Position Postdoctoral Fellow in Proteomics

Last date of Application: 17/6/2022

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

In this position, you will work as part of the proteomics group at TTCRC. The group uses proteomics based high-throughput discovery approaches for proteogenomic studies. The group's work is focussed currently on two cancers, acute lymphoblastic leukaemia and gallbladder cancer. The group is supported by a dedicated tissue biorepository, a clinical research unit, genomics, cell biology and informatic analyses. Access to resources include confocal microscopy, flow cytometry, dedicated tissue culture facility, virus transduction facility, next generation sequencing platform and mass spectroscopy. Your primary responsibility will be to continue, optimise and extend ongoing work on developing, establishing suitable approaches for discovery proteomics from cell lines, primary cells, tissues and organoid samples. You will train and teach research assistants, plan and oversee MS measurements, quantitative MS data analysis and interpretation. The candidate will work with the other scientists and research assistant in proteomics and is expected to expand current capabilities of sample processing, LC/MS operation, and data analysis. You will also collaborate with other teams within interdisciplinary research projects. This will involve working closely with the hospital's multidisciplinary clinical service, the tissue biorepository unit and colleagues in the cancer cell biology, genomics group. You will also participate in downstream functional studies that will use these model cell systems to investigate

disease biology and identify therapeutic opportunities. The post holder will have a designated desk and computer.

Minimum required qualifications/experience

(a) PhD in Life Sciences/Chemical Sciences/Pharmacology

(b) Familiarity with mammalian cell culture, extraction and quantification of proteins from different mammalian samples.

(c) Good understanding and hands-on experience in liquid chromatography coupled mass spectrometry

(d) Hands-on expertise in quantitative mass spectrometry proteomics (SILAC, label-free, TMT) and MS data analysis using dedicated software and appropriate statistical methods.

(e) Experience in analysing discovery dataset from mass-spectrometry platforms.

(f) Experience with data-independent acquisition mass spectrometry is a plus.

(g) Possessing at least one first author publication in the field of mass spectrometry.

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

(f) Ability to train junior members of the lab

(g) Open to collaborate to develop new methods in proteomics

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 years 2 and 3 is subject to satisfactory review of performance through periodic appraisals of performance. The starting consolidated monthly salary for this post is INR 61000-71000. A higher starting salary may be offered based on the qualifications and experience of the candidate. Further salary increments and promotions are determined via annual appraisal. The position is funded by a centre grant from the Tata Consultancy Services. The successful applicant will be managed by the Lead Scientist in Cell Biology and will report to the Director.

Enquiries

(a) For further details on TMC and TTCRC, visit www.tmckolkata.com

(b) Submission of applications by post or by e-mail to:
Mr Suvasish Mukherjee; Head, Human Resources; Tata Medical Center; 14 Major Arterial Road (East-West); Newtown, Rajarhat; Kolkata 700 160
e-mail: suvashish.mukherjee@tmckolkata.com

(c) For informal enquiries,
Ms Sukanya Guha (sukanya.guha@ttcrc.tmckolkata.org)

Knowledge/ Aptitude/Skills,	Requirements	Essential / desirable	Information from
1. Disposition / Attitude	a. Integrity b. Flexibility c. Motivated d. Committed e. Willing to learn new skills f. Works as part of a team g. Receptive to new ideas h. Capable of independent work & to an agreed plan i. Good time management j. Organised, able to prioritise responsibilities k. Works to high technical and quality standards	a. Essential b. Essential c. Essential d. Essential e. Essential f. Essential g. Essential h. Essential i. Essential	Application form CV Profile Interview References
2. Education / Qualifications	PhD in Life Sciences/Chemical sciences/Pharmacology)	Essential	Interview Application form CV
3. Experience	a. Good laboratory practice b. Liquid chromatography and mass spectrometry c. Analysis of quantitative proteomics data d. Cell & molecular biology techniques & protocol development.	a. Essential b. Essential	Application form CV Interview & References
4. Skills and ability	a. Critical thinking b. Problem solving skills c. Readiness to evaluate, develop and test new approaches and strategies	a. Essential b. Essential c. Essential	Application form CV Interview References