







PhD Position Opening for: Amphibian Genomics and Evolution



What: 4-year PhD fellowship in Evolutionary Biology and Genomics

Where: Biological Station of Doñana – CSIC, Seville, Spain

With who: H. Christoph Liedtke and the <u>Amphibian Genomics and Evolution Lab</u> When: Call is open now! Final candidate selection October-November 2025

We at the <u>Amphibian Genomics and Evolution Lab</u> of the Biological Station of Doñana (EBD-CSIC, Seville, Spain) are offering a 4-year, fully funded doctoral candidate contract. Join the GRAVID project to work on the genomic, transcriptomic and phylogenomic origins of viviparity in the enigmatic, Tanzanian true toad genus *Nectophrynoides*!

One of the animal kingdom's most intriguing 'replayed tapes' is the evolution of viviparity. The transition from egg laying (oviparity) to the retention of offspring inside the reproductive tract (viviparity) has occurred more than 150 times independently. In vertebrates, this transition usually requires complex physiological, developmental and behavioural changes: shifts to internal fertilization, smaller clutch/litter sizes, longer gestation periods, higher maternal investments and immunodepression, and remodelling of the reproductive tract to at least allow for embryonic gas exchange. We are beginning to understand how viviparity has evolved at a molecular level across vastly different systems, from fishes to squamates, to mammals, but critically, little is known about viviparity evolution in amphibians.

This project endeavours to uncover the genomic, transcriptomic and phylogenomic signatures and consequences of viviparity evolution in the charismatic anuran genus *Nectophrynoides* endemic to the Eastern Arc Mountains of Tanzania. By comparing this amphibian system to other vertebrates, we wish to understand how functionally similar, complex traits can evolve under different ecological circumstances and evolutionary constraints.

Learn more about the project and the research team here.



















What we offer

- 4-year, fully funded PhD contract, starting in early 2026 (PIX2025 Predoctoral Fellowship granted by the Spanish Ministry of Science).
- This PhD offers excellent future career prospects arming the candidate with the cutting-edge tools in a changing/exciting field for a successful career in genomics.
- The opportunity to enjoy a vibrant, research-focused institute working atmosphere, with access to scientific seminars, courses and workshops.
- Tropical herpetological fieldwork opportunities.
- Ample networking opportunities with an international network of collaborators (Natural History Museum – London, University of Dar es Salaam, University of Glasgow, New York University – Abu Dhabi, University of Halle).

Requirements

- Bachelor's and Master's Degree in Biology (or related disciplines).
- Proficiency in English (written and spoken).
- A keen interest in genomics/bioinformatics and/or evolutionary biology.

Valued additional skills

- Familiarity with at least one programming language (preferably R or python).
- Tropical field work experience.
- A track record/experience in one of the following areas:
 - comparative genomics
 - transcriptomics
 - phylogenomics
 - molecular ecology

How to apply

Pre-selection of candidates is starting immediately, with position remaining open until filled. Official selection process likely to take place in **October-November 2025**, but candidates are strongly advised to submit expressions of interest by September 30th.

Interested applicants should send the following documents to christoph.liedtke@ebd.csic.es:

- A short motivation letter of why this project is meant for you (1-2 pages). We care most about personal motivation and genuine interest, so please do not use LLM-generated text.
- CV.
- Two references we can contact (name and email address and your relationship with this person (e.g. master's project supervisor)).
- Academic transcripts (short versions if available).