

Fellowship in Computational Immunology

Italian Institute for Genomic Medicine Immune Regulation Lab, Dr. Luigia Pace

The Giovanni Armenise-Harvard laboratory of Immune Regulation, at the Italian Institute for Genomic Medicine (IIGM), in Turin, Italy, is seeking for a highly motivated fellow in Computational and Systems Immunology.

Research: The lab addresses fundamental aspects of immune responses, related to **memory T cell differentiation and long-term protective immunity**. Our research aims to understand how T lymphocytes integrate complex environmental stimuli into specific **epigenetic and differentiation programs**, which specify cell fate commitment and function. The research's goal is to use this knowledge to develop novel molecular targets and strategies for the prevention and treatment of cancer, in the new field of **cancer immunotherapy**.

To achieve these goals, we combine a variety of high throughput approaches, including next generation sequencing of RNA and epigenetics marks, and single cell transcriptomic analysis.

Qualifications and requirements:

- Master or PhD degree in Bioinformatics, Biostatistics or Applied Mathematics
- Experience in computational data analysis (RNA-seq, ChIP-seq)
- Strong programming skills (R, Python, Bash)
- Mastering bioinformatics and biostatistics tools (R, Bioconductor)
- Experience in high-throughput data analysis and multivariate statistics
- First-authored publications in peer-reviewed journals are preferred
- Good communication skills and self-motivation
- Fluent in spoken and written English

IIGM (www.iigm.it) is located at the FPO IRCCS Candiolo Cancer Institute, Candiolo, Turin, Italy (www.research.fpoircc.it). The main goal of IIGM is to foster and develop **excellence in human genomic research and education**, with special reference to genomic variability in multifactorial diseases, with a strong focus on cancer. The institute provides high-level scientific education, and access to state-of-the-art research facilities.

To apply for these positions please submit a cover letter (in English) describing research experience, interests, motivation, CV and contact information of three references to:

luigia.pace@iigm.it

The position is available immediately.

References: Pace L, et al. Science 2018; Pace L, et al. Science 2012; Alessandri', et al. GigaScience 2019.