



COMPUTATIONAL SCIENTIST POSITION in **Translational Cancer Genetics**

Department of Oncology, University of Torino and Candiolo Cancer Institute –ITALY

The Translational Cancer Genetics laboratory (<https://www.irccs.org/translational-cancer-genetics>) led by Prof. Sabrina Arena is focused on the design of novel therapeutic strategies to overcome heterogeneous resistance in tumors of colorectal, prostate and ovarian origin. Development of cancer therapies based on synthetic lethal targeting of the DNA damage response (DDR) and metabolic pathways might provide an opportunity for the design of novel drug combinations to elicit synergistic activity with tolerable toxicities and foster the long-term response to therapies. Translational application is provided by testing efficacy in patient-derived preclinical models (cell lines and organoids, PDXs) that faithfully recapitulate the clinical settings of these tumors.

Position Overview:

We are looking for a highly motivated Computational Scientist. The ideal candidate should have experience in performing, maintaining, and updating DNA/RNA sequencing and multi-omics data analysis applications. The candidate will leverage his/her expertise in computational biology, bioinformatics, and statistical analysis, to develop algorithms to analyse large-scale datasets on newly established preclinical models and contribute to a deeper enlightening of the novel potential druggable targets in different types of cancer.

Key Responsibilities:

- To employ computational methods to analyze high-throughput sequencing and multi-omics data.
- To collaborate closely with experimental biologists to design experiments, validate and interpret computational findings.
- To follow the latest advancements in computational biology and multi-omics, applying innovative approaches to address complex scientific questions.

Qualifications:

- Ph.D. or equivalent experience in computational biology, bioinformatics, genomics, or a related field. Younger candidates with a solid computational track are also encouraged to apply.
- Proficiency in programming languages, preferably with experience in developing bioinformatics pipelines and tools.
- Strong background in statistical analysis applied to biological datasets.
- Excellent communication skills and ability to collaborate effectively within a multidisciplinary team environment.

Given the international nature of our team, English is the official language.

The candidate will join a dynamic and multidisciplinary group at the Candiolo Cancer Institute, a renowned and fully equipped with state-of-art core facilities cancer center in Northern Italy with strong ties with the University of Torino Medical School and many documented national and international collaborations.

Applications will be accepted until the position will be fulfilled and should be sent to sabrina.arena@unito.it. They should include a CV, a cover letter outlining your scientific interests and relevant experience, and contact information of at least two referees.