

Consultant - Laboratory Haematology

Conceptualized in the year 2004 as a philanthropic initiative for the Eastern and North-Eastern parts of India and the neighbouring countries, the Tata Medical Center (TMC) started operations in Kolkata on May 16, 2011. The hospital is governed by a charitable trust – Tata Medical Centre Trust. It is an integrated Oncology facility with well-trained professional staff and equipped with modern facilities and the most contemporary medical equipment. The hospital was designed by Cannon Design, a renowned architectural firm from North America. It is located on 13 acres of land at New Town in Kolkata, West Bengal.

The hospital is an integrated Oncology facility with well-trained professional staff and equipped with modern facilities and contemporary medical equipment. The Hospital, with a capacity of 437 beds, serves all sections of the society, with 75% of the infrastructure earmarked for subsidized treatment for the underprivileged sections. It provides a wide spectrum of services from diagnosis and therapy to rehabilitation and palliative support. The Institution's objective is to excel in service, education and research.

This state-of-the-art Hospital has been built on carefully landscaped grounds to emphasize the holistic approach in our crusade against cancer. The buildings were designed by Cannon Design, a renowned architectural firm from North America.

Diagnosis and treatment are characterized by a multi-disciplinary approach with Disease Management Teams, wherein experts from different streams participate in decision-making for treatment protocols, using evidence-based medical strategies and appropriate documented clinical guidelines.

Tata Medical Center, Kolkata, has strived to be one of the leading cancer care and research institutions in the country and has benefited West Bengal as well as the adjoining states and neighboring countries.

ABOUT THE DEPARTMENT

The Haematology laboratory is completely automated with state-of-the-art equipments. Beckman Coulter DxH 900 (2 Units) with automated Slide Maker Stainer, DxH 800 (2 Units) with automated Slide Maker Stainer and a LH 750, the fully automated differential cell counters; which are the work-horse in this lab. The cell counters are supplemented by Cellvision, the digital haematology solution. The Beckman Coulter Command Centre attached to the DxH 900s networks all the desktops of consultants , fellows and

laboratory staff by sharing the scatter plots and histograms. Coagulation is fully automated with Werfen IL Top 300 & IL Elite Pro analysers. Cytochemical staining is automated using a Thermanc auto-staining system. The department has 4 flowcytometers, the two 3-Laser BD FACS Canto II flowcytometers, 12 colour BD FACS Lyric and the 13 colour Beckman Coulter Dx Flex flowcytometers; performing flow cytometric analyses in leukaemia / lymphoma diagnosis, MRD detection, haematopoietic stem cell enumeration, PNH, HS and cell cycle studies. The Sebia HYDRASIS II automated electrophoresis platform performs the haemoglobin & protein electrophoresis including immuno-fixation electrophoresis in diagnosis of plasma cell disorders and haemoglobinopathies. The nephelometer (SPA Plus) from Binding Site supplements further by doing the FLC assays and Ig quantifications. There is an advanced platelet aggregometer (Chronolog), both for whole blood and PRP (Chronolog Model 700) for platelet function defects as well as a ROTEM for rotational thromboelastometry study during prolonged & complicated cancer surgeries. Though a cancer hospital, the lab houses a BIORAD D-10 HPLC system for Hb variant analysis in thalassaemias / haemoglobinopathies. In addition the lab has spectrophotometer for kinetic red cell enzyme assays (G6PD), automated ESR equipment and performs all kinds of special stains (NAP, Esterases, AP, TRAP etc.) employed in haematology. Besides the sophisticated blood and bone marrow testing, the bone marrow biopsies have access to all possible IHC markers. The in-house facilities for molecular haematology and cytogenetic tests for hematological malignancies encompass the entire diagnostic algorithm. The Molecular Haematology has four state of the art NGS Platforms (Ion Torrent PGM, Ion Gene Studio S5, QIAGEN Gene Reader & Illumina MiSeq), Digital droplet PCR (BIORAD ddPCR), Sanger Sequencer (8 capillary ABI 3500), four Real Time PCR Platforms (ABI 7500, Qiagen Rotorgene, Thermo Quant Studio 3 & Thermo Quant Studio 6). For nucleic acid extraction, the Qiagen QiaSymphony and Thermo King Fisher automated systems are available. Tape Station, Qubit & Nanodrop instruments are used for quality and quantity check of extracted nucleic acids. .Cytogenetics performs conventional G-Banding karyotyping, Stress Cytogenetics and FISH for all kinds of haematological malignancies. Cytogenetics have 3 Metasystems (IKAROS & ISIS) analysis platforms with Carl Zeiss automated microscopes (Axio Imager)and Metacyte Spot Counting software. In addition it has an ASI (Applied Spectral Imaging) Karyotyping / FISH digital analysis workstation with an Olympus BX53 microscope. The Laboratory handles close to 2500 molecular and 1500 cytogenetic analysis samples a year, which involves peripheral blood, bone marrow aspirates and formalin fixed paraffin embedded tissue. The laboratory aims to provide a timely, clinically relevant, and quality assured diagnostic test results in the laboratory for in-patients, out-patients or other external clients for the laboratory at an affordable price. The entire laboratory is connected to LIMS and HMS for seamless transmission of patient reports within a paper-less environment in the hospital. The department aims to provide an intellectually stimulating, safe, secure, academically friendly work environment to its students, staff & scientific officers, and would

