



Tata Memorial Centre invites applications for the Multicentric 5-year ICMR Centre for Advanced Research in Pediatric Cancer Genetics.

Project Title: Whole Exome and Genome analysis to define Childhood Cancer Germline Genomic Landscape, identify new cancer predisposition genes, and develop, validate India-specific multigene panels for inherited paediatric cancers.

Coordinating Centre: ACTREC, Tata Memorial Centre, Navi Mumbai

Overall Project PI/Co-PI: Dr Rajiv Sarin / Dr Girish Chinnaswamy **Site PI:** Dr Badira CP

9 Participating Centres: 1) ACTREC, TMC Navi Mumbai; 2) TMH, TMC, Mumbai; 3) RCC, Thiruvananthapuram; 4) Cancer Institute, Adyar; 5) KMC, Manipal; 6) HBCH, TMC, Vishakapatnam; 7) BCCI, Guwahati; 8) HBCH & MPMCM, TMC, Varanasi; 9) RGCI, Delhi

The missing heritability in Childhood Cancers is due to the limited sample size and bias in case selection, as well as gene panel selection in the 2 North American and European cohorts. Whole exome / Genome sequencing in unselected 2500 consecutive paediatric cancers, enriched with rare cancers, along with deep phenotypic and functional characterization could lead to new gene discovery, establish the prevalence, spectrum and geo-ethnic variations of germline mutations, novel genotype-phenotype correlation and customised Targeted Panels for 3 groups 1) Paediatric Solid Tumours, 2) Paediatric Brain Tumours; 3) Paediatric Haematolymphoid malignancies

Interested candidates fulfilling the prescribed qualifications and experience can apply by filling this Google form, specifying the requested details, post/s you are applying for, and experience relevant to the post/s applied for. <https://forms.gle/FLqB9sAKrRjewvmg8>

3 Posts Project Research Scientist II (Non Medical)

Rs. 87,100/-p.m. (Rs.67,000+HRA@30%)

PhD OR MSc with 3 years relevant experience after Masters

For Engineering / IT / Comp. Science - 4 year graduate degree + 3yr relevant experience

Post No 1: NGS Wet Lab (ACTREC)- Running a High Throughput Genomics Lab; Customise and Standardize assays for Exome, Genome, Transcriptome, Targeted Panels, Sanger & MLPA. Will be supported by a dedicated Project Technical Support-III. Will be responsible for Laboratory and inventory management.

Post No 2: Bioinformatics (ACTREC) - Developing Bioinformatic pipelines and using them for variant filtering, analysis and clinical reporting of Germline Exome, Genome, Transcriptome and Targeted NGS panel for childhood cancers. Will be supported by a dedicated Project Technical Support-III

Post No 3: Senior Genetic Counsellor (ACTREC & TMH)- Coordinate Genetic Counselling for complex genomic cases in any of the 9 centres; Provide Genotype-Phenotype correlation,

Reporting of difficult cases; IEC communication; Mentoring and training of all 9 Genetic Counsellors - 1 at each site; Public awareness; Developing a secure genomic database; Site monitoring of all 9 sites.

7 Posts of Project Technical Support-III

Rs. 36,400/- p.m (Rs. 28,000+30% HRA)

MSc OR 3 year Graduate degree in relevant subject + 3 yr post qualification relevant experience For Engineering / IT / Comp. Science - 4 year graduate degree

Post No 4: NGS Wet Lab (ACTREC) - NGS Lab work for Exome, Genome, Transcriptome, Targeted Panel, Sanger & MLPA, under the supervision of the NGS Project Research Scientist and the PI

Post No 5: Bioinformatics (ACTREC) - Bioinformatics and variant analysis of Germline Exome, Genome, Transcriptome and Targeted NGS of childhood cancer cases under the supervision of Bioinformatic Project Research Scientist and PI

Post No 6 and 7: Genetic Counsellor (1 for ACTREC, 1 for TMH) - Genetic Counselling and consenting for all enrolled families at that site for exome/genome analysis of proband, biobanking and cascade testing in the family. Coordinate with investigators, record Genotype - Phenotype correlation, and database entries. Will work under the supervision of the Senior Genetic Counsellor Project Research Scientist, and the PI

Post No 8 and 9: Clinical Trial Coordinator (1 for ACTREC, 1 for TMH) - Screening of cases, checking eligibility checklist, maintaining screen log, data collection, filling eCRF, database entries and curation, tracking status of genetic test reports and coordinating patient appointment; monthly, quarterly & annual reports; coordination with all involved clinicians & investigators, GCs and the lab. Assist the Senior Genetic Counsellor and Site PI for IEC communication. Work under the supervision of PI / Co-PI / Site PI

Post No 10: Networking & Database coordinator: (*Preferred qualification: Engineering / IT / Comp. Science - 4 year graduate degree*) Maintain and monitor servers, network and databases. Generate queries and reports to support operational needs and analyze data trends. Facilitate transfer of data in coordination with the NGS lab, investigators, and the ACTREC IT team. Take periodic backups of data. Implement security measures to protect data & network