

## **Intern position at the TTCRC Clinical Proteomics Unit**

### **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 in 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.

### **The opportunity at TTCRC Clinical Proteomics Unit**

We offer an intern position to train you on handling liquid chromatography coupled to mass-spectrometry (LC-MS/MS) instrument. In this position you will work as part of the proteomics team at TTCRC. The group's work is focussed currently on two aspects, 1. developing plasma proteomics and biomarker discovery platform. 2. providing proteomics solutions to other in-house clinical research teams where you will have ample opportunity to learn MS based proteomics technology and applications. The group is supported by a dedicated tissue biorepository, a clinical research unit, genomics and informatic analyses. Access to resources include confocal microscopy, flow cytometry, dedicated tissue culture facility, virus transduction facility and mass spectroscopy. Your primary responsibility will be understanding the working of the Clinical Proteomics Unit. It'll include troubleshooting, optimizing and maintaining the working of the LC-MS/MS instrument; as well as developing, testing and standardizing various sample preparation and purification techniques. It'll be a regular activity to aid other groups in their requirements for processing samples through the proteomic pipeline and as well in supporting with the data analysis.

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

MSc/M. Tech in Biological Sciences, including Life Sciences, Genetic Engineering, Biotechnology, Cell & Molecular Biology, and Microbiology.

Hands-on experience with molecular biology techniques like Protein purification, Gel Electrophoresis, Western Blotting, etc.

Prior exposure to LC-MS/MS system is preferred but not mandatory

Familiarity with basic theory of Mass-Spectrometry and Protein Biology is essential.

### **Necessary qualities**

- (a) Integrity, motivation, enthusiasm
- (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
- (e) Clarity in career and professional development goals

### **Appointment and reporting**

Appointment to the position will initially be for 6 months. Extension of the internship period or conversion of the position into a regular position of Research Assistant (RA) would be subject to satisfactory review of performance at the end of the 6 month tenure. The monthly remuneration would be according to the TTCRC policy. The position is full time and funded by a central grant from the Tata Consultancy Services. The successful applicant will be managed by the Team Lead, Clinical Proteomics Unit.

### **Enquiries**

(a) For further details on TMC and TTCRC, visit [www.tmckolkata.com](http://www.tmckolkata.com)

(b) Submission of applications by e-mail to:

Dr. Asama Mukherjee, Admin Head and Lab Manager, Tata Translational Cancer Research Centre, Tata Medical Centre, Arterial Road (East-West); Newtown, Rajarhat; Kolkata 700 160.

E-mail: [asama.mukherjee@ttcrc.tmckolkata.org](mailto:asama.mukherjee@ttcrc.tmckolkata.org)

(c) For informal enquiries,

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