

POST DOCTORAL

Fellowship in

Molecular Genetic

Pathology



Get trained by Eminent Faculty and Experts in Specialised Diagnostics





MedNxt is Dr Lal PathLabs's umbrella program for Post-doctoral Fellowship & certificate courses in specialised areas in the field of pathology.

The training programmes will be run onsite at their state of the art, **85000 sq ft National Reference laboratory**, **Rohini**.

The National Reference Lab offers highly specialised exposure in diagnostics incorporating cutting edge technology and vast test menu in Molecular Diagnostics, Next generation sequencing, Clinical Cytogenomics, FISH, Microarray, Digital Histopathology, Oncopathology, Transplant Immunology, Autoimmunity Diagnostics, Mass Spectrometry, Biochemical Genetics, Renal pathology and Transmission electron microscopy. The facility tests over **35000 samples** a day, running close to 90000 tests daily.

The program offers a unique opportunity to learn from the highly experienced faculty and get hands on experience while working with a team of over **60 pathologists** and research scientists and nearly **300 laboratory technologists**.

The students will also get to experience and learn best in class practices in diagnostics from the lab having Accreditations from the College of American Pathologists (CAP) and the National Board for Accreditation of Laboratories NABL for the extensive test menu of **over 3000 tests.** The In-house R&D unit at the National reference Lab is recognized by DSIR, Ministry of Science & Technology, Government of India.

The National reference lab has been training primary DNB Pathology candidates with excellent results over the last five years and now opens avenue to train in advanced, specialised fields in pathology through the MedNxt program.

ABOUT DLPL

Dr Lal PathLabs is India's Leading & Trusted Diagnostics Company

Founded in 1949 75 + years of Diagnostic Expertise

Established in 1949 by Late Dr. Major S.K. Lal, it has over 75+ years of experience in providing quality healthcare diagnostics. It offers ~5000 tests & employs more than 4,000 personnel.



It is India's one of the largest Diagnostics chains with 30+ NABL accredited Labs all over India

We have won many awards over the course of its journey. Some being: -







Molecular Genetic Pathology Fellowship Program

Why choose this program?

- Gain vital exposure to Industry's best practices in Microbiology.
- · Obtain practical/on Job training with one of the most advanced Microbiology Lab setups in India.
- Learn/strengthen operational know how for Accreditations like ISO, NABL, CAP for Pathology Industry.

Minimum Eligibility

MD/DNB in Pathology (Degree must be obtained from recognized Institute.)

Who is this Program for?

- Ideal for Mid-career Pathologist looking to transition to specific branches.
- For pathologists wanting to update their knowledge & technical know-how as per the latest Lab Accreditations.
- Pathologist wanting to get hands on training on latest tests & best in Lab practices

Admission Procedure

Online Registration & profile submission on Registration link

https://www.lalpathlabs.com/mednxt-fellowship-program

Profile evaluation with statement of Purpose followed by personal interview of shortlisted candidates

COURSE DURATION

1 Year

COURSE Fees **INR 1,20,000**

STIPEND Per Month INR 50,000

Evaluation Procedure

The evaluation methodology is at the discretion of the faculty and includes exams, internal evaluations, case log book evaluation, research project completion and performance at the summative examination. A minimum of **75% attendance** is a prerequisite for the successful completion of this programme. Participants will have to secure the minimum pass marks in the respective evaluation components.

Program Director



Dr. Vamshi Krishna Thamtam Technical Director (Genomics & Clinical Cytogenomics)

Dr. Vamshi Krishna Thamtam MBBS, Post-Grad(Public Health), MD(Path), Post-Doc Fellowship and DipRCPath (Molecular Genetics), is the Technical Director of – Genomics & Clinical Cytogenomics. He has nearly two decades of working experience in various specialties, including Renal transplantation, Cardiothoracic surgery, Psychiatry, Clinical trials and Research, Routine Pathology, Oncopathology, Hematopathology and Molecular Pathology. He has acquired the necessary training and experience in the fields of Cytogenomics and Molecular Genetics. In the field of Oncogenomics, his focus has always been on comprehensive test reporting for various solid tumors and hematological malignancies. He did his Fellowship in Molecular Genetics from Tata Medical Center, Kolkata, which impressed upon the advantage of establishing a definite diagnosis, prognostication of the disease and using evidence-based-medicine in formulating individualised targeted therapy for various conditions. Working with the multi-disciplinary specialties, the importance of correlating clinical details, histomorphology, immunophenotyping (flow cytometry & immunohistochemistry), along with cytogenetics and molecular genetics, in various hematolymphoid malignancies and solid tumors has always been well appreciated by peers and mentors. His special interests are Precision Medicine, Wellness genomics, Pharmacogenomics, and Research & Development in the disciplines of Cytogenomics and Molecular Diagnostics. His publication articles, papers and posters in the field for Molecular Pathology and Genetics, and participation in various societies and conferences as a member/speaker reveal his interest and passion towards providing continuing medical education and imparting knowledge towards providing evidence-based patient care.



