

**Add Validity: 10/4/2024**

**Position:** Postdoctoral Fellow

**No. of positions:** 1

**Appointing Organisation:** Tata Translational Cancer Research Centre  
Tata Medical Center, Kolkata

### **The Tata Medical Center and the Tata Translational Cancer Research Centre**

The Tata Medical Center (TMC) is a multispecialty institution for tertiary cancer care based in New Town, Kolkata. At TMC, clinical and research activities are integrated to provide state-of-the-art care for patients with cancer. This integration is enabled by the Tata Translational Cancer Research Centre (TTCRC), the research arm of TMC. TTCRC is within a dedicated academic space and spread over 3 floors. At TTCRC, a multidisciplinary team of clinicians, scientists, academics and industry professionals collaborate to develop a systems medicine approach in cancer research. This approach is focussed on developing innovative, indigenous, cost-effective and equitable strategies to improve cancer diagnosis; develop treatments that match disease characteristics and are adapted to treatment response; and, identify prognostic and predictive disease biomarkers. These strategies are multi-dimensional and involve an iterative pathway that include clinical studies, high-throughput laboratory investigations, computational strategies to integrate, analyse and model data, hypothesis-based pre-clinical studies and evidence-based translation of findings to clinical practice. For additional information on work at TTCRC, visit <https://tinyurl.com/TTCRC-systems-medicine> and <https://tinyurl.com/TTCRC-childhood-ALL>.

### **The Position and the PRDiCT research group**

Applications are invited for the position of Postdoctoral fellow within **Personalised Residual Disease Tracking in Cancer (PRDiCT)** group at TTCRC. PRDiCT group is focussed on tracking minimal residual disease (MRD) in Acute Lymphoblastic Leukemia (ALL) patient and work in an integrated fashion with the clinical Genomics team at TTCRC. We employ genomic methods to identify patient specific targets. These targets are then tracked to measure the disease burden in the follow up time points after each phase of treatment. This work has a great translational impact and helps in clinical decision making for the patients' treatment. The group is internationally accredited for the minimal residual disease detection in childhood ALL by RQ-PCR method. PRDiCT group is dedicated in two different activities: (a) Prospective MRD monitoring in ALL patients and (b) implementation of NGS based workflow for MRD monitoring. The group has a dedicated laboratory facility equipped with Illumina, Sanger and Nanopore sequencers and it facilitates several national and international collaborative studies. The group is supported by a dedicated clinical research unit and biorepository unit (TiMBR) at TTCRC.

### **Roles and Responsibilities of the candidate**

The candidate will play a key role in the PRDiCT group and must work very closely with CRU and TiMBR Team. Primary responsibility will be to maintain good laboratory practices and perform,

oversee the prospective RQ-PCR MRD workflow, evaluate and report the patients on time to CRU unit. Details of the responsibilities includes:

- (a) Identifying patients for RQ-PCR MRD
- (b) DNA extraction of patient's samples and QC for MRD workflow
- (c) Tracking MRD for ALL patients highlighted by CRU
- (d) Analysis and reporting the MRD results on time
- (e) Proper documentation of regular experiments
- (f) Taking part in the quality assessment (QA) twice a year organised by Euro MRD consortium
- (g) Active participation in data presentations in group meetings and journal club.
- (h) Collating data, creating publication standard figures and contributing in manuscripts preparation.

#### **Minimum required qualifications/experience**

- (a) PhD (submitted) in Biological Sciences with expertise in Molecular Biology and Genomics
- (b) Hands-on experience in basic laboratory protocols and techniques like DNA extraction, quality check, qPCR, sequencing (Sanger and/or next generation sequencing)
- (c) Soft skills: MS Office, Laboratory and clinical data management
- (d) Competency in managing large data, data analysis and familiarity with statistical analysis softwares and GraphPad Prism.

