2 PHD positions (36 month, TVL 13 / 65%), on Niche Choice and Niche Conformance in fire salamanders

at the Department of Behavioural Ecology, Bielefeld University (Germany)

Individual niches change over lifetime due to developmental, social or environmental changes. This is especially noticeable in species, in which developmental changes, such as metamorphosis, require the conformation to different niches during ontogeny. The fire salamander (*Salamandra salamandra*) with its biphasic life cycle, switches its habitat from exclusively aquatic to terrestrial once metamorphosed. In addition to the niche change after metamorphosis, adult female fire salamanders of our study population in the Kottenforst (Bonn, Germany) can choose between two different larval deposition habitats: stream and pond. Within this framework we have two PhD position available.

Project 1) Animal personalities in adult fire salamanders and its impact on niche choice - focusses on niche choice in adult fire salamanders by investigating the factors that influence the choice for the larval deposition habitat. Furthermore, we are interested how individual variation in certain traits and potential personality differences influences niche choice.

Project 2) Functions and mechanisms of niche conformance in fire salamander larvae - focusses on niche conformance by investigating e.g. their performance in their natural habitat and a transferred habitat (match-mismatch). Here we are also interested if and how the natal habitat influences the immune system and the behaviour of fire salamanders.

We seek two bright and highly motivated students with strong interests in evolutionary ecology and behavioural ecology with willingness to carry out fieldwork in rainy nights. A driver licence must be guaranteed, as the field locations can only be reached by car (possible with a private car or rental car). The students will do regularly monitoring surveys, conduct behavioural experiments in the field (some of them at night), and will use molecular methods in the laboratory. Previous experience with field work and/or amphibians is highly recommended.

Fieldwork will be done in the Kottenforst close to the city of Bonn for several weeks per year, starting in March 2022. You should be physically fit and should have a proven ability to work independently as well as in a team. These projects will provide cutting edge training in evolutionary biology and behavioural ecology. The students will be based at the Department Behavioural Ecology at Bielefeld University and both positions are part of the Collaborative Research Centre – 212 NC3 between Bielefeld, Münster and Jena. Together with the Animal Behaviour Department and the Evolutionary Biology Department we have around 50 scientists working on related questions, offering a stimulating international environment and an excellent research infrastructure with access to state-of-the-art techniques. The working language of the Department is English.

These two studentships (E13/65%) are funded within the CRC-TRR 212 and available for 3 years, with a potential to be prolonged. Full funding is available for fieldwork and for attending conferences. Please send your CV, the name of 2 referees, and a motivation letter as a single PDF file to: Barbara.caspers@uni-bielefeld.de (project 2). For further information concerning these positions, please contact Barbara Caspers (barbara.caspers@uni-bielefeld.de).

Bielefeld University is an equal opportunity employer. We welcome applications from severely handicapped people. We particularly welcome applications from women. Given equal suitability, qualifications and professional achievement, women will be given preference, unless particular circumstances pertaining to a male applicant predominate.

The deadline for applications is 5.1.2022

Interviews will be held soon thereafter and the positions are available as soon as possible.