

# REFERRAL SERVICES

## ***REFERRAL SERVICES***

### **HISTOPATHOLOGY LABORATORY**

The Histopathology laboratory received 3452 surgical pathology specimens during the year under report. These specimens included 1449 skin biopsies, 105 neurosurgical biopsies, 63 bronchoscopic biopsies, 154 prostate biopsies, 807 cancer surgery biopsies, 63 lymph node biopsies, 59 kidney biopsies, 152 cancer breast biopsies, 20 ovarian biopsies, 168 bone marrow biopsies, 142 bladder biopsies, 170 GIT biopsies and 100 miscellaneous specimens. Special histochemical stains and immunohistochemistry were routinely done for diagnostic purpose as necessary.

Teaching histopathology sets for undergraduate and post-graduate students of other institutions are also being prepared in the laboratory.

**Staff** Dr. Sujala Kapur, Dr. Avninder Singh, Dr. Shruti Sharma, Dr. Sarvjot Vermani, Mrs. Karuna, Mrs. Krishna, Mrs. E. Sharda, Mr. Shivraj Singh, Mr. Ishwar Singh, Mr. Daya Sagar, Mr. Anil Verma, Mr. Shyam Sunder.

### **CYTOPATHOLOGY LABORATORY**

The Cytology laboratory handles FNAC's, fluid cytology and exp cytology for diagnostic purposes from patient's referral from Safdarjung Hospital. From April 2005 to March 2006, 808 cases were received, out of which 173 cases were from breast, 139 from lymph node, 194 fluid cytology, 116 from soft tissue, 43 lung mass, miscellaneous cases-143.

These cases were routinely stained with Giemsa and special stains like PAS, mucicarmine, Alician blue & ZN stain were used as necessary.

**Staff** Dr. Usha Agrawal, Dr. Sarvjot Kaur, Mr. Raj Singh, Mrs. M B Jagannath

### **ELECTRON MICROSCOPE LABORATORY**

A total of 140 samples were received during the year under report for electron microscopy. These included 15 cases from different hospitals of Delhi covering skin, kidney, liver, aspirate and blood samples for diagnostic referral. Remaining 125 samples were received for ultrastructural studies from different research institutes and Labs of the Institute. These included samples from experimental animals as well as human samples for different projects. All the samples were processed and pursued for electron microscopy.

**Staff** Dr. Arun Kumar Jain, Dr. Ved Prakash Singh, Mrs. Asha Rani Srivastava, Mrs. Anita Bhatia, Mr. Suresh Bhim Rao

## **HIV/AIDS LABORATORY**

From April 2005 to March 2006, a total of 2877 blood units were received from blood banks for screening of HIV & HCV. Of these, 2730 blood units were received from volunteer blood donors & 147 from replacement donors. The positivity for HIV was found to be 0.173% while for HCV the positivity was 0.521%.

**Staff** Dr. Aruna Mittal, Mr. Yogender Singh, Mrs. Rosamma

## **FLOWCYTOMETRY LABORATORY**

In total, 4,854 samples of blood, cervical cells, kala-azar patients, sperm cells, leukemia patients were acquired and analysed for surface antigen expression, intracellular cytokine response, ER/PR expression and apoptosis.

**Staff** Dr. Aruna Mittal. Dr. Saurabh Varma, Mr. P.D. Sharma

## **CONFOCAL LASER SCANNING MICROSCOPY LAB**

Total of 237 images were acquired on confocal laser scanning microscope to study ER/PR expression of human/mouse sperm cells, *Chlamydia* inclusion bodies in cervical cell samples.

**Staff** Dr. Sunita Saxena, Dr. Saurabh Varma, Mr. P. D. Sharma

## **TUMOR BIOLOGY LABORATORY**

A total of 1162 specimens were received in Tumour Biology laboratory during the year under report for diagnostic and referral services from Departments of Cancer Surgery, Urology and Surgery of Safdarjung Hospital and also other hospitals of Delhi. Of these, 807 specimens were from Department of Cancer Surgery and Department of Surgery comprising of 158 breast specimens, 20 ovarian specimens and rest other soft tissue specimens. From the Urology Department, 296 specimens were received: out of these 154 being prostate and 142 bladder specimens. Blood has been collected from 69 patients of familial or early age onset breast cancer for genomic analysis. Besides, 59 kidney biopsies have been received from Department of Nephrology, Safdarjung Hospital, Kalawati Saran Hospital and R.M.L. Hospital for light microscopic, immunofluorescence and electron microscopic examination.

