

Job Opportunity: Graduate Research Fellow / Post-doc Position in Bioinformatic Applied to Women's Health Genomics

The laboratories of Valentina Proserpio and Ivan Molineris at the University of Turin are jointly looking for a researcher interested in cutting-edge bioinformatic applied in the field of Women's Health Genomics. The initial contract will be for 1 year, renewable for another year.

About Us

Dr. Valentina Proserpio (a molecular biologist) and Prof. Ivan Molineris (a bioinformatician) are leading a collaborative interdisciplinary team at the University of Turin, dedicated to unraveling the complexities of female pathologies through high-resolution multi-omics methodologies. Our goal is to contribute significantly to the understanding, diagnosis and treatment of women's health issues like Vulvodynia and Extramammary Paget Disease. For more insights into our research initiatives, please visit <https://www.mbc.unito.it/it/ricerca-e-facilities/are-e-ricerca/womens-health-genomics> and follow us on Instagram for updates: @doppiaVproject.

Key Tasks And Responsibilities

The successful candidate will analyze big data generated in the lab to study the interplay between microbiome and host cells in onset and development of Vulvodynia at population and single cell resolution. Our aim is to elucidate pathological mechanisms and to identify biomarkers and new therapeutic targets for vulvodynia treatment.

The project benefits from a strong network of collaborators from several Italian Universities including Milan, Pavia and Politecnico of Turin, The Italian Institute for Genomic Medicine (IIGM), International Research Institutes and the "Comitato Vulvodynia e Neuropatia del Pudendo" association.

The ideal candidate will be responsible for

- application and optimization of standard bioinformatic pipelines,
- downstream integration of data coming from different omics like RNA-seq, scRNA, microbiome
- integration of publicly available data
- downstream analysis using machine learning techniques

They will also be involved in the project's dissemination activities.

Job Requirements

Essential requirements:

- Master degree in informatics, mathematics, physics, engineering or other relevant subject areas with strong emphasis on statistics, problem solving, modeling.
- Proven experience in python or R software development, even if basic.
- Basic knowledge of statistical modelling and machine learning
- Fluency in English

Preferential Requirements:

- PhD in relevant areas.
- Knowledge and research experience in bioinformatics, in particular:
 - RNA-seq data analysis,
 - Microbiome data analysis,
 - scRNA data analysis.
- Proven experience in machine learning
- Familiarity with the Linux environment
- Ability in graphical representation of complex data

Organizational And Social Skills:

- Ability to work independently
- Ability to react proactively to unexpected problems or failures
- Ability to build a trusted work environment through operating with transparency and creating an open and positive environment

Application Instructions

To apply for this position please send

- a CV in English or Italian
- a motivation letter in English or Italian
- names and contacts of 1 or 2 referees

to ivan.molineris@unito.it indicating:
Research Position – your Surname
in the email subject.