

PhD position in evolutionary biology

The research project aims to analyse the evolutionary biology and biogeographic processes of checkered beetles of the genus *Trichodes* (Cleridae), which have a conspicuous warning coloration. Although they are commonly collected, no attempt has ever been made to study the phylogenetic relationships of the 93 species. Yet the range of the genus extends over large portions of the Gondwanan continents, making it an interesting model system for answering biogeographic questions. In addition, the aposematic coloration of the nontoxic beetles raises questions about a mimicry system with co-occurring toxic blister beetles. The main activities will be work in the morphometrics and genomics laboratory, analysis of data, and scientific writing. There will be opportunities for entomological collecting trips in the Mediterranean, but a focus will be on extracting historical DNA from dried collection specimens, which means that samples are already available.

Applicants have a MSc degree (or equivalent) in evolutionary biology, ecology, biology or a related discipline. A high level of motivation and strong interest in biogeography, evolutionary biology, and phylogenetics are required. Experience in the molecular laboratory and in phylogenetic analyses is desired. Ideally with large data sets from Next Generation Sequencing, which requires some bioinformatics skills. A good command of English is a requirement. The offered position thus allows learning modern methods in the field of molecular genetics (genomics) and morphometrics – from collection trips to the laboratory and statistical analysis. Become part of the young, newly established and emerging research group "Evolutionary Zoology" at the University of Salzburg and meet colleagues with interest in topics of evolutionary biology, phylogeography and phylogenetics.

Your tasks:

- Sampling in the field and in museum collections
- Extraction of DNA from fresh and historical samples and sequencing in the molecular laboratory
- Phylogenetic reconstructions
- Morphometric measurements (3D)
- Statistical analysis, phylogenetic comparative methods
- Writing of scientific articles
- Attendance of symposia

The remuneration is in accordance with the UG and the Angestelltengesetz for a university assistant in accordance with § 26 of the Kollektivvertrag der Universitäten (dissertant) The group is B1; the minimum monthly salary for this position is € 2,294.00 gross according to the UG 2002 Kollektivvertrag at 30 hours per week.

The Paris Lodron University of Salzburg aims to increase the proportion of women among university staff and therefore encourages applications from qualified women. In case of equal qualifications, women will be given priority.

Unfortunately, travel and accommodation expenses incurred on the occasion of the admission procedure cannot be reimbursed. Admissions are made in accordance with the provisions of the Universitätsgesetzes 2002 (UG) and the Angestelltengesetz.

The position is limited to 2 years. An extension will be sought. The structure of the doctoral thesis follows a cumulative structure. The anticipated start date is Jan 2, 2023.

Interested applicants* should send a letter of motivation and their CV in electronic form to jonas.eberle@plus.ac.at.

For further information, please contact Dr. Jonas Eberle (jonas.eberle@plus.ac.at). The deadline for applications is 12 Dec 2022.