	..		
iii)	Exp. during 10-11	22186	0	22186
20	DST Evaluation Tear fluid			
i)	Upto 09-10	..		
ii)	Rec. during 10-11	375000		
iii)	Exp. during 10-11	375000	0	..
21	DST/FIST			
i)	Upto 09-10	..		
ii)	Rec. during 10-11	250000		
iii)	Exp. during 10-11	250000	0	..
22	ENDURE			
i)	Upto 09-10	..		
ii)	Rec. during 10-11	545400		
iii)	Exp. during 10-11	375780	169620	..
23	ESG Evaluation Study on Glaucoma			
i)	Upto 09-10	5800		
ii)	Rec. during 10-11	..		
iii)	Exp. during 10-11	5800	0	5800
24	FAMESTUDY			
i)	Upto 09-10	1325390		
ii)	Rec. during 10-11	615075		
iii)	Exp. during 10-11	1940465	0	1325390
25	FTG			
i)	Upto 09-10	..		
ii)	Rec. during 10-11	189595		
iii)	Exp. during 10-11	119698	69897	..

26	<u>High Precision Bio</u>			
	<u>Analitical (HP-BAF)</u>			
i)	Upto 09-10	93810		
ii)	Rec. during 10-11	412421		
iii)	Exp. during 10-11	233851	272380	93810
27	<u>ICMR</u>			
i)	Upto 09-10	3020778		
ii)	Rec. during 10-11	12081998		
iii)	Exp. during 10-11	5199984	9902792	3020778
28	<u>INDEGEN (LSTM)</u>			
i)	Upto 09-10	146744		
ii)	Rec. during 10-11	..		
iii)	Exp. during 10-11	20897	125847	146744
29	<u>Indeye</u>			
i)	Upto 09-10	3559		
ii)	Rec. during 10-11	..		
iii)	Exp. during 10-11	3559	0	3559
30	<u>INMAS Biomedical Dispensing Products</u>			
i)	Upto 09-10	399958		
ii)	Rec. during 10-11	460000		
iii)	Exp. during 10-11	859958	0	399958
31	<u>INMAS Human Pharamacology</u>			
i)	Upto 09-10	5549		
ii)	Rec. during 10-11	475000		
iii)	Exp. during 10-11	480549	0	5549
32	<u>LCIF</u>			
i)	Upto 09-10	3044		
ii)	Rec. during 10-11	..		3044
iii)	Exp. during 10-11	3044	0	
33	<u>LUX 201 Omnicare</u>			
i)	Upto 09-10	974600		
ii)	Rec. during 10-11	187704		
iii)	Exp. during 10-11	147930	1014374	974600
34	<u>Lux 211- PRA International</u>			
i)	Upto 09-10	47810		
ii)	Rec. during 10-11	..		
iii)	Exp. during 10-11	47810	0	47810
35	<u>MA Foundation</u>			
i)	Upto 09-10	..		
ii)	Rec. during 10-11	308400		
iii)	Exp. during 10-11	158681	149719	..
36	<u>MBDL ILLYLILLY</u>			
i)	Upto 09-10	32057		
ii)	Rec. during 10-11	207720		
iii)	Exp. during 10-11	239777	0	32057
37	<u>M.K. Media Corneal Transplant (Min. of Finance)</u>			
i)	Upto 09-10	1318716		
ii)	Rec. during 10-11	..		
iii)	Exp. during 10-11	556388	762328	1318716
38	<u>Multifocal IOL</u>			
i)	Upto 09-10	4675		
ii)	Rec. during 10-11	..		
iii)	Exp. during 10-11	4675	0	4675
39	<u>NAB</u>			
i)	Upto 09-10	769713		
ii)	Rec. during 10-11	500000		
iii)	Exp. during 10-11	261065	1008648	769713

40	<u>Neema International pilot study</u>			
i)	Upto 09-10	14343		
ii)	Rec. during 10-11	..		
iii)	Exp. during 10-11	14343	0	14343
41	<u>Novartis Shield study</u>			
i)	Upto 09-10	87300		
ii)	Rec. during 10-11	157500		
iii)	Exp. during 10-11	237930	6870	87300
42	<u>Noverties PDT - VISUDUNE</u>			
i)	Upto 09-10	5392		
ii)	Rec. during 10-11	179551		
iii)	Exp. during 10-11	184943	0	5392
43	<u>NPCB DOS Training</u>			
i)	Upto 09-10	..		
ii)	Rec. during 10-11	976050		
iii)	Exp. during 10-11	470501	505549	..
44	<u>NPCB Eye Camp Godda Jharkhand</u>			
i)	Upto 09-10	..		
ii)	Rec. during 10-11	248642		
iii)	Exp. during 10-11	248642	0	..
45	<u>NPCB/DBCS</u>			
i)	Upto 09-10	12600		
ii)	Rec. during 10-11	877250		
iii)	Exp. during 10-11	115600	774250	12600
46	<u>NPCB-NSU</u>			
i)	Upto 09-10	..		
ii)	Rec. during 10-11	300000		
iii)	Exp. during 10-11	10000	290000	..
47	<u>NPCB SSU</u>			
i)	Upto 09-10	1930		
ii)	Rec. during 10-11	303385		
iii)	Exp. during 10-11	163250	142065	1930
48	<u>OEU</u>			
i)	Upto 09-10	155330		
ii)	Rec. during 10-11	340054		
iii)	Exp. during 10-11	378852	116532	155330
49	<u>ORBIS PECP</u>			
i)	Upto 09-10	43452		
ii)	Rec. during 10-11	114956		
iii)	Exp. during 10-11	87268	71140	43452
50	<u>Pharmacokinetic Quinacrine</u>			
i)	Upto 09-10	..		
ii)	Rec. during 10-11	443765		
iii)	Exp. during 10-11	154313	289452	..
51	<u>Phase II age related macular degeneration monet Study (ARMD)</u>			
i)	Upto 09-10	218727		
ii)	Rec. during 10-11	849815		
iii)	Exp. during 10-11	839650	228892	218727
52	<u>Polyherbal evaluation Collabrative Study ONDRY EYE STNDROME (DES)</u>			
i)	Upto 09-10	2323		
ii)	Rec. during 10-11	..		
iii)	Exp. during 10-11	2323	0	2323
53	<u>Posudurex Allergan International</u>			
i)	Upto 09-10	790842		
ii)	Rec. during 10-11	358262		
iii)	Exp. during 10-11	243940	905164	790842
54	<u>PVD/VRT Study</u>			
i)	Upto 09-10	936058		
ii)	Rec. during 10-11	..		
iii)	Exp. during 10-11	936058	0	936058
55	<u>Reliance Relinatra</u>			
i)	Upto 09-10	74275		
ii)	Rec. during 10-11	80100		
iii)	Exp. during 10-11	154375	0	74275

56	ROP Macugen				
i)	Upto 09-10	2335			
ii)	Rec. during 10-11	..			
iii)	Exp. during 10-11	2335	0	2335	
57	ROP Workshop				
i)	Upto 09-10	27619			
ii)	Rec. during 10-11	187042			
iii)	Exp. during 10-11	214661	0	27619	
58	Sight Savers				
i)	Upto 09-10	165577			
ii)	Rec. during 10-11	583750			
iii)	Exp. during 10-11	749327	0	165577	
59	SSML-VFA				
i)	Upto 09-10	..			
ii)	Rec. during 10-11	585864			
iii)	Exp. during 10-11	269984	315880	..	
60	Symposium Workshop				
i)	Upto 09-10	800			
ii)	Rec. during 10-11	60000			
iii)	Exp. during 10-11	60800	0	800	
61	Treatment of dry eye				
i)	Upto 09-10	28400			
ii)	Rec. during 10-11	..			
iii)	Exp. during 10-11	28400	0	28400	
62	WHO GS				
i)	Upto 09-10	15956			
ii)	Rec. during 10-11	..			
iii)	Exp. during 10-11	15956	0	15956	
63	WHO SEIND DSTG				
i)	Upto 09-10	12050			
ii)	Rec. during 10-11	..			
iii)	Exp. during 10-11	12050	0	12050	
64	WHO Short term Training Programme				
i)	Upto 09-10	1191			
ii)	Rec. during 10-11	..			
iii)	Exp. during 10-11	1191	0	1191	
65	Workshop				
i)	Upto 09-10	31600			
ii)	Rec. during 10-11	..			
iii)	Exp. during 10-11	..	31600	31600	
VI	NIAF				
i)	Upto 09-10	1234565			
ii)	Rec. during 10-11	30000			
iii)	Exp. during 10-11	3372	1261193	1234565	
VII	NPCB				
i)	Upto 09-10	..			
ii)	Rec. during 10-11	4000000			
iii)	Exp. during 10-11	3999173	827	..	
VIII	Refund of Security deposits				
i)	Upto 09-10	2071000			
ii)	Rec. during 10-11	35000			
iii)	Exp. during 10-11	285000	1821000	2071000	
IX	A.I.I.M.S. Remittance				
	As per last year	214290			
	Add during 2010-11	1500	215790	214290	
X	Outside Recoveries				
	Upto 10-11		11288	11288	
	POOR PATIENT A/C				
1	Cash	104014			
					POOR PATIENT A/C
2	Receipts				Cash/Bank
	i) Interest	5507			186104
	ii) Donation	174295			104014
	iii) Misc Receipts	497			
	iii) Payments	98209			
3	Closing Balance		186104	104014	
XI	Excess of Income Over Expenditure				
i)	Upto 09-10	26367829			
ii)	During 10-11	16661818	43029647	26367829	
	Sub-Total (B)		1187605128	943170222	
					1187605128
					943170222

CARDIO-THORACIC & NEURO SCIENCES CENTRE (C)

1	Amount due but not paid (Cashier)				1	<u>Cash in hand</u>			
i)	Office contingency		1000		a)	Imprest (CNC Cashier) 2010-11		41000	40000
2	<u>Capital Grant from Govt. of India</u>				b)	Amount due but not paid			1000
i)	Upto 2009-2010	3316752096			2	Cash at Bank		171455298	168444476
ii)	During 2010-11	592524468			3	<u>Recoverable Advance</u>			
iii)	Less Machinery Condemed	197140			a)	Computer		846450	785350
iv)	Less Furniture Condemed	664962			b)	Car 696544		613864	
v)	Less S.O. No.100/52 & 100-54CNC CTVS/09-10/St.	7735325	3900679137	3316752096	c)	Cycle		-	-
3	Amount transfer from IRCH		1478400	1478400	d)	Scooter		772212	953820
4	Cost of the vehicle donated by Sai Bhakta Samaj		613384	613384	e)	House Building Advance		6146510	6601555
5	CT Patient A/c Machinery & Equipment Transfer Sai Bhakta Samaj		49025000	49025000	f)	Festival Advance		721660	
6	<u>Neurology Patient A/c</u>				4	<u>Machinery & Equipment</u>			
i)	Upto 2009-10	21893498			i)	Upto 2009-10	2637005214		
ii)	Receipt during 2010-11	15034509			ii)	During 10-11	62952864		
iii)	Less refund/Exp. 2010-11	14416146	22511861	21893498	iii)	Spares & Accessories of Machinery & Equipment	20678764		
7	<u>Outside recoveries/ Institute Recovery</u>				iv)	Mach. & Equip. Recd. Agt. Advance Payment	464489345		
i)	Upto 2009-10	303045			v)	Mach. Condmed	197140	3184929047	2637005214
ii)	during 2010-11	125	303170	303045	5	Machinery & Equipment Transfer From CT Patient A/C		49025000	49025000
8	<u>Donations</u>				6	<u>Advance payment for Foreign purchase</u>			
i)	Upto 2009-10	2360242			a)	<u>Machinery & Equipment</u>			
ii)	Receipt during 2010-11	6020			i)	Upto 2009-10	151833430		
ii)	Less expenditure 2010-11	272190	2094072	2360242	ii)	Less S.O. NO.100-52 & 100-54/ CNC/CTVS/ 09-10 St.	7735325		
9	<u>Security Deposits</u>				iii)	During 10-11	458864463		
i)	Upto 2009-10	28014964			iv)	Less equip. recd. 10-11	464489345	138473223	151833430
ii)	Receipt during 2010-11	10110000			7	<u>Building construction/ Minor work</u>			
iii)	Less refund	6634000	31490964	28014964	i)	Upto 2009-10	243491533		
10	<u>Thallium</u>				ii)	During 2010-11	42103117	285594650	243491533
i)	Upto 2009-10	773682			8	Advance against works		174596762	174596762
ii)	During 2010-11	1799000			9	<u>Amount due from outside patients</u>			
iii)	Less Expenditure 2010-11	168525	2404157	773682		Upto 2009-10	1452545		
11	<u>Heart Transplant Donation</u>					During 2010-11	153635		
i)	Upto 2009-10	274919				Less amount Recd.	-	1606180	1452545
ii)	During 2010-11	-			10	<u>Vehicles</u>			
iii)	Less Expenditure		274919	274919	i)	Ambulance ORBO		1305522	2025954
12	<u>Lab Test</u>				11	Furniture & Fixture			
i)	Upto 2009-10	5748828			i)	Upto 2009-10	2010467		
ii)	During 2010-11	6864220			ii)	During 2010-11	1258424		
iii)	Less Expenditure 2010-11	9526353	3086695	5748828	iii)	Furniture condemned	664962	2603929	2010467
13	<u>Cardiac Test</u>								
i)	Upto 2009-10	6220125							
ii)	During 2010-11	4326420							
iii)	Less Expenditure 2010-11	3335063	7211482	6220125					
	POOR PATIENT A/C					POOR PATIENT A/C			
1	N.S. Centre				1	N.S. CENTRE			
a)	Cash/Bank	104900			a)	Cash/Bank		101932	104900
b)	Donations	6232							
c)	Payments	9200							
d)	Closing Balance		101932	104900					