**Staff** Dr. Sunita Saxena, Dr. Anju Bansal, Mr. Jagdish Pant, Mrs. Valsamma Mathews, Mr. Sazid Hussain.

## **MOLECULAR BIOLOGY LABORATORY**

During the year, 180 clinical samples (blood, bone marrow, dermal lesions) were collected for detection of leishmaniasis. Samples were processed for detection of *L. donovani*/*L. tropica* infections by PCR, Elisa, DAT and rk39 strip test.

**Staff** Dr. Poonam Salotra, Dr. Ruchi Singh, Mr. NA Ansari, Mr. BVS Raju, Mr. Rajesh Kumar, Mr. Paresh Sharma, Mr. Dhiraj Kumar, Mr. Sandeep Verma, Mr. Gajendra Katara, Mr. Anish Saxena, Mr. RC Chhetri

## **TISSUE CULTURE / MICROBIOLOGY LABORATORY**

During the year, 142 endocervical swabs were collected from Gynecology Out patient Department of Safdarjung Hospital for detection of *C. trachomatis* infection and other sexually transmitted pathogens in females by different diagnostic assays. In addition, 115 cervical lavages & 104 blood samples were collected for immunological & molecular studies. Further, 11 urethral swabs from male patients who were partners of female infertile patients attending clinic of National Institute of Health and Family Welfare were also sent to the laboratory for diagnosis of chlamydial infection. Further, 38 endometrial curettage tissue samples and 14 blood samples were collected from spontaneous aborters undergoing D&E at Dept. of Obst. & Gyn., SJ Hospital. These tissue/blood samples were collected for detection of *C. trachomatis* infection and other STD pathogens by different assays and related immunological studies.

**Staff** Dr. Aruna Mittal, Dr. Sangita Rastogi, Mrs. Madhu Badhwar, Mrs. Asha Rani, Mr. Ajit Singh Lehra, Mr. Kamal Dev

## **CELL BIOLOGY LABORATORY**

This laboratory has been established to develop keratinocyte culture for application in burns. In addition, the laboratory has also been engaged in activities towards the establishment of *Mycoplasma* detection protocol for cell cultures.

**Staff** Dr. Lakshmana Kumar Yerneni, Mr. Ashok Kumar, Mr. Bijender

## **BIOCHEMISTRY / DCP LABORATORY**

Biochemistry laboratory has Direct Current Plasma Atomic Emission Spectrometer. It is mainly involved in trace element analysis and analysis of organic pollutants.

**Staff** Dr. Jagjit Kaur Sindhu, Dr. Madhu Bhatnagar, Mr. T. D. Joshi, Mrs. Kamlesh, Mr. Manoj Sejwal

## ANIMAL HOUSE DIVISION

The Animal House Facility continues to cater the needs of the Institute's scientists. In accordance with the CPCSEA guidelines, the least number of animals that are necessary to maintain the stock in addition to the actual number of animals used for experimental purpose are maintained in the IOP Animal House Division.

During the reporting year, the stock and experimental animals in the Animal House Division as on 31.03.06 included :

- Balbc mice-30
- C3H/Jax mice-09
- Rats-nil
- Hamsters-30

Fellow scientists, namely Dr. S. Jayaraman, Dr. S. Rastogi and Dr. P. Salotra performed experiments for their respective research projects cleared by Institutional Animal ethics committee (IAEC) and Scientific Advisory Committee (SAC).

**Staff** Dr. S. Jayaraman (upto 31.08.05), Dr. Sangita Rastogi (w.e.f. 01.09.05), Mr. Kuldeep Kumar Sharma, Mr. Madan Lal, Mr. Bala Dutt.

