









Este contrato laboral es parte del proyecto PID2023-151379OB-I00 financiado por MICIU/AEI/10.13039/501100011033 y por FEDER, UE

Postdoctoral Position in Genomics of Preclinical Disease

The Integrative Genomics Lab, led by Urko M. Marigorta at CIC bioGUNE (Bilbao, Basque Country, Spain), invites applications for a postdoctoral position in complex disease genomics. Our lab integrates statistical genomics and multi-omic profiling, with a focus on identifying molecular events that precede clinical symptoms. We are guided by the belief that understanding these early molecular drivers can lead to advances in precision medicine.

About the Position and the Project

You will spearhead a cutting-edge project aimed at integrating multi-omic datasets from preclinical cohorts to uncover molecular signatures predictive of disease risk and progression. Your responsibilities will involve analyzing in-house multi-omic profiles from individuals at risk of inflammatory diseases and integrating them with large-scale data (e.g., UK Biobank), developing computational pipelines to refine multi-omic risk signatures, identifying molecular pathways that can be targeted for prevention, and exploring lifestyle interventions or molecular biomarkers that modulate disease risk.

This position offers an exciting opportunity to engage with **real-world, high-dimensional datasets** at the intersection of **genomics, immunology**, and **clinical medicine**. It is part of the project PID2023-1513790B-I00 funded by MICIU/AEI/10.13039/501100011033 and by FEDER, EU. The project can be tailored to your interests within the scope of the overarching project, including exploration of other disease domains. The position is available for up to three years.

Requirements

We are seeking a motivated candidate with:

- A PhD in genetics, bioinformatics, statistics, or related fields, ideally with experience in complex trait genomics, multi-omic integration, or computational biology.
- Strong **programming and bioinformatics skills** (e.g., R, Python, or similar).
- A solid understanding of **statistical methods** applied to large datasets and the ability to adapt to emerging tools and techniques.
- An inquisitive mindset, able to work in a collaborative environment.
- Experience in immunology is desirable but not essential.

The Lab

We specialize in uncovering the molecular basis of disease progression and heterogeneity through **statistical genomics** and **multi-omic profiling**. Located at **CIC bioGUNE**, a leading research institute in the Basque Country, our lab collaborates with clinicians, immunologists, and computational biologists to tackle critical challenges in complex diseases. For more information, visit <u>Integrative Genomics Lab</u>.

Application procedure (Deadline December 31st, 2024):

Motivated candidates should submit an application package including:

- A detailed CV.
- 2. A **cover letter** (2 pages) describing your research experience, statistical and computational skills, and goals for postdoc training.
- 3. Contact details for two references.

Applications should be submitted via the form available at https://www.cicbiogune.es/joboffers-form, and indicating **44621** as reference.