C.T. PATIENT A/CC.T. PATIENT A/C

1	Fixed Deposits	299400000	306900000
2	Cash at Bank	21625780	19675665

ANGIOGRAPHY PATIENT A/CANGIOGRAPHY PATIENT A/C

1	Cash recoverable from Sh. Dal Chand Verma, Cashier	3245441	3245441
2	Fixed Deposits	79200000	74300000
3	Cash at bank	14744516	13114110

GAMMA KNIFE PATIENT A/CGAMMA KNIFE PATIENT A/C

1	Fixed Deposit	126400000	136800000
2	Cash at Bank	57268485	27927424

NEURO SURGERY PATIENT A/CNEURO SURGERY PATIENT A/C

1	Fixed Deposits	31800000	31800000
2	Cash at bank	9915213	3410417

EXCESS OF INCOME OVER EXPENDITUREEXCESS OF EXPENDITURE OVER INCOME

1	<u>C.N.C.</u>			
a)	upto 09-10	5421787		
2	C.T. PATIENT A/C			
i)	Upto 2009-10	326575665		
ii)	less excess of expenditure over income 10-11	3295472		
iii)	Less fresh cheques issued against cancelled cheques	2254413	321025780	326575665
3	ANGIOGRAPHY PATIENT A/C			
i)	Upto 2009-10	90659551		
ii)	Excess of income over expenditure 2010-11	7105771		
iii)	Less fresh cheques issued against cancelled cheques	575365	97189957	90659551
4	GAMMA KNIFE PATIENT A/C			
i)	Upto 2009-10	164727424		
ii)	during 2010-11	18941061	183668485	164727424
5	NEURO SURGERY PATIENT A/C			
i)	Upto 2009-10	35210417		
ii)	Excess of income over expenditure 2010-11	6711877		
iii)	Less Fresh Cheques	207081	41715213	35210417
	Sub-Total (C)	4664874608	4056158927	

1	<u>C.N.C.</u>			
i)	During 2010-11	7781041		
ii)	less excess of income over expenditure dg.09-10	5421787	2359254	

Dr. B.R.A. INSTITUTE ROTARY CANCER HOSPITAL (D)

1	Capital Grant Upto 2009-10	1436005599	1436005599	
	Add During 2010-11	134668296	1570673895	
2	R.T. Revolving Fund		7519953	
(i)	Upto 2009-2010	7519953		
(ii)	Add during 2010-2011	2824110		
(iii)	Less payment during 2010-11 (-)	4416053	5928010	
3	Medical Oncology Fund		1993655	
(i)	Upto 2009-2010	1993655		
(ii)	Add during 2010-2011	609725		
	Less payment during 2010-11 (-)	1144373	1459007	
4	EMD & Security Deposit			
(i)	During 2010-11	174000		
(ii)	Less Payment Dg. 2010-11	10000	164000	

1	<u>Cash at Bank</u>	28911048	46936817
2	<u>Capital works</u>		
a)	Upto 2009-2010	25051399	
b)	During 2010-11	3523029	28574428
3	<u>Computer Advance</u>		
(i)	Upto 09-10	285777	
(ii)	During 10-11	60000	
(iii)	Less recoveries dg. 2010-11	69800	275977
4	<u>House Building Advance</u> upto 2010-11	87750	262321
5	<u>Car/Scooter Advance</u>		
i)	Upto 2009-10	174571	
ii)	Add during 2010-11	60000	
iii)	Less recoveries during 10-11	120816	113755
6	<u>Advance Payment Machinery & Equipment</u>		
a)	Upto 2009-2010	65784804	

b)	Add during 2010-11	90877918		
c)	Less Adjustment of Advances (LCs)			
	During 2010-11	83406362	73256360	65784804
7	Fixed Assests			
	Machinery & Equipment			
a)	Upto 2009-10	984259797		
b)	Add during 2010-2011	15235705		
c)	Add Spare & accessories			
	during 10-11	13413900		
d)	Add adjustment of advances			
	(LCs) during 2010-11	83406362		
e)	Add. Custom duty adjusted			
	during 10-11	9428110	1105743874	984259797
8	Security Deposited NDMC		2626000	2626000
9 (i)	Building Construction			
	Upto 2010-11		294456915	294456915
10	Vehicle			
a)	Upto 2009-10	1741416		
b)	Less during 10-11	138334	1603082	1741416
11	Furniture & Fixture			
a)	Upto 2009-10	11093772		
b)	Less during 2010-11	173575	10920197	11093772
12	Advance payment to			
	Custom Duty & PDA Account			
(i)	Upto 2009-10	15197690		
(ii)	Add during 2010-11	15415762		
(iii)	Less Custom Duty adjusted			
	during 2010-11	9428110	21185342	15197690
13	Festival Advance			
(i)	During 2010-11	312300		
(ii)	Less Recoveries dg.2010-11	180300	132000	

	Poor Patient A/c			
	Dr. B.R.A.I.R.C.H.			
a)	Cash/Bank	2419552		
b)	Receipts			
	i) Grants	442981		
	ii) Interest	316840		
	iii) Excess Credited	2000		
	iv) Payments	634962		
c)	Closing Balance			
	Cash/Bank		2546411	2419552

	Poor Patient A/c			
	Dr. B.R.A.I.R.C.H.			
a)	Cash/Bank		2546411	2419552

	Patient Treatment A/c			
	Dr. B.R.A.I.R.C.H.			
a)	Opening Balance	32686499		
b)	Short term investment			
c)	FDR	6000000		
d)	Receipts			
	i) Grants	36393493		
	ii) Cheque Cancelled	114324		
	iii) Dly. Interest			
	iv) Interest	4589		
	v) Payments	38089221		
	vi) Miscellaneous Payments	362700		
c)	Closing balance			
	i) Cash/Bank		30746984	26686499
	ii) Short term investment			
	iii) FDR's		6000000	6000000

	Patient Treatment A/c			
	Dr. B.R.A.I.R.C.H.			26686499
a)	Cash/Bank		30746984	
b)	Short term investment			
c)	FDR	6000000	6000000	

	HMCPF A/c			
	Opening Balance	40463		
	Receipt	3000000		
	Refund	20550		
	Payment	2063808		
	Misc.	650	996555	40463

	HMCPF A/c			
	Cash/Bank		996555	40463

EXCESS OF INCOME OVER EXPENDITURE

i) Upto 2009-10			2177501
Sub-Total (D)	1618514862	1482843222	

EXCESS OF EXPENDITURE OVER INCOME

During 2010-11	12515685		
Less Excess of income over Expenditure 2009-10	2177501	10338184	
		1618514862	1482843222

NATIONAL DRUG DEPENDENCE TREATMENT CENTRE & UNDCP PROJECT (E)

1 Capital fund upto 2009-10	156408827		
a) Capital funds dg. 2010-11	10273175	166682002	156408827
b) Machinery & Equipment			
c) Furniture			
d) Books & Publication			
e) Bks & Pub. Adv.			
f) Custom Duty Adv.			
2 Institute Recovery			
i) Upto 2009-10	113215		
ii) 2010-11		113215	113215
3 Security Deposit			
a) Upto 2009-10	255000		
b) Refund 2010-11 (-)	5000	250000	255000

1 Cash at Bank		1257618	11047879
2 <u>Machinery & Equipment</u>			
a) Upto 2009-10	30063564		30063564
b) During 2010-2011	4112197	34175761	
3 Books & Publication			
a) Upto 2009-10	15622659		15622659
b) During 2010-11	2961748	18584407	
4 <u>Furniture & Fixture</u>			
a) Upto 2009-10	3478648		3478648
b) During 2010-11		3478648	
5 <u>Building Construction</u>			
a) Upto 2009-10	101953715		101953715
b) During 2010-11		101953715	
6 <u>Vehicle</u>			
a) Upto 2009-10	5653867		5653867
b) During 2010-11	3379234	9033101	
c) Vehicle condemned			
7 Outside recovery			
a) Upto 2009-10	40708		40708
b) During 2010-11		40708	
8 Car Advance			
a) Upto 2009-10			
b) During 2010-11			
9 Advance for Material & Supply			
a) Upto 2009-10	365000		365000
b) 2010-11	48932		
c) Less Mat.& Supply Recvd. during 10-11	200000	213932	

NATIONAL DRUG DEPENDENCE TREATMENT CENTRE (N.D.D.T.C.) (UNDCP PROJECT)

Opening balance	464680	239532	
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EXCESS OF INCOME OVER EXPENDITURE

1 NDDTC			
Upto 2009-10	11448998		
Less excess of expd. Over income during 2010-11	9756325	1692673	11448998
2 N.D.D.T.C. (UNDCP Project)		7010068	225148
Sub-Total (E)	176212638	168690720	

NATIONAL DRUG DEPENDENCE TREATMENT CENTRE (N.D.D.T.C.) (UNDCP PROJECT)

Closing Balance	7474748	464680	
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J.P.N. APEX TRAUMA CENTRE (F)

1 <u>Capital Grants from Govt. of India</u>			1652230986
(i) Upto 09-10	1652230986		
(ii) Receipt During 10-11	409064414	2061295400	
2 Security deposit			
(i) Upto 2009-10	4479968		
(ii) Receipt During 2010-11	7648000		
(iii) Less Refund during 2010-11 (-)	5970000	6157968	4479968
3 (PT A/C, ATLS)			
(i) Upto 2009-10	4717885		

1 Cash at Bank		21126261	7809730
<u>Construction of Building</u>			
Advance Paid to M/S HSCC121912064			
Add. During 10-11	13500000		
Adjustment Received (-)	128912064	6500000	121912064
Security deposite to NDMC		5979000	
Security Deposite with IGL		1304680	
Advance Payment to "TRIGEN" (Min. of Power as per MOU)		1170000	

