



PREDOCTORAL POSITION

Mitochondrial Genetics & Cell Stress Signaling

The **MitoPhenomics lab**, located at CiMUS in Santiago de Compostela, is offering a **2 years postdoctoral position** fully funded by the **Convocatoria de Ayudas para Incentivar la Consolidación Investigadora. Convocatoria 2024**

MitoPhenomics Lab. MitoPhenomics lab's overarching aim is to understand the role of mitochondrial phenotypic variation in metabolism and cell signaling in health and disease. For achieving this we combine genetics (clinical and population) and bioenergetics with multi-omics approaches in cell biology, animal models, and population cohorts.

Research Project. Mitochondria do more than power the cell—they regulate metabolism, immunity, epigenetics, and stem cell fate. Our project explores how mutations in mitochondrial (mtDNA) and nuclear (nDNA) genomes lead to mitochondrial diseases, which affect 1 in 5,000 people. Despite carrying the same mutation, individuals show vastly different symptoms, hinting at hidden layers of cellular regulation. We aim to pioneer a new translational research approach by integrating cell biology, mitochondrial genetics with “functional integromics”. Using patient-derived samples, we’ll uncover stress response pathways (ranging from hypoxia to nutrient sensing pathways) and metabolic networks that drive disease variability. Our ultimate goal is to identify new mechanisms driving variable penetrance in mitochondrial disorders and to develop personalized therapeutic strategies.

Job Offer

A 2 years fully funded postdoctoral position. Remuneration: From 32K to 36.6k€ depending on experience. Also, he/she will be supported to apply for public postdoctoral calls to promote the competitiveness of their CV. Preferable starting date September-October 2025 but this is negotiable

Required skills

Candidates should hold a **Master in Biological Sciences or a related discipline, with research experience in cell biology and/or epigenetics**. Prior experience in **mitochondrial biology, cell signaling microscopy and image analysis** will be considered a strong asset.

Where

The candidate will join the **MitoPhenomics Lab** at **CiMUS – Centro Singular de Investigación en Medicina Molecular y Enfermedades Crónicas**. CiMUS is located in the vibrant and beautiful city of **Santiago de Compostela**. The Centre is a leading institute in genetics, chronic diseases—including metabolic disorders, obesity, cardiovascular, neurological conditions, and cancer—as well as in drug discovery. It has recently been awarded the prestigious “**María de Maeztu**” distinction and **CIGUS recognition** from the **Xunta de Galicia**, both honoring its research excellence. At CiMUS, research groups take a collaborative, **innovative**, and interdisciplinary approach to uncover new mechanisms involved in chronic diseases and translate these discoveries into novel treatments.



Applications to:

Dr. Aurora Gomez-Duran (aurora.gomez@usc.es) in a single PDF including

- ◆ Complete CV
- ◆ Motivation letter
- ◆ The name of 2 different referees

Application deadline: June-July 2025

Interviews will take place during the month of July