

## The Institute of Evolutionary Biology seeks a: Research Technician (Genomics)

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 Barcelona Biomedical Research Park (PRBB).

### Description Group/Unit

About the Metazoa Phylogenomics Lab:

The overarching goal of the lab is to understand how animals reshape their genomes to generate their vast diversity and to adapt to the different environments. For that, we generate and interrogate genomic and transcriptomic data through the lens of phylogenomics. Our favorite creatures are arthropods and annelids, but our interest often transcends the level of phylum to understand animal genome evolution at a macroevolutionary scale. We are committed to maintaining a respectful, inclusive, and friendly working environment for all staff and students, as well as promoting your personal and career development.

Rosa Fernández joined IBE as a Group Leader only a few months ago, so this is a chance to help build a lab from the ground up and contribute your knowledge and passion to the group and its culture. The [lab](#) is a part of the Animal Biodiversity and Evolution Program at IBE.

### Project description

#### **Land animal evolution: genomic landmarks on the path to terrestrial life (SEA2LAND) (grant no. 948281)**

All animals share a common origin: a marine one. To conquer land from marine environments, animals radically changed the way they breathe, reproduce, move or smell. And they did it multiple times in the history of Earth, with terrestrial animals massively outnumbering aquatic ones. Understanding terrestrialization is therefore key to comprehending animal biodiversity and biological adaptation. Despite the relevance of such an episode, the genetic underpinnings orchestrating terrestrialization in animals are



largely unexplored. The project will test the hypothesis that animals are equipped with a highly plastic 'terrestrialization genetic toolkit' that allowed their adaptation to the extreme environmental conditions in terrestrial ecosystems. We will focus on two pivotal questions: which genes facilitated life on land and how do they differ between aquatic and terrestrial animals? and how did animals reshape their genomes to adapt to dry land? This project will deliver fundamental insights into a core question in evolutionary biology: what shaped the land animal genetic toolkit.

**Duties:** As a Research Assistant, you will be in charge of the wet lab organization and experiments, which will include high molecular weight DNA/RNA extractions, library preparation and sequencing (Illumina, Nanopore, PacBio and HiC). You will be in charge of contacting vendors and placing orders and help the PI with grant administration (ie, help process invoices, etc.). You may be asked to supervise and mentor others in the lab with experiments and tasks, including postdoctoral researchers and PhD students. Depending on your project involvement, you may also be asked to help prepare or edit manuscripts (for which you would receive authorship credit where appropriate) and talks for presentations.

## Candidate requisites

The ideal candidate will have at least a BSc (undergraduate) degree in life sciences with wet lab experience. A Master's or PhD in life sciences or equivalent experience is desirable. You will have experience with molecular biology and genetics techniques (ideally including DNA and RNA extraction, library preparation for genome/transcriptome sequencing, Nanopore/Pacbio sequencing, and HiC), strong record-keeping skills (e.g. lab notebook, collections maintenance, data storage and organisation) and a strong command of written and spoken English. You'll also be comfortable maintaining the lab on a day to day basis, including developing standard operating procedures, ordering and maintaining laboratory supplies, managing and disposing of chemical inventory safely.

You will be comfortable working both independently and as a member of a larger team, as well as having good time management, attention to detail, and prioritisation skills. You'll be comfortable collaborating with international and local colleagues from diverse cultures and backgrounds. You will be able to travel locally and internationally for e.g. collaborations or meetings.



## What do we offer?

- A full time position is available for 12 months, with the possibility of further renewal for several consecutive years.
- Starting date is expected in December 2021 or as soon as possible afterwards.
- Salary depending on experience and qualifications.
- Location in Barcelona (Passeig Marítim de la Barceloneta, 37 – 49)

## Application process

If you are interested in the position, please send your CV and motivation letter to this link: <https://forms.gle/niaZRgNek6MsMbvD7>

IMPORTANT: Please name your documents as follows: 'CV\_your\_name.pdf' and 'Motivation\_letter\_your\_name.pdf'

The application deadline is **20<sup>th</sup> October**. Interviews will be held in Late October either in person or via video conference depending on travel needs and current restrictions; no particular preference will be given to candidates who are able to interview in person.

If you have any inquiries, please feel free to contact Rosa Fernández (rmfernandezgarcia00@gmail.com).