(ii)	Less from Ledger Dg.10-11	3874913	842972	4717885	2	<u>Machinery & Equipment</u>			
						Advance Payment made for foreign purchase upto 09-10	89895594		
						During 10-11	184766328		
						Less Adv. Adjusted 10-11 (-)199403844		75258078	89895594
						<u>Custom Duty Adv.</u>			
					(i)	upto 09-10	5921400		
					(ii)	during 10-11	70000000		
					(ii)	Less Adjusted during 10-11 (-)17499376		58422024	5921400
						<u>PDA Advance</u>			
					i)	upto 09-10	1069730		
					(i)	Adv. During 10-11	500000		
					(ii)	Less Adjusted dg.10-11	971885	597845	1069730
					3	<u>Construction Building</u>			
						Account transf.from AIIMS	449825743		449825743
						Capital works			63082590
					i)	upto 09-10	63082590		
					ii)	during 10-11	21279035		
						Adj. recvd from M/S HSCC	128912064	663099432	
						Land A/C transferred AIIMS	9900000		9900000
						payment made in 09-10	44410794	54310794	44410794
						Festival Advance	30000		
						Less Recovered	9600	20400	
					4	<u>Machinery & Equipments</u>			
					(i)	upto 09-10	851356650		
					(ii)	during 10-11	110222922		
					(iii)	M & E received 10-11	199403844	1160983416	851356650
						Custom duty			
					i)	upto 09-10	46173969		
					ii)	during 10-11	17499376	63673345	46173969
						PDA			
					i)	upto 09-10	2001690		
					ii)	during 10-11	971885	2973575	2001690
						Furniture & Fixture			
					i)	upto 09-10	6331865		
					ii)	during 10-11	342449	6674314	6331865

EXCESS OF INCOME OVER EXPENDITURE

i)	upto 2009-10	38262980			
ii)	add from Ledger 10-11	15533844	53796824	38262980	
	Sub-Total (F)		2122093164	1699691819	
					2122093164 1699691819

CENTRE FOR DENTAL EDUCATION AND RESEARCH (G)

1	<u>Capital Grant</u>				1	Cash in Hand	5000	5000
(i)	Upto 09-10 transferred from AIIMS Main A/c	459260204			2	Cash at bank	9822091	2107815
(ii)	During 2010-11	28000000	487260204	459260204	3	<u>Machinery & Equipment</u>		
					(i)	Upto 2009-10	132122259	
					(ii)	During 2010-11	22067175	
2	<u>Security Deposits</u>				(iii)	Add Machinery & Equipment received against advances during 2009-10	25438345	179627779
(i)	Upto 2009-10	2780915						132122259
(ii)	During 10-11	755000			4	<u>Advance Payment made to foreign purchases</u>		
(iii)	Less refunded during 2010-11	1094825	2441090	2780915	(i)	Upto 2009-10	25438345	
					(ii)	During 2010-11	-	
					(iii)	Less advances adjusted during 2010-11	25438345	0
								25438345

5	Building			
(i)	Upto 09-10 transferred from	253993864		
	AIIMS Main A/c			
(ii)	During 10-11	5770563		
(iii)	Capital Works against			253993864
	advance payment	40000	259804427	
6	Advance paid to HSCC		45668116	45668116
(i)	Adv.paid toNDMC upto09-10	2404500		2404500
(ii)	Less Adjusted 2010-11	40000	2364500	
(iii)	Security Deposite to NDMC		3040000	3040000
(iv)	Advance paid to DGS&D upto2010-11		469471	469471
(v)	Advance paid to Voltas upto 10-11		184589	184589

EXCESS OF INCOME OVER EXPENDITURE

i)	Upto 09-10	3392840		
ii)	During 2010-11	7891839	11284679	3392840
	Sub-Total (G)		500985973	465433959
	GRAND TOTAL (A) TO (G)		24925830297	21208738302

Note:

- 1 The accounts have been prepared on actual Receipts and Expenditure basis.
- 2 No depreciation on Machinery & Equipment, vehicles etc. has been provided as the Institute is fully funded by the Govt. of India.
- 3 A statement showing the expenditure made by various Project Investigators during 2010-11 is attached at Appendix-A-I. It may be mentioned that on completion of Research Projects, the equipments are either returned to the funding agencies or used in the Departments.
- 4 Institute is exempted from Income-Tax under Section 8G(5)(vi) of the Income Tax Act, 1961.
- 5 The amount shown under four patient Accounts viz. C.T. Patient A/c, Angio Patient A/c, N.S. Patient Account and Gammaknife Patient A/c on the asset side of the Balance Sheet represents the amount as "Excess of Income over Expenditure" and the same is invested in term deposits. The amount is accumulated during the previous years on introduction of package charges in the year 1995. Package was introduced for convenience of patients and to ensure that quality products are used at reasonable rates. The package rates included service charges and ICU charges which were approved by Standing Finance Committee and ratified by Governing Body. Later on it was decided not to levy such charges from the patients and was withdrawn in the year 2000. During that period(1995-2000) accumulated balance amount and also the earned interest were invested in term deposit. A part of the interest only has however been utilised for treatment of poor patients as is reflected in the Receipt & Payment Account. The accumulated balance has not been utilised during the years as such in the absence of a guideline regarding its utilisation. Issue regarding the use of accumulated balances on account of user charges and interest thereon was discussed in the SFC meeting held on 11.11.2010, wherein it was decided that all the Centres will prepare their sub-budget (from the financial year 2011-12 onwards) before the consolidated budget for the Institute is prepared. In this budget C. N. Centre may propose to use the accumulated balances for their planned development activities under Plan head. The same has been ratified by the Governing Body on 27.11.2010. Accordingly, C.N. Centre for the current financial year 2011-12 has proposed to utilise Rs.6.00 crore out of the accumulated lance during the current financial year 2011-12 in their sub-budget under Plan head.
- 6 An amount of Rs.5.51crore was sanctioned by the Ministry of Health & Family Welfare for making the payment towards manpower requirement under recommendations of the Oversight Committee for the year 2010-2011 on 30.3.2011 and cheque was prepared by the Ministry on 31.3.2011 for transfer to AIIMS through ECS. Accordingly expenditure has been incurred and shown against head Oversight Committee in Receipt & Payment A/c and Income & Expenditure A/c for the year 2010-11. Credit for the same has been afforded by the bank on 04.4.2011 (2011-12) and shall be accounted for during the year 2011-12.
- 7 Separate Receipt & Payment and Balance Sheet of General Provident Fund has been shown at Appendix F 1 in continuance of the Balance Sheet of the AIIMS.
- 8 Recoverable Festival Advance has also been shown in Balance Sheet on Asset side.

Financial Advisor

Senior Financial Advisor

Director

ALL INDIA INSTITUTE OF MEDICAL SCIENCES**STATEMENT SHOWING THE EXPENDITURE OF THE GRANT RECEIVED
FOR THE SPECIFIC PURPOSE FOR THE YEAR 2010-11**

No.	Funding Agency	Opening Balnce		Receipt	Total_Reciept	Expenditure	Adjustments		Balance	
		Credit	Debit				Credit	Debit	Credit	Debit
1	ICMR	56,888,534.00		181,090,998.00	237979532.00	157685192.00			80294340.00	
2	C.S.I.R.	14,910,029.00		32,739,205.00	47649234.00	30693720.00			16955514.00	
3	DST	63,746,654.00	43,534,555.00	107281209.00	59862227.00			47418982.00		
4	UNICEF	278,421.25			278421.25				278421.25	
5	D.B.T.	123,078,183.00		138,095,673.00	261173856.00	120730591.00			140443265.00	
6	W.H.O.	14,278,963.00		2,737,178.00	17016141.00	2827981.00			14188160.00	
7	U.G.C.	2,331,957.00		8,191,428.00	10523385.00	3172689.00			7350696.00	
8	Ministry of Health and Family welfare	3,757,843.00		1,989,487.00	5747330.00	4864457.00			882873.00	
9	Ministry of Environ ment & Forest	8,818.00		853,458.00	862276.00	689950.00			172326.00	
10	Dabur Research Foundation	563,164.00			563164.00	54586.00			508578.00	
11	DEPTT. OF ELECTRONICS	56,370.00			56370.00				56370.00	
12	Himalaya Drug Co.	74,494.00			74494.00				74494.00	
13	International Atomic Energy Agency	1,599,938.00		1,218,501.00	2818439.00	1172143.00			1646296.00	
14	Convatee Sayibb	2,328.00			2328.00				2328.00	
15	Rajiv Gandhi Foundation		-989.00		-989.00					-989.00
16	Directorate of Education (NSS)	70,558.00			70558.00	40960.00			29598.00	
17	Torrent Pharma	49,741.00		1,500,000.00	1549741.00	199741.00			1350000.00	
19	INDO-US	749,033.00			749033.00				749033.00	
20	Ford Foundation	458,594.00			458594.00				458594.00	
21	Fulford India Ltd.	17,255.00		721,000.00	738255.00	463732.00			274523.00	
22	National Thalassaemia Welfare Society	47,945.00		114,200.00	162145.00	91126.00			71019.00	
23	INCLN		-361.00		-361.00	118007.00				-118368.00
24	Institute of Cancer Research UK co-ordination Committee		-5,625.00		-5625.00	1584.00				-7209.00
25	Central Council for Research in Yoga And Naturopathy	673,666.00		643,537.00	1317203.00	988449.00			328754.00	
26	Ranbaxy /Elililly & company pvt Ltd	2,723,437.00		356,900.00	3080337.00	1216994.00			1863343.00	
27	NATIONAL INSTITUTE OF HEALTH, USA	4,476,030.00		4,733,221.00	9209251.00	2565612.00			6643639.00	
28	NIE	22,749,841.00		15,638,717.00	38388558.00	5723256.00			32665302.00	
29	Sarabhai Chemicals				0.00	4868.00				-4868.00
30	INSA	25,331.00			25331.00				25331.00	
31	SRB-Clinical Pharamacology		-3,154,100		-3154100.00					-3154100.00
32	Panacea biotech Ltd.	30,290.00		148,500.00	178790.00	150914.00			27876.00	
33	Revolving Funds for Drugs. / SNMC	195,710.00			195710.00				195710.00	
34	Atomic Energy Regulatory Board	387,629.00			387629.00	-16000.00			403629.00	
35	Pfizer Ltd.	2,318,913.85		1,358,390.00	3677303.85	1795085.00			1882218.85	

36	NATCO Pharma India	359,245.00			359245.00	334666.00			24579.00	
37	University of Maryland	90,282.00			90282.00				90282.00	
38	Glaxo India Ltd.	217,377.00			217377.00				217377.00	
39	Ministry of Defence (D.R.D.O)	353,015.00		3,451,570.00	3804585.00	2518513.00			1286072.00	
40	MBI Kits.	57,353.00		17,945.00	75298.00	66431.00			8867.00	
41	Nova Nordisk India Pvt Ltd.	259,203.00		143,910.00	403113.00	99792.00			303321.00	
42	Indian Institute of Technology	101,800.00		153,196.00	254996.00	32704.00			222292.00	
43	Cystic Fibrosis/World Wide, USA	86,269.00			86269.00	71664.00			14605.00	
44	CONARD, USA	591.00			591.00				591.00	
45	The Cancer Foundation	44,245.00			44245.00				44245.00	
46	Novartis India Ltd.	2,866,531.38		2,376,312.15	5242843.53	1692047.00			3550796.53	
47	Maharishi Ayurveda		-15,978.00	270,000.00	254022.00	90622.00			163400.00	
48	UN International Drug and crime Control Programme	563,882.00			563882.00	125756.00			438126.00	
49	Russan Pharma Ltd Mumbai	162,947.00			162947.00	157522.00			5425.00	
50	Central Council for Research in Ayurveda & Sidha	1,962,046.00			1962046.00	457200.00			1504846.00	
51	Ministry of Social Justice and Empowerment	77,882.00			77882.00				77882.00	
52	Quintiles Spectral India	4,093,109.86		1,284,649.00	5377758.86	2352429.00			3025329.86	
53	Ministry of Communication and Information & Technology	547,858.00		724,000.00	1271858.00	515428.00		368600.00	387830.00	
54	University of Bergen, Norway	1,055,702.00		7,952,000.00	9007702.00	6812074.00			2195628.00	
55	Zydas Healthcare Ltd		-398.00			-398.00				-398.00
56	Oxford University, UK	3,134,159.00		1,178,393.00	4312552.00	1725539.00			2587013.00	
57	Federation of Obstetric & Gynaecological		-276.00			-276.00				-276.00
58	Aimil Pharmaceutical India Ltd.		-331.00			-331.00				-331.00
59	Pharmacia India Pvt. Ltd	837.00			837.00				837.00	
60	INCTR USA	155,516.00		1,070,507.00	1226023.00	934645.00			291378.00	
61	Emcure Pharmaceutical Ltd.	85621.00			85621.00	35752.00			49869.00	
62	Delhi State Control Society/AIDS	143,735.00		284,646.00	428381.00	303263.00			125118.00	
63	Bharat Biotech International Ltd	12,241.00			12241.00				12241.00	
64	L.G. Chemicals India Pvt Ltd.		-668.00			-668.00				-668.00
65	Wockhardt, Mumbai	20,459.00		810,000.00	830459.00	81000.00			749459.00	
66	NSD (Security Deposit)	1,736,650.00		1,131,000.00	2867650.00	200300.00			2667350.00	
67	Sanofi Pasteur India Pvt Ltd	123,346.00			123346.00				123346.00	
68	Johnson & Johnson	72,695.00		113,803.90	186498.90	161107.00			25391.90	
69	Beijing Toshiba Pharmaceuticals Co. Ltd.	180,235.00			180235.00				180235.00	

