



## PhD position (f/m/x) on riverine species and landscape evolution in hyperarid regions

### CRC 1211 „Evolution at the dry limit“

We are one of the largest and oldest universities in Europe and one of the most important employers in our region. Our broad range of subjects, the dynamic development of our main research areas and our central location in Cologne make us attractive for students and researchers from around the world. We offer a wide range of career opportunities in science, technology, and administration.

The speciation of aquatic insects is likely to be closely linked to the development of the rivers they inhabit, so the genetic record of riverine species can help us understand fluvial histories and impactful tectonic and environmental changes. This PhD project aims to better understand and develop this concept in arid regions, focussing on the Atacama Desert in South America and the Namib Desert in Southern Africa. The topic is part of a larger research consortium „Earth – Evolution at the Dry Limit“ (CRC1211), which includes several interconnected projects hosted across several German universities, which focus on the links between biological and geoscientific disciplines in arid environments. The successful applicant will be hosted at the University of Cologne and supervised by Kathrin Lampert and Steven Binnie in either the Institutes of Biology or Geology. They will also work closely with researchers in the group of Jean Braun at the GFZ German Research Centre for Geosciences in Potsdam to integrate findings from field studies into a modelling framework.

#### YOUR TASKS

- » Combine geomorphological and biological research
- » Analyse the connection of river drainage reorganization and biodiversity
- » Modelling using AdaScape/FastScape
- » Molecular (DNA) laboratory work
- » Data analyses and integration
- » Fieldwork in Namibia
- » Present and disseminate research results in scientific conferences and publications

#### YOUR PROFILE

- » Excellent academic record
- » MSc Geology/Geomorphology or MSc Biology
- » Background in landscape evolution studies and/or phylogenetic analyses and willingness to conduct interdisciplinary research
- » Comfortable doing field work in remote areas
- » Experience with basic programming is an asset
- » Fluent in English (spoken, reading and writing)
- » High motivation, commitment, good communication skills, ability to work in a team and independently
- » Drivers license

#### WE OFFER

- » An exciting research project at the cutting edge of interdisciplinary research in an international working group
- » A diverse working environment with equal opportunities
- » Support in balancing work and family life
- » Extensive advanced training opportunities
- » Occupational health management offers
- » Flexible working time models

The University of Cologne promotes equal opportunities and diversity. Women will be considered preferentially in accordance with the Equal Opportunities Act of North Rhine–Westphalia (Landesgleichstellungsgesetz – LGG NRW). We also expressly welcome applications from all suitable candidates regardless of their gender, nationality, ethnic and social origin, religion, disability, age, sexual orientation and identity.

The position is available from 1 November 2024 on a part-time basis (29,87 hours per week). The position is to be filled for a fixed term until 30 June 2028. If the applicant meets the relevant wage requirements and personal qualifications, the salary is based on remuneration group 13 TV-L of the pay scale for the German public sector.

Please apply online with proof of the required qualifications without a photo under: <https://jobportal.uni-koeln.de>. The reference number is Wiss2408-13. The application deadline is 15 September 2024. For further inquiries, please contact Kathrin Lampert ([klampert@uni-koeln.de](mailto:klampert@uni-koeln.de)) or Steve Binnie ([sbinnie@uni-koeln.de](mailto:sbinnie@uni-koeln.de)).