concentrate on continuous quality improvement, research and development. The department is involved in numerous research projects with cumulative grants of nearly 10 crores.

In order to fulfill the above objectives, we are looking to appoint full time:

- **Junior Consultant in Laboratory Haematology (Vacancy - 01)**

Qualifications: - MD or DNB or Equivalent in the relevant Specialty (Pathology). DM Haemato-Pathology would be a desirable qualification.

Experience: Minimum 3 years Post MD / DNB experience in Laboratory Haematology .

Job Description:

Laboratory Responsibilities:

The Consultant is expected to:

- ❖ Do option appraisal of different diagnostic strategies and systems, and make recommendations about the inclusion or exclusion of a system in a clinical context,
- ❖ Provide guidance or participate in the writing of standard operating procedures,
- ❖ Develop evidence based diagnostic algorithms for different clinical situations including in flowcytometry.
- ❖ To analyse, interpret and authorize all laboratory reports related to laboratory haematology including flowcytometry based MRD in leukaemias.
- ❖ Perform a cost benefit analysis of different diagnostic options and make suitable recommendations,
- ❖ Help laboratory technical and scientific staff in the routine diagnosis through supervision, guidance and technical support as and when required,
- ❖ Ensure participation and satisfactory performance of the laboratory in relevant internal quality control and external quality assurance activities,
- ❖ Ensure processing and transport of clinical samples / genetic material in accordance with standard operating procedures and legal requirements.
- ❖ Provide clinical interpretation of laboratory reports either through interpretative comments or during verbal communications.
- ❖ Provide strategic guidance to users (other clinical colleagues) with regards to diagnostic dilemmas related to haematology.
- ❖ Ensure the implementation of appropriate measures for the accreditation of the laboratory with national or international bodies (National Accreditation Board for Testing and Calibration Laboratories (NABL) and Joint Commission International(JCI).
- ❖ Analysing, reporting and authorizing the peripheral blood smears, bone marrow aspirates, bone marrow biopsies, flowcytometry, various body fluid examinations, molecular diagnostics in haematology and HLA typing reports.
- ❖ The Consultant will be responsible for clinical diagnostic services in Lab Haematology. He / She will perform real-time review of clinical case histories involving peripheral blood smears, histopathology slides, bone marrow aspirate smears and bone marrow biopsies and correlate with molecular diagnostic reports including cytogenetics. He / She will be involved in the validation / verification process including internal QC, external QA processes. The Consultant will

independently review all the data with the Fellow (Lab Haematology) for clinical correlation. He / She will be supervising all aspects of the bench work in the laboratory including performing, demonstrating, supervising and troubleshooting.

