Postdoc Quintarelli Group - Bioinformatics

Job description

APPLICATION CLOSING DATE: October 2023

Bambino Gesù Children Hospital (OPBG) is a Scientific Institute for Research, Hospitalization and Health Care, which represents the Italy's main Paediatric Hospital (http://www.ospedalebambinogesu.it). It is part of the Italian National Healthcare System and is widely recognized as referral Centre for all pediatrics specialties at national and international levels. Research Laboratories are fully equipped with high-tech utilities, supporting genomics, proteomics, microarray technology, cytogenetic.

In this context, the Quintarelli group at Department of Hematology-Oncology and Cell and Gene Therapy leads by Prof. Locatelli, is looking for **a computational postdoctoral fellow**. The project will involve the analysis of newly developed datasets from CAR T cell therapy and pediatric/adult tumors. This project may result in the development of novel strategies for the early detection and monitoring of CAR T cell fate and clinical outcomes in patients undergoing CAR T and the characterization of tumor microenvironment in bone marrow niche and in solid tumors.

The successful candidate will report to Prof. Concetta Quintarelli, Research Group Leader of CAR T cell unit.

(S)He will have the following main responsibilities:

- Analyze RNA-seq datasets;
- Analyze large single cell datasets and develop or apply computational methods for clonal tracking;
- Interest in spatial transcriptomic analysis;
- Managing data analysis within their project;
- Generating reliable data for publication in the projects to which they are assigned and record all data and results in specified forms (paper and electronic);
- Publishing reproducible research in international conferences and journals;
- Interacting and supporting other group members whenever needed;
- Sharing and discussing research results with collaborators.

Job requirements

We are seeking a creative and highly motivated computational biologist with prime interest in single cell genomics. Candidates must have a *PhD* in bioinformatics, computational biology, statistics or related genomic disciplines. Experience with next-generation sequencing data and strong programming and quantitative skills are required. Previous work in translational bioinformatics (theoretical or analytical) is a plus.

Essential:

- PhD in bioinformatics, computational biology, statistics or related disciplines
- Experience in RNA-seq and single-cell RNA-seq analysis
- 3+ years of experience in programming in Python or R;
- Fluency in English.

Preferential:

- Ability and interest to learn and develop new methodologies especially in the emerging field of spatial transcriptomic;
- Previous work in translational bioinformatics (theoretical or analytical);
- Previous experience with machine learning methods.

Required personal skills:

- Ability to manage competing priorities in a fast-paced environment and to work independently;
- Strong interpersonal skills demonstrated by the ability to lead and gain the assistance and cooperation of others team members;
- Ability to train students;
- Ability to build trust through operating with transparency and creating an open and positive environment;

Application Instructions:

- CV
- A motivation letter
- Names and contacts of 2 referees

Number of positions offered: 1

Contract offered: Research Contract, 1 years, renewable, 2500 €/month

The role is based in Rome (OPBG- San Paolo venue)