Position: Post-Doctoral Fellow in Informatics

Validity of the advertisement : 30/11/2022

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 informatics team at TTCRC. The group's work is focussed currently on two cancers, acute lymphoblastic leukaemia and gallbladder cancer which focusses on targeted and global approach to understand the variations in the cancer genome. These studies include using high throughput genomic data such as mRNA sequencing, targeted exome sequencing and whole exome sequencing. TTCRC has a dedicated genomics laboratory facility equipped with Illumina (NextSeq 550 and MiSeq) and Oxford Nanopore Technology (MinION) sequencers. Your primary responsibility is to analyse high throughput data generated from the equipment as well as developing new pipelines for analysis. This involves working closely with the hospital's multidisciplinary in-house clinical team and researchers as well as collaborators. The post holder will also ensure secure data storage and manage data transfer between the stakeholders. The post holder will have a designated desk and workstation.

Minimum required qualifications/experience

(a) PhD in Bioinformatics/Biotechnology/Computer science
(b) Familiarity with Database Management, Linux OS and Programming languages like C/C++, Perl, Python etc.
(c) Data analysis experience using R/Bioconductor and/or SAS/SPSS
(d) Handling Whole Genome/Exome/ Targeted Sequencing/RNA-Seq/Chip-Seq data
(e) Handling miRNA, gene expression datasets, knowledge on genomic and proteomic databases

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) Ability to train junior members
(f) Clarity in career and professional development goals

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 successful applicant will be managed by the lead scientist in genomics 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,
Mr. Satadru Dey (satadru.dey@ttcrc.tmckolkata.org)

Job related knowledge/ aptitude, skills, etc.	Requirements	Essential/ desirable	Information source
1. Disposition/ Attitude	**a.** Flexible **b.** Self-motivated **c.** Hardworking **d.** Willing to learn new skills **e.** Work as part of a team	a. Essential b. Essential c. Essential d. Essential e. Essential	Application form CV Profile Interview References
2. Education/ Qualifications	**a.** M. Sc in Biotechnology/ Bioinformatics/Computer Science or related discipline preferably with 2 years of research experience.	a. Essential	Certificates Application form CV
3. Experience	**a.** Database management, Linux OS and Programming languages like C/C++, Perl, Python etc. **b.** Data analysis using R/Bioconductor and/or SAS/SPSS **c.** Handling Whole Genome/Exome/ Targeted Sequencing/RNA-Seq/Chip-Seq data **d.** Handling miRNA, gene expression datasets, knowledge on genomic and proteomic databases	a. Essential b. Essential c. Essential d. Essential	Application form CV, Publications Interview References
4. Special Knowledge and Ability	a. Writing Grant and manuscript b. Ability to work with TTCRC Bioinformatician within an agreed framework c. Willingness to learn new experimental techniques d. Ability to organise and prioritise own work e. Good communication skills f. Ability to maintain good laboratory records	a. Essential b. Essential c. Essential d. Essential e. Essential f. Essential	Application form CV Interview References