## LIBRARY

The Institute library continues to cater the needs of the Institute's staff, students and the research staff by subscribing to **52** (*Indian and Foreign*) journals. The faculty of Safdarjung hospital is also using the Facility. The library serves the scientific staff, DNB, MSc, Ph.D. students, WHO fellows and trainees by getting books and providing other library services. The users access the online journals and reprints through inter-library loan from Safdarjung Hospital Library, NIC, National Medical Library, INSDOC and others as requested by the scientific and administrative staff of the Institute. The library also receives inter-library loan request on email to send photocopies of the same by post free of cost. The photocopy facility for the scientists and students is being continued.

The Institute library has more than 7,000 books, bound journals, thesis, fascicles) pertaining to Pathology, Cancer, Computer Science, Infectious Diseases, Toxicology, Electron Microscopy, Confocal Microscopy, sub-branches of Pathology and other specialized medical subjects. The Medline Service Offline (1966-2001), Central News Agency (Online) and PUB-MED and other online services are also provided for the scientific and technical staff of the Institute. JCCC and J-Gate Custom content for Consortia through informatics India Ltd. is used for resource sharing of other ICMR libraries. The facility allows the user to be more flexible in meeting their needs. This year, our library has become Institutional member of Biomed Central free online journals (*Publication of papers is free of cost for IOP scientists only*)

The library also provides other services like indexing and abstracting of books and journals. The library displays the recent scientific publications, annual reports, newsletters of other Institutes and newspaper clippings of scientific, technical and government policies.

Local Area Network (LAN) facility with two nodes terminal Internet connection has been installed in the library for Internet browsing and e-mail access. Scientists on their desktop can access online journals, which are subscribed from the publisher with print journals. The IOP Newsletter (Quarterly) is being continued and till April, twelve issues have been published and distributed.

### **Meetings and Conferences Attended during the year:**

#### ***Anita Sharma***

1. Attended the Meeting on Electronic Resource Sharing on 8<sup>th</sup> April 2005 at NIOH, Ahmedabad.
2. Attended Programme On JCCC-J-Gate at IRMS, New Delhi in March 2006.

#### ***Sangeeta Batra***

1. Attended Programme on JCCC-J-Gate at IRMS, New Delhi in March 2006.
3. Attended Annual Meeting of Librarians of ICMR at NIRRH, Mumbai, on 25<sup>th</sup> May 2006.

**Staff:** Dr. Sujala Kapur, Mrs. Anita Sharma, Mrs. Sangeeta Batra, Mr. Dharmender  
E-Mail:-ioplibrary@rediffmail.com

### **COMPUTER DIVISION**

During the year, Computer Division continued to act as back-bone for different research activities of the Institute by maintaining existing computers in different Divisions of the Institute and providing and maintaining Local Area Networking as well as Internet Access Services for the Institute. The Computer Division staff was also actively involved in preparation and publication of the Annual Report and Highlights Document of the Institute and operating and maintaining DLP projectors and Laptop computers for all the journal clubs and other presentations in the Institute. The Computer Section was also involved in preparation of salary bills of the staff and calculation of Income tax and filing of quarterly and annual Income Tax returns.

**Staff** Dr. AK Jain, Mr. Shiv Prakash Vashist, Mrs. Seema Sharma

**Meetings and Conferences Attended during the year:**

***SP Vashist***

1. Attended Four days course at NIC on “Bio-medical search databases” in April 2005.
2. Attended five days training course on “System Administration training on configuration of Server & switches etc.” in April 2005.
3. Attended “Symantec Enterprise Data Management Seminar” at Hotel Intercontinental Eros, Nehru Place, New Delhi on 26<sup>th</sup> Aug. 2005.

***Seema Sharma***

1. Attended Four days course at NIC on “Bio-medical search databases” in April 2005.
2. Attended five days training course on “System Administration training on configuration of Server & switches etc.” in April 2005.
3. Attended “Symantec Enterprise Data Management Seminar” at Hotel Intercontinental Eros, Nehru Place, New Delhi on 26<sup>th</sup> Aug. 2005