

PhD Position in Bioinformatics and Genomics

A predoctoral contract to carry out a **PhD in Bioinformatics and Genomics** is available at the Comparative and Functional Genomics group from the Research Programme on Biomedical Informatics (GRIB) of the Hospital del Mar Research Institute in Barcelona (IMIM). The successful candidate will join a dynamic and interdisciplinary team to participate in the research project “**Complete characterization of human polymorphic inversions with long-read sequence data (CompleTION)**”, funded by the Agencia Estatal de Investigación (AEI).

The PhD project will be focused in the functional consequences of human inversions, a little studied type of genomic variant with potential important effects, and will include the optimization of novel methods to impute inversions, determine their contribution to gene expression and epigenetic variation, and estimate their association with phenotypic traits and complex diseases taking advantage of available large datasets. The selected candidate is expected to join the new Interuniversity PhD Program in Bioinformatics, and will have the opportunity to be part of the extraordinary research community at the Barcelona Biomedical Research Park (PRBB).

Requirements:

We are looking for highly-motivated and talented individuals with interest in science and a **Master degree** in an area related to Bioinformatics, Genomics or Genetics. Those candidates that are planning to complete their master before or around September 2023 are also encouraged to apply.

Conditions:

Total duration of contract will be of **4 years**, with the possibility to enjoy a 4th year as postdoctoral researcher.

More information of the contracts:

<https://www.aei.gob.es/convocatorias/buscador-convocatorias/proyectos-generacion-conocimiento-2022>.

Application:

To express interest in the position and have more information, send an e-mail with a copy of your CV and contact information to **Mario Cáceres** (mcaceres@icrea.cat) before **September 15th, 2023**.

Application deadline:

Official application will open in the next weeks at the Hospital del Mar Research Institute job offers webpage: https://www.imim.es/ofertes/en_index.html.

Additional information:

[Comparative and Functional Genomics group](#)

[The InvFEST database](#)

[Research Programme on Biomedical Informatics \(GRIB\)](#)

Selected publications:

F. Degenhardt et al. Detailed stratified GWAS analysis for severe COVID-19 in four European populations. [Human Molecular Genetics, 31: 3945-3966 \(2022\)](#).

E. Campoy et al. Genomic architecture and functional effects of human inversion supergenes. [Philosophical Transactions of the Royal Society B 377: 20210209 \(2022\)](#).

M. Puig et al. Determining the impact of uncharacterized inversions in the human genome by droplet digital PCR. [Genome Research 30: 724-735 \(2020\)](#).

C. Giner-Delgado et al. Evolutionary and functional impact of common polymorphic inversions in the human genome. [Nature Communications 10: 4222 \(2019\)](#).