

## JOB OFFER

Happy New Year! @rosabarro1 lab is offering a **PhD contract** for a motivated person interested in protein regulation and rare diseases.

<https://www.cicbiogune.es/careers/job-offers>

**Ubiquitin-likes and Development Lab:** <https://www.cicbiogune.es/people/rbarrio>

### ***Role of the ubiquitin protein family in rare diseases.***

Protein homeostasis plays a determinant role in the regulation of animal developmental circuits, which are fine-tuned by posttranslational modification by members of the ubiquitin-like (Ubl) family. Barrio Lab focuses on elucidating the roles of protein homeostasis driven by Ubls, i.e. SUMOylation, and on the diseases caused by homeostasis disruption, i.e. rare diseases such as ciliopathies. We use state-of-the-art technology in biochemistry, cellular and molecular biology and genetics, being experts in proteomics and molecular interactions, using cell culture, patient-derived samples and *Drosophila* in vivo model.

The candidate will develop a cutting-edge project in the field of biomedicine. Specifically, s/he will develop strategies to analyse the targets of E3 Ubl ligases involved in rare diseases and with specific sub-cellular localization. This project will have high impact in the understanding of rare diseases and on the emerging technology of targeted protein degradation, where the cell degradation machinery mediated by ubiquitin is hijacked for the elimination of disease-causing proteins. The candidate will learn techniques of molecular biology (gene editing by CRISPR-Cas9, cloning), biochemistry (protein-protein interactions, immunoprecipitations, proximity proteomics), cell biology (cell culture, immunostaining, fluorescence and confocal microscopy), and genetics (model organisms).

**Research will be carried out CIC bioGUNE** ([www.cicbiogune.es](http://www.cicbiogune.es) @CICbioGUNE) a research center in biosciences recognized with the Severo Ochoa Excellence Accreditation.

Candidates should hold a degree in Biology, Biochemistry, Biotechnology, Medicine, or related topic. They should have completed their MSc degree at the time of incorporation (expected summer 2023).

Please, if you are interested send, **before Jan 20th**, your CV, along with a motivation letter (1 page, including up to five preferred topics) using the following form (<https://www.cicbiogune.es/job-offers-form>) and indicating 44611 + name of the most preferred laboratory as reference.



**The Barrio Lab says hello!**