

Bioinformatician

We are looking for a Bioinformatician in the Cancer Genomics and Bioinformatics (CGB) Unit. The position is in the context of a 3-year multi-unit research grant funded by the Italian Ministry of Health.

Research. The CGB unit study the regulation of alternative splicing in cancer, with a strong focus on the role of RNA binding proteins (RBPs). Our research aim at determining the role of RBPs in cancer progression, assessing the mechanisms of RBP abnormal regulation, establishing whether these mechanisms are common to different cancer types, and identifying novel therapeutic targets. To achieve these goals, we will combine genomic, transcriptomic and epigenetic high-throughput approaches with big data science. The unit rely on second- and third-generation sequencing data generated by the research team, external collaborators and publicly available data.

Role. The post holder will be responsible for the analysis and integration of multi-omic next generation sequencing data at cell-population and single-cell levels for the molecular characterization of sarcomas. A key mission will be to ensure the delivery of computational analyses to identify neo-antigens generated by alternative splicing neo-junctions. To achieve these goals, the candidate will also be expected to contribute to the development of new algorithms and bioinformatics approaches. Robustness and reproducibility of bioinformatics analyses will be at the core of this role.

Requirements.

- PhD in physics, computational biology, computer science, bioinformatics or similar.
- +3 years experience in bioinformatics analyses, especially in the analysis of high-throughput sequencing data, particularly RNA-sequencing.
- Knowledge of programming languages as R, bash, python.
- Experience in cancer genetics and alternative splicing.
- Experience in theoretical and practical statistical approaches and network theory.
- Experience with single-cell sequencing.
- Experience with long-read sequencing is highly advantageous.
- Experience in standardised and modular bioinformatics workflows.
- Experience in High-Performance Computing and Unix operating systems.
- Experience in delivery of genomics projects.

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- Ability to report research progress on a regular basis.
- Fluency in English
- Proven communication and problem-solving skills.
- Commitment to oncological research.
- Excellent interpersonal, problem-solving, oral and written communication skills

Application. To apply for this position please submit a cover letter in English, describing research experience and motivation, CV in English, and contact information of 2/3 references to: ufficio.personale@ircc.it ; direzione.scientifica@ircc.it

A coordinated and continuous collaboration contract is offered, lasting 24 months, with a gross salary of 35.000 euros.

The position is available immediately.