

PhD POSITION AT IISPV/IMIM

(Ref. 2303 - SANTPERE)

We are looking for highly motivated and qualified candidates for a 3-year contract to perform the PhD in a project funded by La Marató de TV3 entitled: "INSCRIPTION: An integrative approach to schizophrenia risk prediction leveraging genetics, brain imaging and neuroepithelium's transcriptome".

The successful candidate will join a young and dynamic scientific community and be supervised by two labs: the Gerard Muntané Lab, at the Institut d'Investigació Sanitària Pere Virgili (IISPV), Tarragona, and Gabriel Santpere lab, at the Research Programme on Biomedical Informatics (GRIB-IMIM/UPF), located at the Biomedical Research Park of Barcelona. Gerard Muntané is a researcher in the Genetics and Environment in Psychiatry (GAP) group, which is part of the Strategic Area of Neurosciences and Mental Health of the IISPV. Gabriel Santpere is the head of the recently formed Neurogenomics group at the GRIB-IMIM. His group is interested in the mechanisms that lead to brain specializations, including the human manifestations of multiple neuropsychiatric disorders.

The project will focus on the genetic bases of mental health disorders, with special focus on schizophrenia, and how we can combine multimodal data extracted from patients recruited for this project, to improve our prediction of schizophrenia. The candidate will bear responsibility in the following tasks:

- Conduct original research using techniques such as genome-wide association studies, gene expression analysis, Polygenic Risk Scores and functional genomics.
- Conduct data analysis and prepare data for presentation in peer-reviewed journals and at professional meetings under the supervision of the project coordinators.
- Liaise with and coordinate experimental duties with medical Doctors.
- Attend and present at conferences and workshops.
- Participate in relevant coursework and seminars.

We will value:

- Previous experience and formal training in programming and data analysis with R or Python (e.g., master's in bioinformatics).
- Knowledge of UNIX operating system and bash scripting.
- Understanding of statistics.
- A good level of English.

The contract will start upon the beginning of the project, (around spring of 2023).

Please send your CV and motivation letter to: <u>gerard.muntane@urv.cat</u> and <u>gsantpere@imim.es</u>.