70	C.P.W.W. Jersulam	6,534.00			6534.00				6534.00	
71	AVENTIS PHARMA- CEUTICALS, USA	14,135.00			14135.00				14135.00	
72	Dr. Reddys Lab. Pvt. Ltd.	20,502.00		240,000.00	260502.00	244046.00			16456.00	
73	Hindustan Latex Family Planning Promotion									-7020.00
74	SIRO CLIN PHARMA PVT. LTD	1,945,706.00		1,140,749.00	3086455.00	882087.00			2204368.00	
75	Charak Pharma (P)Ltd.	463,427.00			463427.00	324128.00			139299.00	
76	INCLEN & USAID	24.00			24.00				24.00	
77	SAVING NEWBORN LIVES, USA	9,102.00			9102.00	20000.00				-10898.00
78	DANIDA RESEARCH COUNCIL	19.00			19.00				19.00	
79	THE MICRO- NUTRIENT INITIATIVE, ASIA									-4702.00
80	Ministry of Health And Family Welfare (N.A.C.O)	3,476,852.00		2,051,607.00	5528459.00	5079385.00			449074.00	
81	The University of Alabama, USA	46,755,299.00		24,544,912.00	71300211.00	36546600.00			34753611.00	
82	Indian council of Philosophical Research	4,920.00			4920.00				4920.00	
83	Sterling Synergy System (P) Ltd.	63,580.00			63580.00				63580.00	
84	Reliance Clinical Research Services (P) Ltd.	1,817,825.64		2,181,145.00	3998970.64	1280193.00			2718777.64	
85	KLPF, USA	16,473.00			16473.00				16473.00	
86	Vulimini Ramalinga- swami Foundation									-6508.00
87	Texas A&M Research Foundation (TAMRF) USA	16,237.00			16237.00				16237.00	
88	Biomerieux India (P)Ltd.	12,011.00			12011.00				12011.00	
89	Media Lab Asia									-11301.00
90	University of Warwick U.K	4,464.00			4464.00	5525.00				-1061.00
91	National AIDS Control Organisation	56.00			56.00				56.00	
92	BHARAT SERUMS AND VACCINES LTD.									-10000.00
93	CD PHARMA INDIA PRIVATE LIMITED	153,383.00		751,508.00	904891.00	547193.00			357698.00	
94	CODMAN & SHURTLEFF, INC., USA	42,138.00			42138.00				42138.00	
95	KHANDELWAL LABORATORIES LTD.	805.00			805.00				805.00	
96	Directorate General of Health Services	55,389.00		1,292,953.00	1348342.00	98295.00			1250047.00	
97	Lajolla Pharma- ceutical Company, California	490,361.00			490361.00	35950.00			454411.00	
98	Institute De Recherches Internationales Servier (IRIS), France	0.00			0.00	2034.00				-2034.00

99	BONE & JOINT DECADE INDIA	130.00			130.00				130.00	
100	Eli Lilly	19,503.00		239335	258838.00	227119.00			31719.00	
101	ANTISENSE PHARMA Gmbh, GERMANY	3,339.00			3339.00				3339.00	
102	I.S.H.T.M	303,619.00		1,400,000.00	1703619.00	1012309.00			691310.00	
103	National Institute of Nutrition (NIN) Hyderabad	109.00			109.00				109.00	
104	Peregrine Pharma- ceuticals, USA	1,100,320.00		1,172,750.00	2273070.00	1489157.00			783913.00	
105	B.A.R.C	271,280.00			271280.00	272490.00				-1210.00
106	Ozone pharmaceuticals ltd.	211,924.00			211924.00	104715.00			107209.00	
107	Ovation Pharma- ceuticals, USA	70,292.00			70292.00	30465.00			39827.00	
108	DELHI TAPEDIK UNMULAN SAMITI	10,824.00			10824.00				10824.00	
109	JOHN HOPKINS BLOOMBERG SCHOOL OF PUBLIC HEALTH (JHBSPH)	97,463.00		3,391,651.00	3489114.00	2775965.00			713149.00	
110	Clinigene Interna- tional Pvt. Ltd	754,382.00			754382.00	16360.00			738022.00	
111	D.R.D.O.			827,378.00	827378.00				827378.00	
112	FREEDOM TRIAL	86,253.00			86253.00				86253.00	
113	DIGENE CORPORATION, USA	42,184.00			42184.00				42184.00	
114	Ministry of Health & Family Welfare (AYUSH)	821,356.00		944,242.00	1765598.00	1298575.00			467023.00	
115	KOBE, JAPAN	10,221.00			10221.00				10221.00	
116	AYUSH, Ministry of Health and Family Welfare	116,312.00		465,457.00	581769.00	545752.00			36017.00	
117	Troikaa Pharma- ceutical Ltd	25,414.00			25414.00				25414.00	
118	International Paedtrics Nephrology Association	419,398.00		720,120.00	1139518.00	523756.00			615762.00	
119	National Perinatal Epidemiology Unit, University of Oxford, UK	1,303,783.00		2,652,126.00	3955909.00	3268112.00			687797.00	
120	ABBOTT VASCULAR, USA	482,902.00			482902.00				482902.00	
121	European Commission	2,818,289.00			2818289.00	860003.00			1958286.00	
122	Synergy Network India Pvt Ltd,	551.00			551.00				551.00	
123	Solvey Pharma Ltd.	13,465.00			13465.00				13465.00	
124	Relisys Medical Devices Ltd.		-3,433.00		-3433.00					-3433.00
125	PPD Pharmaceutical Development India Pvt. Ltd.		-1,854.00		-1854.00	13196.00				-15050.00
126	Auxilium Technical & Management Services Pvt. Ltd.	400.00			400.00				400.00	
127	M/S ASPREVA PHARMACEUTICAL CORPORATION, CANADA		-41,816.00		-41816.00	-550.00				-41266.00

128	CLINIRx RESEARCH PVT. LTD. GURGAON, HARYANA	129,807.00		127,219.00	257026.00	137424.00			119602.00
129	Central Council for Research in Unani Medicine	1,284,371.00		1,000,000.00	2284371.00	1733347.00			551024.00
130	CLINCYTE, USA	665.00			665.00				665.00
131	M/S Markansas Research Division		-4,745.00		-4745.00				-4745.00
132	THRESHOLD PHARMA CEUTICALS, USA		-3,136.00		-3136.00				-3136.00
133	London School of Hygiene & Tropical Medicine, UK	137,225.00			137225.00				137225.00
134	GlaxoSmith Kline Asia Private Ltd	2,084,913.00		426,971.00	2511884.00	1513209.00			998675.00
135	AJINOMOTA CO. JAPAN	43,855.00			43855.00				43855.00
136	The International Society for Paediatric Neurosurgery (ISPNE)	408.00			408.00				408.00
137	MSD (India) Pvt. Ltd.	327,166.00		656,100.00	983266.00	214872.00			768394.00
138	Solumiks Herba- ceuticals Limited	13.00			13.00				13.00
139	Cadila Health care Ltd.	170,758.00			170758.00	118007.00			52751.00
140	AO Spine International, USA	121,797.00		489,079.00	610876.00	236891.00			373985.00
141	Shire Human Genetic Therapies, Inc., USA	2,640,313.00		1,407,350.00	4047663.00	1381193.00			2666470.00
142	Centocor Research & Development, USA	85,639.00		739,943.00	825582.00	770503.00			55079.00
143	Neeman Medical International Asia Ltd.	237,385.00			237385.00				237385.00
144	Apothecaries Ltd	435.00			435.00				435.00
145	PAREXEL INTER- NATIONAL LTD., U.K.	1,545,901.87		991,598.40	2537500.27	458885.00			2078615.27
146	OXIGENE, USA	245,787.84			245787.84	30661.00			215126.84
147	Hindustan Latex Limited	62,224.00		355,000.00	417224.00	179837.00			237387.00
148	Deptt of Information Technology	285,905.00			285905.00	531744.00	368600.00		122761.00
149	Ovrseas associates	190.00			190.00				190.00
150	Glaxo Smith Kline	76,096.00		468,187.00	544283.00	213367.00			330916.00
151	The Medical Research Council, UK	905.00		110,706.00	111611.00	112161.00			-550.00
152	Biogen Idec Limited, UK	674,199.00			674199.00	281276.00			392923.00
153	Global Cancer Concern India	3,647.00			3647.00				3647.00
154	N.C.Pvt. Ltd	37,117.00			37117.00				37117.00
155	N.C.T.	68,140.00		166,645.00	234785.00	165441.00			69344.00
156	NAIP	340,663.00		738,743.00	1079406.00	883832.00			195574.00
157	UNIVERSITY OF CALGARY, CANADA	57,187.00			57187.00				57187.00
158	CORVENTIS, USA	654,606.00			654606.00	202305.00			452301.00
159	BRITISH COUNCIL, UK	2,064,096.00			2064096.00	1389768.00			674328.00

160	The Service de Dermatologie, France		-8,445.00		-8445.00					-8445.00
161	MERCK SERONO INTERNATIONAL S.A., SWITZERLAND	1,034,631.00		1,847,227.00	2881858.00	2851956.00			29902.00	
162	University of Western Australia	6,180.00			6180.00				6180.00	
163	Centre For Chronic Disease Control	410.00			410.00				410.00	
164	Lupin Limited	8,386.00			8386.00	-10000.00			18386.00	
165	Coloplast		-5,775.00		-5775.00					-5775.00
166	Piramal Life Sciences	93,003.00			93003.00	34550.00			58453.00	
167	Criterion	503,957.00		430,650.00	934607.00	293171.00			641436.00	
168	M/s ARCHIMEDES DEVELOPMENT LTD., UK	349,634.00		365,946.00	715580.00	658480.00			57100.00	
169	University of Nottingham, UK	119,477.00			119477.00	6418.00			113059.00	
170	BRISTOL MEYER SQUIBB INDIA PRIVATE LIMITED	200,687.00		230,400.00	431087.00	419435.00			11652.00	
171	Brains Gate Ltd. ISRAEL	117,274.00			117274.00	117142.00			132.00	
172	Central Council for Research in Homoeopathy (CCRH), Janak Puri, New Delhi			763,500.00	763500.00	76350.00			687150.00	
173	JIV DAYA FOUNDATION	171,550.00		1,476,110.00	1647660.00	949644.00			698016.00	
174	QED PHARMACEUTICAL SERVICES PVT. LTD	577,043.00			577043.00				577043.00	
175	Amgen Technolgy Private Limited	534,209.00		553,781.00	1087990.00	297128.00			790862.00	
176	ACE PHARMACEUTICALS BV, NETHERLAND	330,529.00		1,176,284.00	1506813.00	1287452.00			219361.00	
177	Actelion Pharmaceuticals Ltd. Switzerland	10,619.00		32,400.00	43019.00	43019.00			0.00	
178	Macleods Pharmaceutical Ltd.	5,708.00			5708.00	5690.00			18.00	
179	Department of Health and Human Services Centers for disease control, USA	15,982,907.00		13,882,039.00	29864946.00	20717009.00			9147937.00	
180	PHARM-OLAM INTERNATIONAL, LTD.	34,382.00			34382.00	17459.00			16923.00	
181	MERK & CO., INC. USA	1,780,104.00		2,135,220.00	3915324.00	1723136.00			2192188.00	
182	Central Scientific Instruments Organisation	200,793.00			200793.00	65236.00			135557.00	
183	McMaster University, Canada	8,626.00		479,965.00	488591.00	272051.00			216540.00	
184	Institute of Genomics & Integrative Biology	505,202.00		3,587,246.00	4092448.00	2174864.00			1917584.00	
185	India Medtronic Pvt. Ltd	8,038.00		21,460.00	29498.00	23119.00			6379.00	
186	Society of American Gastrointestinal and Endoscopic Surgeons	961,919.00			961919.00	926418.00			35501.00	