COURSE CONTENT

1. Introduction to Molecular Biology

- 2. Laboratory orientation and work flow (especially the quality control parameters):
 - a) Basics of nucleic acid extraction techniques
 - b) Complimentary DNA (cDNA) preparation.
 - c) Routine polymerase chain reaction plate preparation.
 - d) Automated systems handling and troubleshooting.
 - e) Real time PCR assay setup and graph interpretation with standard curves analysis.
 - f) Gel electrophoresis and interpretation.
 - g) Methylation studies by Pyrosequencing
 - h) Copy number analysis determination by using MLPA
 - i) Sequencing PCR and sequence analysis using Sanger sequencing
 - j) Fragment length analysis for various parameters
 - k) Droplet digital PCR (ddPCR)
 - I) Next generation sequencing
 - i. Quality parameters
 - ii. Library preparation
 - iii. Platform initiation and run setup
 - iv. Bio-informatics
 - v. Result analysis and Trouble shooting.
 - m) Reagents/Kits stock maintenance and storage

3. Didactics:

- a) Screening and accepting various sample types together with the assigned faculty by rotation.
- b) Presentations at weekly academic meetings (Tuesday) Technical academic presentations, journal clubs, journal scan, as well as discussing interesting in-house cases.
- c) Clinico-pathological meetings Monthly (with the invited clinical faculty, as necessary)
- d) Maintenance of daily case logs for various test reports.

4. Other Academic activities

- a) Attend at least two National/International Molecular Pathology conferences and present a paper(s)/poster(s).
- b) Undertake a Research Project with the assigned faculty and submit within 3 months of course completion, before the final assessment.
- c) Clinical connect with the treating clinicians for patient reports and academic case discussions.
- d) One original article manuscript submission in a peer review reputed journal based on the research project.
- e) Successful publication of a faculty-supervised case report/case series in reputed peer reviewed journal before the completion of the fellowship program.

6. Departmental Discussions/Rotation(s):

15 days rotation in Cytogenomics/ Histopathology/ Hematology/Flow cytometry

The Fellow is encouraged to collate relevant clinical information from any/all the relevant Departments/Disciplines in NRL for a holistic approach towards test/case reports involving various departments with prior intimation and HoD's consent.

GENERAL GUIDELINES Summary FOR MEDNXT – Post Doctoral Fellowship & Certificate Program

- You will be bound by all rules, regulations, office orders, quality controls, information security
 procedures, code of conduct and circulars in existence and framed by the company from time to
 time, which will form a part of your terms of candidature with us.
- You shall keep the Organization informed of your latest postal address and any communication sent to you by the Organization on you last known address shall be deemed to have been duly served notwithstanding the fact that you may have changed your address.
- You will be the responsible for the safe custody of all possessions (Documents, manuals and kits or any other property etc.) belonging to the company that may be entrusted to you by organization.
- You will follow the confidentiality Cluase, leave policy, POSH Act., IT Acts and any other code of
 conducts which would be applicable to you. The detailed guidelines along with code of conduct for
 each applicable Act/Law would be provided to you at the time of joining.
- There would not be any refund/adjustment of or for Fees paid by you.
- The management may withdraw or terminate your candidature by giving 15 days written notice without assigning any reason. Similarly, you may withdraw your candidature by giving 15 days written notice.
- In case of exit either voluntary or involuntary from the program all the assets either hard or soft provided to you have to be returned to the organisation, unless the organisation allows.
- The Candidature shall be governed and construed in accordance with the laws of India. It is agreed
 that any dispute of whatsoever nature between you and Management will be subject to exclusive
 jurisdiction of courts in Delhi.

Note :- A detailed information of all the applicable Laws/Act/Code of conduct would be provided at the time of joining.

Email Id :- MedNxt@ Lalpathlabs.com | Mobile :- 8460133122

Registration Link :- https://www.lalpathlabs.com/mednxt-fellowship-program