

**POSTDOCTORAL POSITION
AT THE RESEARCH PROGRAMME
ON BIOMEDICAL INFORMATICS (GRIB) AT THE IMIM
(Ref. 2223 - DONLO)**

The IMIM is looking for a PostDoc at the Research Programme on Biomedical Informatics (GRIB). The GRIB mission is to develop and apply computational methods and information technologies for a better understanding and prediction of biological phenomena, giving especial emphasis to those related to the human diseases, their prevention, diagnosis and pharmacological treatment.

IMIM is located at the Biomedical Research Park of Barcelona (PRBB), being part of a fantastic scientific community, offering a highly innovative and enriching training environment for basic and translational research. More information about the GRIB at <http://grib.imim.es/>

The successful candidate will join the GRIB in the context of the European consortium "Toward **PR**ecisi**ON** Medicine for the **P**rediction of **T**reatment response in major depressive disorder through stratification of combined clinical and -omics signatures (PROMPT)" funded by the ERA PerMed JTC2020 program. More information about the project at <https://www.prompt-depression.org/>

The candidate will bear responsibility of the following tasks:

- Process and analyze multi-omics datasets (eg. RNA-Seq, smallRNA-Seq, GWAS)
- Design and apply integrative data analysis (computational/statistical/causal) and visualization techniques for multi-omic (transcriptomics, genomics, mirnomic and clinical) data to address research hypotheses
- Collaborate with experimentalists, psychiatrists, psychologists and other scientists to design and deliver robust multi-omic predictive models for treatment response
- Participate and perform the data management, activities, tasks, and reports within the framework of the PROMPT project

Candidates must have:

- A PhD in Bioinformatics, Genomics, Data Science, or related fields.
- Experience in NGS data analysis (RNASeq, smallRNASeq, GWAS, WES...)

- Excellent understanding of transcriptomic and genomic workflows, data structure and potential data analysis approaches to efficiently integrate and/or develop analysis and visualization protocols
- Experience in analyzing, integrating and harmonizing multi-omics datasets e.g., using network-based, graph modelling, dimensionality reduction or machine learning approaches
- Able to process and derive novel insights from integrative analysis of multi-omic datasets
- Experience in advanced statistics and machine learning
- Proficiency in R or Python for data analysis and programming
- Solid knowledge of UNIX-like operating systems and shell scripting
- High level of English

In addition we will value:

- Previous experience in neuropsychiatric research
- Experience in the development, generation and use of software containers, e.g. Docker, Singularity
- Experience in collaborative software development using Git and HPC computing.

Starting ideally in January 2023, but negotiable and flexible to candidate's convenience.

PROMPT fosters a diverse, inclusive and equal-opportunity environment, and sets out the criteria and procedures for [Open, Transparent and Merit](#)-based recruitment of staff, which as a top priority of the European Research Area (ERA), is one of the pillars of the [European Charter for Researchers](#) and in particular of the [Code of Conduct](#) for the Recruitment of Researchers.

Category/ Salary: Investigador Postdoctoral Senior A/ Annual Gross Salary: 35.401,63€

Period: January 2023 to September 2024.

Required information and contact:

Please send your CV and motivation letter to chus.donlo@upf.edu . (Ref: PROMPT)

Deadline: submit your application by **December 15th 2022**