187	Sun Pharmaceuticals	17,659.00		87,545.00	105204.00	101820.00			3384.00	
188	National Knowledge Commission			9,270,000.00	9270000.00	281465.00			8988535.00	
189	GW Pharma Ltd. U.K.	9,261.00			9261.00				9261.00	
190	Lady Tata Memorial Trust			192,000.00	192000.00	192500.00				-500.00
191	Liver Foundation	88,665.00		636,593.00	725258.00	402189.00			323069.00	
192	EMMES Corporation, Maryland, USA	203,292.00			203292.00	199995.00			3297.00	
193	Flamentera AG, Switzerland			549,300.00	549300.00	16479.00			532821.00	
194	The Energy and Resources Institute	79,120.00		150,000.00	229120.00	174900.00			54220.00	
195	Morphotek Inc. USA			161,665.98	161665.98	141063.00			20602.98	
196	Albert David Ltd	145,500.00			145500.00	88353.00			57147.00	
197	Sanat Product Ltd	308,922.00		318,476.00	627398.00	621640.00			5758.00	
198	I.C.G.E.&B			597,400.00	597400.00	491453.00			105947.00	
199	IADVL	414,190.00			414190.00	117432.00			296758.00	
200	Ministry of Chemical and petrochemicals			545000.00	545000.00	50350.00			494650.00	
201	National Institute of pharmaceutical Education & Research			3,480,000.00	3480000.00	736823.00			2743177.00	
202	Max Neeman International			49,799.00	49799.00	13879.00			35920.00	
203	The George Institute for International Health, Australia			205,317.00	205317.00	114830.00			90487.00	
204	Appothecaries PvtLtd			194,250.00	194250.00	102932.00			91318.00	
205	Centre for Chronic Diseases Control, New Delhi			320,000.00	320000.00	181411.00			138589.00	
206	BRIDGES, USA			1,522,725.00	1522725.00	484969.00			1037756.00	
208	LG Life Sciences India Pvt. Ltd.			260,192.00	260192.00	26018.00			234174.00	
209	Merck Pharmaceuticals Ltd.			80,000.00	80000.00	46133.00			33867.00	
210	Canadian Institutes of Health Research, Canada				0.00	52000.00				-52000.00
211	International Union Against Cancer (UICC)			675,524.00	675524.00	67552.00			607972.00	
212	Qiagen Inc.India			450,000.00	450000.00	45000.00			405000.00	
213	Ipca laboratoris			493,585.00	493585.00	56813.00			436772.00	
214	Zenotech			82,108.00	82108.00	8210.00			73898.00	
		437660749.69	-3287461	555624062.43	989997351.12	519689837	368600	368600	473784355.12	-3476841

(Smt. Basanti Dalal)
Financial Advisor

APPENDIX-A1

ALL INDIA INSTITUTE OF MEDICAL SCIENCES RESEARCH SECTION

Statement of Expenditures Made for Purchasing Equipment during the Financial Year. 2010-11

S. NO.	CODE NO.	NAME OF PROJECT INVESTIGATOR	MONTH	AMOUNT
1	N1188	DR. A.MALHOTRA	JUN 2010	165,393
2	N1124	DR. ARTI KAPIL	JUN 2010	1,950
3	N1124	DR. ARTI KAPIL	JUL 2010	-16,027
4	N1123	DR. Balram Bhargava	AUG 2010	10,508
5	N935	DR. Balram Bhargava	MAY 2010	243,918
6	N935	DR. Balram Bhargava	JUN 2010	347,383
7	N935	DR. Balram Bhargava	AUG 2010	4,637
8	N935	DR. Balram Bhargava	SEP 2010	5,707
9	N1145	DR. C.S.BAL	SEP 2010	-3,958
10	CSIR6	DR. D.N.RAO	MAR 2011	99,000
11	I685	DR. D.N.RAO	JAN 2011	51,738
12	I685	DR. D.N.RAO	FEB 2011	29,800
13	I685	DR. D.N.RAO	MAR 2011	19,968
14	N1073	DR. D.N.RAO	AUG 2010	6,682
15	D253	DR. D.S.ARYA	JUN 2010	-13,225
16	D253	DR. D.S.ARYA	JAN 2011	14,138
17	I570	DR. S.B. RAY	AUG 2010	5,819
18	D265	DR. G.P.BANDOPADHYAYA	MAR 2011	304,970
19	N1050	DR. GITA SATPATHY	MAY 2010	8,200
20	N1050	DR. GITA SATPATHY	JUL 2010	70,884
21	N1050	DR. GITA SATPATHY	MAR 2011	51,188
22	N1062	DR. J.S.TYAGI	AUG 2010	5,324
23	N1062	DR. J.S.TYAGI	SEP 2010	151,713
24	N1151	DR. J.S.TYAGI	MAY 2010	73,125
25	I625	DR. K.ANAND	JUN 2010	195,300
26	I625	DR. K.ANAND	JUL 2010	24,579
27	I625	DR. K.ANAND	AUG 2010	121,050
28	I625	DR. K.ANAND	JAN 2011	28,454
29	I625	DR. K.ANAND	MAR 2011	21,728
30	I645	DR. KALPANA LUTHRA	MAY 2010	130,000
31	N1125	DR. KALPANA LUTHRA	JUN 2010	1,450
32	N1125	DR. KALPANA LUTHRA	JAN 2011	7,578
33	N1125	DR. KALPANA LUTHRA	MAR 2011	-8,183
34	N1163	DR. Kameshwar Prasad	JUN 2010	99,900
35	N1163	DR. Kameshwar Prasad	JUL 2010	-3,167
36	N958	DR. Kameshwar Prasad	JUL 2010	-31,078
37	N966	DR. Kameshwar Prasad	APR 2010	10,950

38	N966	DR. Kameshwar Prasad	MAR 2011	67,200
39	I560	DR. M.L.KHURANA	AUG 2010	-5,903
40	D266	DR. M.R.RAJESWARI	JUN 2010	41,624
41	D266	DR. M.R.RAJESWARI	MAR 2011	1,606,600
42	I637	DR. M.R.RAJESWARI	JUN 2010	73,125
43	D273	DR. MADHULIKA KABRA	MAR 2011	214,670
44	D269	DR. MADHURI BEHARI	MAR 2011	51,049
45	I671	DR. KANCHAN MITTAL	FEB 2011	17,430
46	I658	DR. N.C.CHANDRA	JUL 2010	597,800
47	I658	DR. N.C.CHANDRA	JAN 2011	13,107
48	I658	DR. N.C.CHANDRA	MAR 2011	-25,786
49	I510	DR. N.K.MEHRA	AUG 2010	237
50	I583	DR. NEENA KHANNA	MAR 2011	3,780
51	N957	DR. GOVIND K MAKHARIA	MAY 2010	41,063
52	I613	DR. PRAMOD GARG	JUL 2010	191,250
53	N1081	DR. PRAMOD GARG	JUN 2010	-13,225
54	N1081	DR. PRAMOD GARG	AUG 2010	317
55	N1081	DR. PRAMOD GARG	JAN 2011	14,138
56	I581	DR. PRATIMA RAY	AUG 2010	4,776
57	N1002	DR. PRATIMA RAY	AUG 2010	11,129
58	N1005	DR. RADHIKA TANDON	SEP 2010	4,849
59	N1005	DR. RADHIKA TANDON	MAR 2011	-327
60	I492	DR. RAJESH MALHOTRA	AUG 2010	-2,202
61	I629	DR. RAJESH MALHOTRA	APR 2010	199,500
62	I629	DR. RAJESH MALHOTRA	OCT 2010	99,750
63	N1011	DR. RAJESH MALHOTRA	JUL 2010	17,300
64	N1097	DR. RAJESH MALHOTRA	JUN 2010	14,275
65	N1097	DR. RAJESH MALHOTRA	JUL 2010	10,600
66	N1097	DR. RAJESH MALHOTRA	JAN 2011	14,138
67	D232	DR. RANDEEP GULERIA	JAN 2011	64,725
68	I610	DR. RANDEEP GULERIA	JUL 2010	276,150
69	N1094	DR. RANDEEP GULERIA	MAR 2011	10,174
70	N980	DR. RANDEEP GULERIA	MAR 2011	407,639
71	D237	DR. RENU SAXENA	MAY 2010	387,975
72	D260	DR. RENU SAXENA	NOV 2010	157,725
73	N1198	DR. S.K.MAULIK	MAR 2011	69,000
74	D220	DR. S.K.PANDA	AUG 2010	23,258
75	N1209	DR. S.K.PANDA	MAR 2011	1,563,112
76	N967	DR. S.K.PANDA	AUG 2010	-47,537
77	N911	DR. S.K.SHARMA	SEP 2010	3,340
78	N911	DR. S.K.SHARMA	MAR 2011	175,000
79	N1004	DR. S.S.CHAUHAN	AUG 2010	5,370
80	N1184	DR. S.S.CHAUHAN	AUG 2010	76,080
81	N1184	DR. S.S.CHAUHAN	OCT 2010	184,710

82	N1184	DR. S.S.CHAUHAN	DEC 2010	699,550
83	N1184	DR. S.S.CHAUHAN	FEB 2011	198,000
84	N1044	DR. SARMAN SINGH	AUG 2010	3,120
85	D264	DR. SAVITA YADAV	JUL 2010	196,988
86	D022	DR. SHASHI WADHWA	MAR 2011	735
87	D022A	DR. SHASHI WADHWA	JUN 2010	800
88	D022A	DR. SHASHI WADHWA	JUL 2010	-3,468
89	D022A	DR. SHASHI WADHWA	AUG 2010	4,057
90	D022A	DR. SHASHI WADHWA	DEC 2010	23,840,990
91	D022A	DR. SHASHI WADHWA	MAR 2011	-18,841,111
92	N1085	DR. SHASHI WADHWA	AUG 2010	-4,921
93	N1085	DR. SHASHI WADHWA	MAR 2011	96,407
94	I435	DR. SHOBHA BROOR	Jun-10	-2,652,000
95	I435	DR. SHOBHA BROOR	AUG 2010	31,374
96	I639	DR. SHOBHA BROOR	JUL 2010	344,832
97	I639	DR. SHOBHA BROOR	FEB 2011	11,517
98	I639	DR. SHOBHA BROOR	MAR 2011	26,472
99	N1099	DR. SHOBHA BROOR	MAY 2010	2,416,886
100	N1099	DR. SHOBHA BROOR	JUN 2010	-32,870
101	N1099	DR. SHOBHA BROOR	JUL 2010	4,016
102	N1099	DR. SHOBHA BROOR	AUG 2010	800
103	N1099	DR. SHOBHA BROOR	SEP 2010	2,519
104	N1099	DR. SHOBHA BROOR	JAN 2011	28,277
105	N1099	DR. SHOBHA BROOR	FEB 2011	295,336
106	N1099	DR. SHOBHA BROOR	MAR 2011	164,251
107	N1100	DR. SHOBHA BROOR	MAY 2010	316,338
108	N1100	DR. SHOBHA BROOR	JUN 2010	791,950
109	N1100	DR. SHOBHA BROOR	JUL 2010	252,780
110	N1100	DR. SHOBHA BROOR	AUG 2010	333,805
111	N1100	DR. SHOBHA BROOR	SEP 2010	15,959
112	N1100	DR. SHOBHA BROOR	MAR 2011	-93,974
113	N1152	DR. SHOBHA BROOR	JUL 2010	-7,639
114	N1152	DR. SHOBHA BROOR	AUG 2010	614
115	D192	DR. SUBRATA SINHA	JUL 2010	875
116	D192	DR. SUBRATA SINHA	AUG 2010	475
117	D268	DR. SUJATA SHARMA	MAR 2011	596,500
118	D272	DR. SUJATA SHARMA	MAR 2011	596,500
119	N1167	DR. T.P.SINGH	DEC 2010	202,515
120	N1167	DR. T.P.SINGH	JAN 2011	166,884
121	I650	DR. T.S.ROY	OCT 2010	61,538
122	I650	DR. T.S.ROY	DEC 2010	331,593
123	I650	DR. T.S.ROY	MAR 2011	97,800
124	I589	DR. TULIKA SETH	MAR 2011	332,477
125	N1146	DR. UMESH KAPIL	JUN 2010	29,256
126	I657	DR. V.K. PAUL	NOV 2010	442,688

