

## The Institute of Evolutionary Biology seeks a PhD student

The Institute of Evolutionary Biology (IBE) is a joint Institute of the Spanish National Research Council (CSIC) and the Pompeu Fabra University (UPF) located in Barcelona city. IBE research is focused on the processes and mechanisms that generate biodiversity and on understanding the genetic basis of evolution. The IBE is a center member of the Barcelona Biomedical Research Park (PRBB).

### The Evolutionary Microbiology Lab

In our group we study the molecular mechanisms that facilitate adaptation to changing environments and the limits of adaptation using a combination of computational approaches, experimental evolution (of bacteria and single proteins) and *omics* (sequencing, transcriptomics). The group is part of the Biodiversity Program at IBE.

We are a small, but collaborative and dynamic group. The candidate will benefit from a vibrant and interdisciplinary academic environment with excellent opportunities for education, training and collaboration.

### Project description

Environments change constantly, but bacteria can rapidly adapt to stressful conditions. How can bacteria adapt so quickly? The candidate will use experimental evolution to investigate how bacteria with multipartite genomes adapt to two sources of stress: high temperatures (close to the upper thermal tolerance) and nutrient scarcity. Evolution experiments will be coupled with whole genome sequencing to unravel the genetic changes underlying adaptation.

### Candidate requisites

- The successful candidate should hold a master's degree in a relevant area such as evolutionary biology or microbiology and have a genuine interest in evolutionary biology
- Standard molecular biology techniques (microbiological culture, PCR, DNA and RNA isolation, cloning)
- Programming skills and experience analysing next-generation sequencing data are an asset
- Proficiency in English (oral and written)
- The candidate should be highly motivated, enthusiastic, curious, and able to work independently and as part of a team

### What do we offer?

- A fully funded three-year PhD contract, funded by CSIC (Excelencia RyC-Max 20243MAX009)
- Salary: around 24.400 € gross salary
- Starting date: September/October 2025
- Location: Institute of Evolutionary Biology (Passeig Marítim de la Barceloneta, 37 – 49, Barcelona, Spain)

## Application process

If you are interested in this position, please send your application (one single PDF file) to Macarena Toll-Riera ([macarena.toll@ibe.upf-csic.es](mailto:macarena.toll@ibe.upf-csic.es)) with the subject line 'PhDs student position' and the following documents: motivation letter describing your interest in the position, CV, and contact information from two potential references. Deadline for applications is 31<sup>st</sup> March 2025.