



## **POST-DOCTORAL POSITION, BIO-INFORMATICS**

Tata Medical Center, Kolkata is a Tertiary Care National Comprehensive Cancer centre. The centre has robust clinical and translational research facility, and is located in the modern Newtown area of Kolkata city. An Investigator Initiated and Institutional Review Board approved research program titled ALTITUDE Study under the Tata Precision Oncology Project [Tata POP] and funded by the Tata Trusts are scheduled to begin in the month of Oct/Nov 2019. This study involves a Multimodal - Omics data platform for the study of patients undergoing standard of care treatment for Acute Myeloid Leukaemia, a blood cancer. We are looking for Post-Doctoral Candidates who can work in a cosmopolitan multi-speciality facility, and contribute pro-actively to the aforementioned research program.

### **RESEARCH FIELD**

Mathematics - Numerical analysis - Simulation

### **ABSTRACT**

Precision medicine, i.e. the personalization of treatments based on the patient's biological and clinical data in a predictive and preventive context, is a major challenge in guiding therapeutic strategy and limiting side effects. It has developed strongly in recent decades thanks to the combination of global (or "omics") technologies in biology and machine learning methods in statistics. Today, the combination of complementary omics analyses appears to be a promising approach to expanding the list of biomarkers and increasing predictive performance. The objective of this 24-36 month renewable post-doctoral fellowship program is to establish standard and develop new biostatistical methods to integrate clinical, genomics, microbiome, and other related datasets from more than 50 patients to build robust and accurate predictive models for diagnostic/ prognostic/ therapeutic prediction in adult patients affected by Acute Myeloid Leukaemia. Linear (multi-block data analysis, partial correlation networks) as well as non-linear approaches will be used. Interested candidates must have a doctorate in applied mathematics (biostatistics, and/or machine learning) and be motivated by multidisciplinary applications (chemistry, biology and medicine). This program will also provide an opportunity to the candidate to train with the best field collaborators in UK for periods up to 3-6 months, or more if found suitable.

**Study Chair:** CHANDY Mammen, Prof. *MD FRCAP FRACP FRCP D.Litt*

**Principal Investigator:** RADHAKRISHNAN Vivek, Dr *MD DM (Onc) PDF (BMT) MSc*

**Lab Co-PI:** ARORA, Neeraj, Dr *MD PDF (Molec Hematology) PDF (Laboratory Hematology)*

**Collaborating Scientist:** BALL Graham, Prof. *PhD* Professor of Bioinformatics, John Van Geest Cancer Research Centre and Nottingham Trent University

**LOCATION**

Tata Medical Center, Kolkata. 14, MAR (EW), New Town, Rajarhat, Kolkata. PIN-700160

**START DATE**

As soon as possible

**SALARY PROPOSED**

INR. 600000-720000 annually, consolidated

**\*For more details about the job positions, qualifications, eligibility and application forms, please log on to our website: [www.tmckolkata.com](http://www.tmckolkata.com). Or contact Dr. Vivek Radhakrishnan, Principal Investigator, Tata-POP ALTITUDE Study Senior Consultant, Division of Clinical Haematology and Hematopoietic Cell Transplantation**

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Please apply online or Email/ Post applications within **30<sup>th</sup> November 2019** to: Mr. Suvasish Mukherjee, Head-Human Resources, Tata Medical Center, 14 MAR (EW), New Town, Kolkata – 700160. Email – [suvashish.mukherjee@tmckolkata.com](mailto:suvashish.mukherjee@tmckolkata.com).