127	I657	DR. V.K. PAUL	MAR 2011	3,041,875
128	N029	DR. Y.D.SHARMA	AUG 2010	3,356
129	N1033	DR. SUSHMA BHATNAGAR	APR 2010	58,500
130	N1033	DR. SUSHMA BHATNAGAR	MAY 2010	99,900
131	D250	DR. B.R.MIRDHA	AUG 2010	49,523
132	I586	DR. Manjari Tripathi	JUN 2010	28,772
133	I642	DR. RIMA DADA	DEC 2010	1,106,620
134	I642	DR. RIMA DADA	FEB 2011	28,013
135	I642	DR. RIMA DADA	MAR 2011	18,514
136	N1202	DR. RIMA DADA	DEC 2010	2,133,437
137	N1202	DR. RIMA DADA	MAR 2011	15,570
138	I612	DR. PRATIK KUMAR	JUL 2010	68,697
139	N1154	DR. PARTHAPRASAD CHATTOPADHYA	JUN 2010	270,465
140	N1154	DR. PARTHAPRASAD CHATTOPADHYA	JUL 2010	-122,869
141	N1154	DR. PARTHAPRASAD CHATTOPADHYA	AUG 2010	116,425
142	N1154	DR. PARTHAPRASAD CHATTOPADHYA	SEP 2010	1,497
143	D196	DR. RASHMI MATHUR	AUG 2010	10,123
144	D248	DR. RASHMI MATHUR	AUG 2010	199,160
145	N834	DR. SUNESH JAIN	NOV 2010	35,200
146	N824	DR. SANJEEV SINHA	JAN 2011	221,050
147	N824	DR. SANJEEV SINHA	FEB 2011	196,300
148	N824	DR. SANJEEV SINHA	MAR 2011	-992
149	N975	DR. SANJEEV SINHA	DEC 2010	204,850
150	N975	DR. SANJEEV SINHA	FEB 2011	72,955
151	N975	DR. SANJEEV SINHA	MAR 2011	39
152	N1095	DR. RAJINDER KUMAR	MAY 2010	40,765
153	I609	DR. ANANT MOHAN	MAY 2010	48,375
154	N1158	DR. V. SREENIVAS	MAY 2010	6,100
155	I616	DR. RITU DUGGAL	AUG 2010	18,170
156	N1021	DR. BALRAM AIRAN	JUN 2010	3,022,970
157	N1021	DR. BALRAM AIRAN	AUG 2010	445,498
158	N1021	DR. BALRAM AIRAN	SEP 2010	99,788
159	N1021	DR. BALRAM AIRAN	JAN 2011	4,269
160	N1021	DR. BALRAM AIRAN	MAR 2011	711,356
161	N865	DR. BALRAM AIRAN	MAY 2010	99,788
162	N865	DR. BALRAM AIRAN	AUG 2010	-99,788
163	N947	DR. S.VIVEKANANDHAN	AUG 2010	24,276
164	N976	DR. RAJ KUMAR YADAV	MAY 2010	175,728
165	N1174	DR. A.K.MUKHOPADHYAY	DEC 2010	686,350
166	I647	DR. SUJATA MOHANTY	FEB 2011	196,875
167	I647	DR. SUJATA MOHANTY	MAR 2011	638,996
168	N1015	DR. SUJATA MOHANTY	JUL 2010	728
169	N1015	DR. SUJATA MOHANTY	OCT 2010	4,868
170	N1015	DR. SUJATA MOHANTY	MAR 2011	7,194

171	N1141	DR. SANJEEV SHARMA	AUG 2010	5,674
172	N867	DR. DEEPAK KUMAR GUPTA	AUG 2010	130,500
173	N1058	DR. SAMEER BAKHSHI	AUG 2010	45,000
174	D221	DR. B.S.SHARMA	APR 2010	78,624
175	D221	DR. B.S.SHARMA	AUG 2010	5,977
176	D259	DR. A.SRINIVASAN	APR 2010	52,500
177	N1147	DR. ASHISH SURI	JUN 2010	614,250
178	N1147	DR. ASHISH SURI	JUL 2010	499,382
179	N1147	DR. ASHISH SURI	SEP 2010	8,449
180	N1147	DR. ASHISH SURI	MAR 2011	-31,771
181	N1056	DR. ALPANA SHARMA	AUG 2010	6,969
182	D246	DR. SANJAY KUMAR SOOD	AUG 2010	294
183	N1091	DR. SHASHANK SHARD KALE	MAY 2010	29,500
184	I602	DR. ANITA SAXENA	AUG 2010	970
185	I602	DR. ANITA SAXENA	FEB 2011	52,595
186	I646	DR. ANITA SAXENA	JUL 2010	6,850
187	I646	DR. ANITA SAXENA	OCT 2010	1,471,507
188	D263	DR. ASHOK KUMAR JARYAL	MAY 2010	98,596
189	D263	DR. ASHOK KUMAR JARYAL	JUN 2010	1,950
190	D263	DR. ASHOK KUMAR JARYAL	JUL 2010	-52,590
191	D263	DR. ASHOK KUMAR JARYAL	JAN 2011	1,681
192	D263	DR. ASHOK KUMAR JARYAL	MAR 2011	95,417
193	N1087	DR. ASHOK KUMAR JARYAL	AUG 2010	56,455
194	N1140	DR. RAJEEV KUMAR	MAY 2010	243,338
195	N1140	DR. RAJEEV KUMAR	AUG 2010	55,125
196	N1140	DR. RAJEEV KUMAR	DEC 2010	6,500
197	I615	DR. ASHUTOSH BISWAS	AUG 2010	49,900
198	I594	Dr. Atul Kumar	JUN 2010	142,824
199	I594	Dr. Atul Kumar	JUL 2010	-10,812
200	N1126	DR. PRAVAS CHANDRA MISHRA	JUN 2010	122,378
201	D271	DR. S.SENTHIL KUMARAN	MAR 2011	525,000
GRAND TOTAL				38,460,190

(Smt. Basanti Dalal)
Financial Advisor

Appendix B

ALL INDIA INSTITUTE OF MEDICAL SCIENCES LIST OF SUNDRY DEBTORS (SCHEME CELL)

S.No.	Funding Agency	Debit
1	Rajiv Gandhi Foundation	989
2	INCLIN	118368
3	Institute of Cancer Research UK co-ordination Committee	7209
4	Sarabhai Chemicals	4868
5	SRB-Clinical Pharmacology	3154100
6	Zydas Healthcare Ltd	398
7	Federation of Obstetric & Gynaecological	276
8	Aimil Pharmaceutical India Ltd.	331
9	L.G. Chemicals India Pvt Ltd.	668
10	Hindustan Latex Family Planning Promotion	7020
	Saving New born lives,USA	10898
11	THE MICRONUTRIENT INITIATIVE, ASIA	470
12	Vulimini Ramalingaswami Foundation	6508
13	Media Lab Asia	11301
	University of Warwick U.K	1061
14	BHARAT SERUMS AND VACCINES LTD.	10000
15	Institute De Recherches Internationales Servier (IRIS),France	2034
16	Peregrine Pharmaceuticals ,USA	1210
17	Relisys Medical Devices Ltd.	3433
18	PPD Pharmaceutical Development India Pvt. Ltd.	15050
19	M/S Aspreva Pharmaceutical Corporation,Canada	41266
20	M/S Markansas Research Division	4745
21	Thjreshold Pharmaceuticals ,USA	3136
22	The Medical Research council ,UK	550
23	The Service De Dermatologie,France	8445
24	Coloplast	5775
25	Lady Tata Mamorial Trust	500
26	Canadian Institutes of Health Research , Canada	52000
		3476841

(Smt. Basanti Dalal)
Financial Advisor

Appendix-C
ALL INDIA INSTITUTE OF MEDICAL SCIENCES
STATEMENT SHOWING THE DONATIONS & INVESTMENT AS ON 31-03-11

<u>S.NO.</u>	<u>PARTICULARS & MODE OF INVESTMENT</u>	<u>AMOUNT OF DONATION</u>	<u>AMOUNT OF INVESTMENT</u>
1	AIIMS ROTARY CANCER HOSPITAL	700000	700000
2	MISC. DONATION - HEAMOTOLOGY UNDER DR. A.K. SARAYA	8000	8000
3	DR. A.K. SARAYA	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 100000	149660 100000
9	SARUP CHAND HANS RAJ	20000	19500
10	RAJ KUMARI AMRIT KAUR	25000	25000
11	KATHERINE SORAL FREYMAN	5000	5000
12	DR. S.L. KALRA	6000	5800
13	R.L. RAJGARHIA	850000	850000
14	SMT. PRAKASH WATI DONATION	13800	13800
15	SMT. KRIPAL KAUR (UNIT TRUST)	6000	5908
16	LALA KHUSHI RAM	247753	247753
17	S.P. VIRMANI (FIXED DEPOSIT)	1500	1500
18	EAST INDIA COMMERCIAL PVT. LTD CALCUTTA (FIXED DEPOSIT) SRB	3200000	2800000
19	DR. KANTI KAPILA (UNIT TRUST)	10079	10002
20	DR. V. RAMALINGASWAMI (UNIT TRUST)	8000	7996
21	SR. S. SABHARWAL (UNIT TRUST)	10000	9951
22	DR. N.H. KASWANI (UNIT TRUST)	10000	9990
23	DR. V. HINGORANI	15000	15000
24	KUMUDINI KRISHNA MOORTHY	15000	15000
25	G.D. RADHAKRISHNA (SARWESHWARI MEMORIAL ORATION, UNIT TRUST)	20000	19987
26	P.L. TANDON (FIXED DEPOSIT)	15000	15000
27	XV INTERNATIONAL CONGRESS OF PEADIATRICS (UNIT TRUST)	40000	40000
28	RAM LOBHAYA DONATION (FIXED DEPOSIT)	15000	15000
29	SUBHASH MEMORIAL FOUNDATION (V.L. TELEKAR DONATION)	10101	10101
30	SMT. INDIRA SATYANAND	10000	10000

