

The Institute of Evolutionary Biology seeks a: **Postdoctoral Fellow in Comparative Genomics of Animal Terrestrialization**

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 [Metazoa Phylogenomics Lab](#) is to understand how animals reshape their genomes to generate their vast diversity and to adapt to the different environments, particularly during the marine-terrestrial transition. For that, we generate and interrogate genomic and transcriptomic data through the lens of phylogenomics. 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. The lab is a part of the Animal Biodiversity and Evolution Program at IBE. This position is funded by an ERC Starting Grant to shed light on the genomic basis of terrestrialization.

Project description:

Land animal evolution: genomic landmarks on the path to terrestrial life (SEA2LAND)

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. This project will deliver fundamental insights into a core question in evolutionary biology: what shaped the land animal genetic toolkit giving origin to animal terrestrial biodiversity.

Duties:



- Your role will be to lead efforts in the lab to address novel questions about how animals rewired their genomes to colonize land from marine ancestors. You will be leveraging multiomics datasets from multiple animal phyla and will analyze them through the lens of phylogenomics and comparative genomics. You may be involved as well in some ongoing genome assembly and annotation projects.
- The postdoctoral fellow is expected to mentor PhD and master students, as well and help identify sources of funding.

Candidate requisites

- PhD in evolutionary biology, computational biology, bioinformatics or a related field.
- Strong publication record with at least one first-authored publication.
- Excellent programming skills in languages commonly used in bioinformatics (such as Python or R), and fluency with Linux shell scripting and high performance computing.
- Skills in genomics and transcriptomics analysis. Experience in comparative genomics leveraging chromosome-level genomes would be beneficial.
- High motivation and efficiency; ability to work independently and as part of a team.
- Proficiency in English (oral and written).

What do we offer?

- We offer a full time postdoctoral fellow contract of 24 months, with the possibility of further renewal. This position is funded by an ERC Starting Grant to shed light on the genomic basis of terrestrialization across animals (project SEA2LAND).
- Starting date is expected in January 2024 or as soon as possible afterwards.
- 40 hours per week.
- Location: Barcelona, Institute of Evolutionary Biology
- Salary depending on experience and qualifications, but will be similar to Spanish postdoctoral fellowship schemes (eg, Margarita Salas, Juan de la Cierva).

Application process

If you are interested in the position, please send your CV (including contact information of at least two references) and motivation letter to this link: <https://forms.gle/EkFqXdYPrDcJNJzi9>. Deadline for applications is 15th October 2023 (IMPORTANT: Please name your documents as follows: 'CV_your_name.pdf' and 'Motivation_letter_your_name.pdf').



Interviews will be held at the end of October either in person or via video conference. We are committed to diversity and especially encourage women and members of underrepresented communities to apply. Selected candidates will be notified by email between 15th-20th October. *If you are not contacted, it means that your profile is not what we are looking for right now - apologies for that in advance but it takes a considerable amount of time to contact all candidates one by one.*

Questions? Feel free to contact Rosa Fernández (rosa.fernandez@ibe.upf-csic.es).