#### **Additional experience**

- Exposure in handling patients' samples
- prior experience (1-2 years) in Sanger Sequencing
- Library preparation on Illumina platform is preferred but not mandatory.

#### **Necessary qualities**

- (a) Integrity, motivation, enthusiasm, responsibility and reliability
- (b) Focus and commitment in carrying out tasks and duties
- (c) Critical analytical and problem-solving skills, capable of independent work
- (d) Ability to work effectively as part of a multidisciplinary team

#### **Appointment and reporting**

Appointment to the position will initially be for 3 (three) years. The first year is probationary. Confirmation in the position and progression to year 2 and 3 will be subjected to satisfactory review of performance through periodic appraisals. The consolidated monthly salary would be commensurate with qualifications, experience and TTCRC policy. The candidate will be managed by the group lead and will report to the PReDiCT group lead (Dr. Pritha Dasgupta) at TTCRC.

#### **Enquiries**

(a) For further details refer to TMC and TTCRC website, visit [www.tmckolkata.com](http://www.tmckolkata.com) and <https://www.ttcrc.org/>

(b) Submission of applications by **e-mail (only) to both the emails** mentioned below:

**Mr Suvasish Mukherjee**

Head, Human Resources

Tata Medical Center, Kolkata 700 160

**Email:** [suvashish.mukherjee@tmckolkata.com](mailto:suvashish.mukherjee@tmckolkata.com)

and

**Mr. Satadru Dey**

Administrative Assistant

Tata Translational Cancer Research Centre

Tata Medical Center, Kolkata 700 160

**Email:** [satadru.dey@ttcrc.tmckolkata.org](mailto:satadru.dey@ttcrc.tmckolkata.org)

Knowledge/ Aptitude/Skills,	Requirements	Essential / desirable	Information from
<b>1. Disposition / Attitude</b>	<ul style="list-style-type: none"> <li>a. Integrity, flexibility, motivated, committed</li> <li>b. Willing to learn new skills</li> <li>c. Works as part of a team</li> <li>d. Receptive to new ideas</li> <li>e. Capable of independent work &amp; to an agreed plan</li> <li>f. Good time management</li> <li>g. Organized, able to prioritize responsibilities</li> <li>h. Works to high technical and quality standards</li> </ul>	<ul style="list-style-type: none"> <li>a. Essential</li> <li>b. Essential</li> <li>c. Essential</li> <li>d. Essential</li> <li>e. Essential</li> <li>f. Essential</li> <li>g. Essential</li> <li>h. Essential</li> </ul>	<ul style="list-style-type: none"> <li>Application form</li> <li>CV</li> <li>Profile</li> <li>Interview References</li> </ul>
<b>2. Education / Qualifications</b>	PhD in Biological Science	Essential	<ul style="list-style-type: none"> <li>Interview</li> <li>Application form</li> <li>CV</li> </ul>
<b>3. Experience</b>	<ul style="list-style-type: none"> <li>a. Good laboratory practice</li> <li>b. DNA and RNA technology</li> <li>c. Library preparation for sequencing</li> <li>d. Handling Illumina sequencer</li> </ul>	<ul style="list-style-type: none"> <li>a. Essential</li> <li>b. Essential</li> <li>c. Desirable</li> <li>d. Desirable</li> </ul>	<ul style="list-style-type: none"> <li>Application form</li> <li>CV</li> <li>Interview &amp; References</li> </ul>
<b>4. Skills and ability</b>	<ul style="list-style-type: none"> <li>a. Critical thinking</li> <li>b. Problem solving skills</li> <li>c. Readiness to evaluate, develop and test new approaches and strategies</li> <li>d. Mentoring junior team members</li> </ul>	<ul style="list-style-type: none"> <li>a. Essential</li> <li>b. Essential</li> <li>c. Essential</li> <li>d. Desirable</li> </ul>	<ul style="list-style-type: none"> <li>Application form</li> <li>CV</li> <li>Interview</li> <li>References</li> </ul>