31	SH. K.V.SUBARAO	10000	10000
32	NEWZELAND HIGH COMMISSION	10000	10000
33	AKHILESH MITTAL (SUMITH MOHAN SADAN DAYAL TRUST)	20000	20000
34	PREMALATA KAPOOR	10000	10000
35	DWARKA PRASAD TRUST	50000	50000
36	LATE. SH. D.R. BAHRI	15000	15000
37	SEWA RAM	15000	15000
38	FACULTY BENEVELENT FUND	60065	60065
39	V.RANGA MEMORIAL TRUST	50000	50000
40	SH. DORABJI TRUST	10000	10000
41	CORPUS FUND	30000	30000
42	AIIMSONIANS	10000	10000
43	SARLA ATAM PRAKASH	15000	15000
44	K.L. WIG RESEARCH FOUNDATION	100000	100000
45	V.K. MITTAL	130000	130000
46	SNEH LATA SONI	15000	15000
47	AIIMSONIAN OF AMERICA	129850 151630 126471	129850 151630 126471
48	SMT. LEELA WATI SALWAN	15000	15000
49	DR. D.K. GUPTA	100000	100000
50	J.R. CHAWLA	15000	15000
51	URMIL SHARMA IN R/O SHYAM SHARMA	15000	15000
52	SMT. SUSHILA WATI MALHOTRA	500000	500000
53	BASANTI KUMARI	100000	100000
54	ORTHOPAEDICS FUND	250000	250000
55	DR. S.B. ROY	125000	125000
56	MR. R.V. KANDHARI	100000	100000
57	DR. B.K. KAPOOR	125000	125000
58	SMT.SAVITRI UGGARSEAN	100000	100000
59	VIMAL LAUMAS	200000	200000
60	MRS. PRAMADA BAJAJ	200000	200000
61	DR. V.RAMALINGASWAMI	100000	100000
62	DR. N.C. NAYAK	100000	100000
63	DR. H.D. TANDON	100000	100000
64	PROF. N. GOPINATH (CTVS)	1200000	1200000
65	PROF. L.K. BHUTANI ORATION	500000	500000
66	BINEY ROHTAGI & SMT. SHAKUNTALA	36000	-
67	DR. K.L. WIG (SBI)	36990	37000
68	ZENITH FINANCE & CO. (SBI)	17000	17000

69	KAMANI CHARITY TRUST (SBI)	15000	15000
70	SMT. KAUSHALYA THAPAR (UNIT TRUST)	12000	12017
71	SMT. BRIJ RANI SAWHENY (UNIT TRUST)	22501	22472
72	KAMLA B.K. ANAND	100000	100000
73	SH. G.D JHANGINI	25500	25602
74	DR. B.K. ANAND (UNIT TRUST)	5000	4995
75	R.S. NANDA	78274	78274
76	GPF INVESTMENT		2662176232
77	NPS INVESTMENT		341900000
	TOTAL	10902514	3014594656

(Smt. Basanti Dalal)
Financial Advisor

Appendix-D

ALL INDIA INSTITUTE OF MEDICAL SCINECES

Details of Misc. Donations as on 31.3.2011

<u>S.NO.</u>	<u>DEPARTMENT</u>	<u>OP. BAL. AS ON 1/4/2010</u>	<u>GRANT</u>	<u>TOTAL</u>	<u>EXPD.</u>	<u>CL. BALAS ON 31-03-2011</u>
1	R & AL	19475		19475		19475
2	PSYCHIATRY	28495		28495		28495
3	HEAMATOLOGY	12380		12380		12380
4	ORTHO	65586		65586		65586
5	IMMUNOLOGY	824		824		824
6	PAED SURGERY	32041		32041		32041
7	INSTIT. 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	34199		34199		34199
16	SURGERY	501		501		501
17	K.L. WIG CEMET	12021		12021		12021
18	N/MEDICINE	19571		19571		19571
19	CEU	30000		30000		30000
20	DR. NK MEHRA	597235		597235		597235
21	I.C.G.E.B. DR. T.P SINGH	444630		444630		444630
22	DR. VEENA KALRA	74682		74682		74682
23	LEVER CLINIC - GASTRO	2865		2865		2865
24	DR. N.P. GUPTA -UROLOGY	4982		4982		4982
25	DR. N. KOCHUPILLAI-POOR PT.	120000		120000		120000
26	PEAD. GENETICS	513560	290450	804010	198250	605760
27	MRS. USHA SHARMA	176600		176600		176600
28	MISC. RECEIPT	145540		145540		145540
		<u>2781276</u>	<u>290450</u>	<u>3071726</u>	<u>198250</u>	<u>2873476</u>

(Smt. Basanti Dalal)
Financial Advisor

APPENDIX - E

ALL INDIA INSTITUTE OF MEDICAL SCIENCES

Details of Misc. Deposits as on 31.3.2011

2010-2011

S.NO.	NAME OF THE DEPARTMENT	AMOUNT
1	Controller of Printing & Stationary	16076
2	C.P.W.D. Shimla	70432
3	C.P.W.D.	7096
4	Delhi Municipal Corporation	33750
5	Indian Institute of Technology	4250
6	N.D.M.C.	173242
7	P. & T. Circle Division	12796
8	Indian Telephone Industries	13344
TOTAL		330986

(Smt. Basanti Dalal)
Financial Advisor

APPENDIX - F

ALL INDIA INSTITUTE OF MEDICAL SCIENCES

Details of GPF Investment

2010-2011

Opening Balance of Investment as on 1.4.2010	2189184354
Investment during 2010-11	890991878
Add Closing Cash Book Balance	67558097
Investment matured during 2010-11	418000000
	<u>2729734329</u>

Details of NPS Investment

2010-2011

Opening Balance of Investment as on 1.4.2010	91900000
Investment during 2010-11	553700000
	<u>645600000</u>
Investment matured during 2010-11	303700000
	<u>341900000</u>
Closing Cash Book Balance as on 31.3.2011	10867288
	<u>352767288</u>

(Smt. Basanti Dalal)
Financial Advisor

APPENDIX - F 1

ALL INDIA INSTITUTE OF MEDICAL SCIENCES G.P.F. SECTION

Receipts and payments of General Provident Funds of AIIMS for the year ending 31st March,2011

Receipts	Amount	Payments	
Cash book Opening Balance	180803780	Withdrawal	397571834
Receipt (Sub/Rec)	558361650	Investment during the year 2010-11	890991878
Add Interest Received	198956379	Cash book closing Balance	67558097
Add Invest Maturity	418000000		
Total	1356121809	Total	1356121809

Balance Sheet of General Provident Funds of the AIIMS as on 31st March ,2011

Liabilities	Amount	Assests	Amount
General Provident Opening Balance	2369988134	Investment Opening Balance	2189184354
Add Receipt during the year 2010-11	558361650	Add Investment during the year 2010-11	890991878
Add Interest received	198956379	Add cash Book Closing Balance	67558097
	3127306163		3147734329
Less Withdrawal	397571834	Less maturity	418000000
Total	2729734329	Total	2729734329
Month	Receipts	Payments	
April	44247636	44392634	
May	46915307	38346471	
June	45418991	29231843	
July	44010545	32518166	
August	45092816	41219685	
September	45171955	36099055	
October	45440354	29188405	
November	46215408	33591718	
December	47714366	35473167	
January	49446626	28372416	
February	49301878	24309604	
March	49385768	24828670	
	558361650	397571834	
Total Subscription Deposit		558361650	
Total Previous Balance		2369988134	
Total Interest Paid		197677658	
Total Net		3126027442	
Total Withdrawal		397571834	
Grand Total		2728455608	

(Smt. Basanti Dalal)
Financial Advisor

**FIGURES OF ACTUAL EXPENDITURE FOR THE YEAR 2009-2010 AND 2010-2011 AND
BUDGET ESTIMATES FOR 2011-2012 IN RESPECT OF
ALL INDIA INSTITUTE OF MEDICAL SCIENCES, NEW DELHI.**

(RS. IN CRORES)

HEAD/SUB HEAD	ACTUAL EXPENDITURE				SANCTIONED BUDGET ESTIMATES			
	2009-2010		2010-2011		2011-12			NON-PLAN
	PLAN	NON-PLAN	PLAN	NON-PLAN	PLAN			
		Revenue(G)	Capital(N)		Revenue(G)	Capital(N)		
	1	2	3	4	5	6	7	8
A. (Main Instt.)								
Pay & Allow. Incl.	-	307.32	13.99	-	265.31	39.35	-	265.00
LS & PC, stipend etc.								
Minor Works	-		22.40	-	-	19.00	-	-
Major Works	-	-		40.84	-		-	-
Commonwealth Games	-	-		-	-	-	-	-
Mach. & Equip. & Computers	87.36	4.57		86.74		7.88	92.05	2.50
		131.80			5.72			
				150.60				
Mat. & Supply	-			-		-	-	111.00
Maintenance of Bldg.	-	8.34		-	9.52	-	-	8.00
				41.73			40.00	
Pension & other pensionary benefits	-	42.89		-		-	-	
Recoverable Advances	-	0.28		-		-	-	0.50
House Building Adv.	-	0.21		-		-	-	0.50
Instt. Research Grant	-	0.50		-		-	-	0.50
Books & Publication (M. & S.)	5.02	-	5.39		-	5.00	-	-
Conference/Symposia	-	1.00		-		-	-	1.00
Capital Building	28.04	-		-	-	-	70.00	-
P.E.T. Facility	-	-		-	-	-	-	-
Revolving Fund			1.07		6.13			
Computerisation	-	-		-	-	5.00	-	-
TOTAL A	120.42	496.91	42.85	127.58	479.01	76.23	162.05	429.00
B. SUPERSPECIALITIES								
C.N.Centre	28.30	114.39	10.17	52.50	105.05	6.10	27.00	98.00
Dr. R.P. Centre	14.99	60.74	4.03	21.95	55.35	7.80	27.00	44.00
Dr.B.R.A.I.R.C.H.	8.27	42.81	1.70	12.15	41.69	2.50	5.00	39.00
J.P.N. Apex	80.54	-	64.26	37.43	-	68.00	25.00	
Trauma Centre								
Centre for Dental								
Education and Res.	8.52	-	4.79	2.21	-	5.27	0.40	
TOTAL (A & B)	261.04	714.85	127.80	253.82	681.10	165.90	246.45	610.00
<i>N.D.D.T.C</i>	8.33	-	7.90	-	-	-	-	
GRAND TOTAL(A to C)	269.37	714.85	135.70	253.82	681.10	173.65	246.45	610.00

13.2 Audit Report

Separate Audit Report of the Comptroller & Auditor General of India on the Accounts of All India Institute of Medical Sciences (AIIMS) for the year ended 31 March 2011

We have audited the attached Balance Sheet of All India Institute of Medical Sciences (AIIMS) as at 31 March 2011 and the Income & Expenditure Account/Receipts & Payments 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 AIIMS 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, proper books of accounts on double entry system of accounting and other relevant records have been maintained by the AIIMS in so far as it appears from our examination of such books.
- iv We further report that :

A Balance Sheet

A.1 Assets

A.1.1 Overstatement of assets by Rs. 19.76 lakh (AIIMS Main)

The Institute had included consumable items of Rs. 19.76 lakh under the head "Machinery and Equipment" on asset side of the Balance Sheet. This resulted in overstatement of fixed assets in the Balance Sheet and understatement of expenditure in Income and Expenditure Accounts by Rs. 19.76 lakh.

A.1.2 Overstatement of assets by Rs. 1.72 crore (AIIMS Main)

The Institute had purchased 3 new machines under buy back scheme of 3 old machines worth Rs. 1,71,68,448 for Radiology department during 2010-11. The three old machines were given to the respective companies from which the new machines were purchased. But the institute had not shown these machines as condemned and reduced their value from the machinery and equipment under the head "Machinery Condemned" on the assets side as well as on the liability side of the Balance Sheet. This has resulted in over statement of machinery and equipment by Rs. 1,71,68,448.

A.1.3 Overstatement of assets by Rs. 4.16 lakh (Dr. BRA Institute of Rotary Cancer Hospital)

The Centre had shown Rs. 1,54,15,762 under the head “Add during 2010-11 in Advance payment to Custom Duty & PDA Account” on asset side of the Balance Sheet while as per the records, the Centre had paid only Rs. 1,50,00,000. This has resulted in overstatement of the current asset and capital head by Rs. 4,15,762.

A.1.4 Overstatement of assets by Rs. 15.60 crore (CN Centre)

Cardio Thoracic and Neuro Sciences centre had purchased 5 new machines under buy back scheme of 5 old machines worth Rs.15,59,63,460 during 2010-11. The five old machines were given to the respective companies from which the new machines were purchased. But the institute had not shown these machines as condemned and reduced their value from the machinery and equipment under the head “Machinery Condemned” on the assets side as well as on the liability side of the Balance Sheet. This resulted in over statement of machinery and equipment by Rs. 15,59,63,460.