Administrative Responsibilities

- ❖ Supervising and overseeing the duties, leaves, appraisals of the technologists and scientific officers.
- ❖ Supervising procuring of various reagents and stock maintenance of the same.
- ❖ Overseeing strategic planning for the laboratory's technologies, instrumentation, staffing, budgeting and regulatory issues.
- ❖ Continuous monitoring of quality control and all other aspects required for the accreditation of the laboratory.

Scientific / Technical Responsibilities

- ❖ Formulating and updating the Standard operating procedure documents (SOPs) of the various techniques and tests done in the laboratory.
- ❖ Involved in all aspects of the bench work in the laboratory including performing, demonstrating, supervising and troubleshooting.

Academic Responsibilities

- ❖ Running Fellowship programmes in Laboratory Haematology ; positions open to all MD Pathology qualified doctors in the country.
- ❖ Screening applications, organizing entrance examinations and selection of Fellows in various subspecialties of the laboratory.
- ❖ The consultant is expected to develop, implement, maintain and monitor a teaching / training program for the laboratory staff, junior doctors and for others in relevant areas.
- ❖ He / She will actively participate in monthly / fortnightly / weekly intra & inter-departmental conferences / meetings (Clinical Grand Rounds / MDTs).The Consultant will supervise Fellows to prepare, present, and discuss cases at inter-departmental conferences / meetings attended by the faculty and fellows of the Departments of Clinical Hematology & BMT. He / She will actively participate in Journal Clubs / Lab Meetings / Seminars / Symposia as scheduled from time to time. He / She will be expected to assist in ongoing research projects and to develop his / her own research projects. Consultant will also present papers at national conferences and international conferences as per institutional rules.
- ❖ He / She will teach / guide students enrolled for DNB, PhD, MSc, DMLT and other courses.

Audit responsibilities

- ❖ Identify potential areas of laboratory and clinical audit.
- ❖ Help formulate the methodology and identify resources to conduct the audit & get requisite approval
- ❖ Monitor the conduct and evaluate the data,
- ❖ Ensure appropriate communication and follow up.
- ❖ The Consultant would be involved in laboratory and clinical audit. He / She is expected to participate in research programmes which would involve functioning as Co-PI.

Research Responsibilities

- ❖ plan, conduct and guide research programs,
- ❖ contribute to the development of research grant applications.
- ❖ present papers in scientific conferences in India & abroad.
- ❖ publish articles in Pubmed indexed journals.
- ❖ He / She will be encouraged to write research grant applications, write original articles in peer reviewed journals, guide Fellows in write papers and analysing clinical & laboratory data

Management Responsibilities

- ❖ This would include:
- ❖ business case development for new laboratory / clinical initiatives.
- ❖ ensure the laboratories overall clinical relevance and financial viability.
- ❖ give strategic direction for future development.
- ❖ identify risks and manage risks.
- ❖ ensure health and safety of staffs / visitors working / visiting the laboratory,
- ❖ ensure the safety and security of laboratory assets,
- ❖ deal with staffing, organization and disciplinary issues.
- ❖ Provide leadership to the laboratory.
- ❖ The Consultant would be expected to help other laboratory staff in writing standard operating procedures, drafting policy documents, carrying out health and safety audits, participate in equipment maintenance and quality control activities. He / She will actively participate in NABL / CAP accreditation processes for the molecular laboratory. The Consultant is expected to integrate high end molecular diagnostic platforms (like NGS,Nanostring etc.) into clinical and research use.

***For more details about the job positions, qualifications, eligibility and application forms, please log on to our website: www.tmckolkata.com. Further informal queries about the job please contact the consultants in the Laboratory Haematology department.**

You may also Email or Post applications to: Mr. Suvasish Mukherjee, Head-Human Resources, Tata Medical Center, 14 MAR (EW), New Town, Kolkata - 700160. Email - suvashish.mukherjee@tmckolkata.com. **Last date of application: - 15th Feb,2022**