

The Discipline of Laboratory Medicine

Impact, National & International Since All India Institute of Medical Sciences, New Delhi opens it up in 1988

All India Institute of Medical Sciences, created by a special act of Parliament has the mandate to create new discipline and course-curriculum pertaining to Education, Service and Research in Medical Science.

AIIMS created a discipline of Laboratory Medicine and a Department of the same name in 1988, taking service leaf of Clinical Pathology, Biochemistry, Microbiology and Hematology. In developed countries, the discipline also exists and encompasses the same area as it has been covered at AIIMS.

To start with, although, this was a huge investigative service department and became the mainstay of laboratory investigations of AIIMS hospital, soon this was converted into an Academic discipline. **With a view to creating a continuous human resource of Laboratory Physicians, the department**, with one Professor and four Asst. Professors in position, started Ph.D. program in 1996 and a three-year residency program leading to MD degree in 1997. The first batch of MD students came out in 2000.

The discipline of Laboratory Medicine at AIIMS, so far, has served the following purposes:

1. Service to Patients: It has become a centralized and integrated largest diagnostic laboratory serving the hospital investigations in one place pertaining to clinical chemistry, microbiology, haematology and in clinical pathology.

Also, under this department works, the centralized blood collection (phlebotomy) centre, which also collects samples for various other specialized laboratories at AIIMS. In absence of such a discipline, all four parent departments were to run this collection center of their own and emergency service separately.

The Department's Emergency wing runs a 24 x 7 service for AIIMS hospital and even for its various Centers. This is looked after at the basic level by academic junior and senior residents of the department, under guidance of consultant.

2. Service to Students: In the process, it has become a source of human resource development to produce *versatile expertise*, the Laboratory Physician, a 'Four in One' in the discipline of Laboratory service. This laboratory physician can connect all investigation results for an integrated patient care system. **The discipline and its postgraduate thus take care of space economy, knowledge economy, manpower economy, expenditure economy and management economy for a multidisciplinary diagnostic laboratory of any big hospital.** And, this arrangement is also to a great convenience for the patients attending the hospital.

3. Service to Science: The discipline has served the Science by production of incredible data which has added values in clinical management of Patients, numerous research publications and attracting extramural and intramural funds for research.

Following AIIMS Delhi, Safdarjung Hospital in Delhi, Tata Memorial Cancer Hospital in Bombay, P. D. Hinduja Hospital in Bombay, School of Tropical Medicine in Calcutta, Delhi State Cancer Institute, Institute of Liver and Biliary Sciences in Delhi have opened up this new discipline of Laboratory Medicine. In addition, there are several Private sector Corporate laboratories, all in metro cities, like Apollo, Max, Medanta, Fortis groups, have also opened up this discipline of Laboratory Medicine. **However, the discipline did not grow there in terms of knowledge, Skill and Attitude since none of these places mentioned above could run any academic, MD course.** AIIMS remains, so far, the only source in the Nation for continuous production of such expertise in the medical field.

In 2014, "Guidelines for Investigation Laboratories in the State of Goa as approved by Goa Medical Council" accepts Laboratory Medicine as generic overarching term as well as an individual discipline.

Taking leaf from AIIMS Delhi, at the International level, Bangabandhu Sheikh Mujib Medical University (BSMMU) of Dhaka, since 2014, has introduced three-year residency program leading to MD degree in Laboratory Medicine. Prof. A. K. Mukhopadhyay of AIIMS, Delhi has acted as catalyst in transformation of the discipline of Laboratory Science in Bangladesh.

AIIMS, Delhi has now several post-graduates who have the expertise and experiences to take over as consultant in any multidisciplinary Laboratory and many of them have been joining as senior resident and consultant in the above-mentioned hospitals. One of AIIMS Delhi's postgraduates in Lab Med has joined **AIIMS Bhubaneswar as Faculty.**