A.1.5 Overstatement of assets by Rs. 27.85 lakh (CN Centre)

Cardio Thoracic and Neuro Sciences centre had included consumable items of Rs. 27.85 lakh under the head “Machinery and Equipment” on asset side of the Balance Sheet. This resulted in overstatement of fixed assets in the Balance Sheet and understatement of expenditure in Income and Expenditure Accounts by Rs. 27.85 lakh.

A.1.6 Understatement of assets and Capital Fund by Rs. 4.00 lakh (N.D.D.T.C.)

The Centre had current asset under the head “Custom duty advance” of Rs. 4.00 lakh as closing balance in the Balance Sheet of 2009-10 but the centre did not show the same in the Balance Sheet of 2010-11. The amount was also deducted from the opening balance of capital fund for 2010-11. This resulted in understatement of current asset and capital fund by Rs. 4.00 lakh.

A.1.7 Overstatement of assets by Rs. 1.34 crore (IRCH)

IRCH had wrongly capitalised the expenditure of Rs.1,34,13,900 incurred towards the “comprehensive annual maintenance contract” given to the various companies for the maintenance of various machinery and equipment during the year 2010-11. This not only resulted in overstatement of machinery and equipment in the Balance Sheet but also understatement of expenditure in the income and expenditure account by Rs. 1,34,13,900.

A.1.8 Fixed assets

No depreciation was provided on fixed assets resulting in overstatement of assets and understatement of capital fund. The schedule of fixed assets showing the opening balance, additions, deletion, depreciation and closing balance had not been prepared.

A.1.9 Investment-Non adherence to the approved pattern of investment for G.P Fund accumulations.

The investment of accumulated funds of General Provident Fund balance of Rs. 266.22 crore was not made as per the pattern prescribed by the Ministry of Finance vide notification no. F.5 (88)/2006-PR dated 14.8.2008

A.2 Liabilities

A.2.1 Overstatement of liabilities – Capital Fund by Rs. 55.20 lakh (R.P. Centre)

The centre had shown assets of Rs. 2349.99 lakh created during the year while capitalised Rs. 2294.79 on the liabilities side. This needs to be reconciled.

A.2.2 Overstatement of liabilities – Capital Fund by Rs. 28.32 lakh (AIIMS Main)

The Institute had shown assets of Rs. 1,68,28,06,050 created during the year while capitalised assets of Rs. 1,67,99,73,887 on the liabilities side. This needs to be reconciled.

A.2.3 Overstatement of liabilities – Capital Fund by Rs. 92.96 lakh (C.N. Centre)

The centre had shown assets of Rs.58,58,57,632 created during the year while capitalised Rs.59,51,53,650 on the liabilities side as per ledger (In the accounts, centre had shown the figure of Rs.59,25,24,468 as capitalised during the year 2010-11 after deducting Rs.21,00,000 and Rs.7,20,432 and adding Rs.1,91,250 as correction of 2009-10). This resulted in overstatement of capital fund by Rs.92,96,018 on the liabilities side of the Balance Sheet.

A.2.4 Overstatement of liabilities – Capital Fund by Rs. 1.62 lakh (C.D.E.R.)

The centre had shown assets of Rs.2,78,37,738 while capitalised Rs.2,80,00,000 on the liabilities side. This needs to be reconciled.

B Income and Expenditure Account

B.1 Income

B.1.1 Understatement of Income by Rs. 39.09 lakh (GPF)

The Institute had FDRs for General Provident Fund (GPF) accounts of Rs.6,93,00,000 from 11.09.2008 to 11.08.2010 (23 months) @ interest of 10.1%. The Institute received interest of Rs.1,04,93,755 only while the balance amount of interest of Rs.39,08,773 was deducted by the bank as TDS though the Institute was exempted from income tax under Section 8G(5)(vi) of the Income Tax Act 1961. The deduction of TDS on the FDRs resulted in understatement of interest income by Rs.39,08,773 in the Institute GPF account as well as understatement of claim recoverables.

B.1.2 Understatement of Income by Rs. 2.02 lakh (Neuro Surgery Patient Account)

C.N. Centre had FDRs of Rs. 3.18 crore during the year 2001-11. The centre was to receive interest income of Rs.20,86,474 against which only Rs.18,84,067 were credited in the account. The balance amount of interest of Rs. 2,02,407 was deducted by the bank as TDS though the Institute was exempted from income tax under Section 8G(5)(vi) of the Income Tax Act 1961. The deduction of TDS of Rs.2,02,407 on the FDRs of Rs.3,18,00,000 resulted in understatement of interest income by Rs.2,02,407 as well as understatement of claims recoverable by the same amount.

C. Grants in aid

The institute is mainly financed from the grants of Government of India. During the year 2010-11 the institute received grants of Rs. 1024.65 crore {Plan Rs. 380 crore and Non-Plan Rs.605 crore, Oversight Committee (Plan) Rs.31.75 crore and Rs.7.90 crore (Plan) for N.D.D.T.C.}. It also had its own income of Rs. 65.17 crore. The total plan expenditure was Rs. 182.97 crore and Rs. 191.17 crore was utilised for giving advances for various purposes. The total non-plan expenditure was Rs. 676.75 crore and Rs. 4.35 crore was given to suppliers etc. as advances. The institute received grants for various schemes for Rs.55.57 crore and incurred an expenditure of Rs.51.97 crore.

D Management letter: Deficiencies which have not been included in the Audit Report have been brought to the notice of the Director, AIIMS, through a management letter issued separately for remedial /corrective action.

v. Subject to our observations in the preceding paragraphs, we report that the Balance sheet and Income and Expenditure Account /Receipts and Payments Account dealt with by this report are in agreement with the books of accounts.

vi. In our opinion and to the best of our information and according to the explanations given to us, the said financial statements read together with the Accounting Policies and Notes on Accounts, and subject to the significant matters stated above and other matters mentioned in Annexure to this Audit Report give a true and fair view in conformity with accounting principles generally accepted in India;

a. In so far as it relates to the Balance Sheet, of the state of affairs of the All India Institute of Medical Sciences as at 31 March 2011; 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 Comptroller and Auditor General of India

Place: New Delhi

Director General of Audit

Date: 16.11.2011

Central Revenues

Annexure to Audit Report

1. Adequacy of internal audit system

- The Institute did not have any internal audit manual.
- During 2010-11 out of 70 units, only 11 units were audited by the internal audit wing of the Institute.

2. System of physical verification of fixed assets

- The physical verification of fixed assets had not been conducted during 2010-11 and as such, the actual existence of fixed assets included in the accounts could not be assured.
- The physical verification of stationery, books and publications and consumable items was conducted for the year 2010-11.

3. Regularity in payment of statutory dues

- As per the accounts, no statutory dues over six months were outstanding.

Parawise replies to Separate Audit Report of the Comptroller and Auditor General of India on the Accounts of All India Institute of Medical Science (AIIMS) for the year ended 31st March 2011.

A.1.1 Overstatement of assets by Rs. 19.76 lakh (AIIMS Main)

The consumable item of Rs. 19, 76, 445/- were inadvertently included in the Machinery & Equipment on assets side. The discrepancy point by audit will be rectified in the Annual Accounts 2011-12 of AIIMS Main.

A.1.2 Overstatement of assets by Rs. 1.72 crore (AIIMS Main)

The point raised by audit has been noted and necessary correction and the discrepancy will be make good in the Annual Accounts 2011-12 of AIIMS Main.

A.1.3 Overstatement of assets by Rs. 4.16 lakh (Dr. BRA Institute of Rotary Cancer Hospital)

Due to oversight Rs. 4, 15, 762/- was shown under the head advanced payment. The discrepancy pointed out by audit has been noted and the same will be rectified in the Annual Accounts for the year 2011-12 of IRCH.

A.1.4 Overstatement of assets by Rs. 15.60 crore (CN Centre)

The point has been noted for future compliance and necessary rectification in this regard will be made in the Annual Accounts for the year 2011-12 of CN Centre.

A.1.5 Overstatement of assets by Rs. 27.85 lakh (CN Centre)

The point has been noted for future compliance and necessary rectification in this regard will be made in the Annual Accounts for the year 2011-12 of CN Centre.

A.1.6 Understatement of assets and Capital Fund by Rs. 4.00 lakh (N.D.D.T.C.)

The discrepancy pointed out by the audit will be rectified in the Annual Accounts of 2011-12 of N.D.D.TC.

A.1.7 Overstatement of assets by Rs. 1.34 crore (IRCH)

The discrepancy pointed out by the audit has been noted and will be made good in the Annual Accounts for the year 2011-12 of IRCH

A.1.8 Fixed assets

The Institute prepares its accounts on actual Receipt & Expenditure bases. Further, no depreciation on Machinery & equipment, vehicles etc. has been considered as the AIIMS is 100% founded by Government of India. A note in this regard has already been given in the Balance Sheet to justify the action taken in this regard.

A.1.9 Investment-Non adherence to the approved pattern of investment for G.P Fund accumulations.

The investment in category I & II of accumulated funds of General Provident Fund of Rs. 266.22 crore was made as per the pattern prescribed by the Ministry of Finance vide notification No. F.5 (88)/2006-PR, dated 14.08.2008. However, in order to sustain the security of subscribers money keeping in view the prevailing volatility in the market investment in category III & IV could not be made as per prescribed pattern.

A.2.1 Overstatement of liabilities – Capital Fund by Rs. 55.20 crore (R.P. Centre)

With reference to the audit observation i.e. under statement of capital fund by Rs. 1, 47, 76, 654/- on the liability side of the Balance Sheet. It is clarified that in compliance with the Audit para No. A.2.1 of the SAR 2009-10. A sum of Rs. 92.57 lac (over statement of liabilities) was reduced from the current year asset of Rs. 23, 49, 98, 900/- The balance amount of Rs. 55.20 lac will be adjusted in the accounts of RP Centre for the year 2011-12.

A.2.2 Overstatement of liabilities – Capital Fund by Rs. 28.32 lakh (AIIMS Main)

The audit observation has been noted and necessary correction to this effect will be made in the Annual Accounts 2011-12 of AIIMS Main.

A. 2.3 Overstatement of liabilities – Capital Fund by Rs. 92.96 lakh (C.N. Centre)

The point has been noted for future compliance and necessary rectification in this regard will be made in the Annual Accounts for the year 2011-12 of C.N. Centre.

A.2.4 Overstatement of liabilities – Capital Fund by Rs. 1.62 lakh (C.D.E.R.)

The point has been noted and discrepancy point by audit will be rectified in the Annual Accounts of 2011-12 of C.D.E.R.

B.1.1 Understatement of Income by Rs. 39.09 lakh (GPF)

We have already taken up matter with SBI, Ansari Nagar, New Delhi for not deducting Income Tax at source on the interest earned on FDRs vide letter No.F-1-2/GPF/INV/11-12 dated 24.08.2010 and 05.09.2011 (copies enclosed). Further, S.B.I. Ansari Nagar, New Delhi has intimated vide their letter No. AGM/2011-12/20/82 dated 05.10.2011 (copy enclosed) that the TDS has been deducted in few accounts of AIIMS despite their feeding 'No Tax Deduction' in the computer system. They have already taken up the matter with their higher authorities to find out the reason thereof. They have also started manually checking individual accounts of AIIMS to ensure no TDS is deducted and remitted to Government Account. Meanwhile they have instructed the Chartered Accountant engaged by them for filling TDS returns, verify full records and file revised return/ apply for refunds. Moreover, we have already filled return with Income Tax department (copy enclosed) for the refund of the Tax deducted erroneously.

Therefore, you are requested to drop the objection.

B.1.2 Understatement of Income by Rs. 2.02 lakh (Neuro Surgery Patient Account)

Please refer the reply to para B.1.1.

C. Grants in aid

Facts : - No comments.