

PhD position in marine molecular evolutionary biology, Ruhr-University Bochum & Bavarian State Collection Munich. Topic: "Speciation and adaptation in Southern Ocean sea spiders" The Department of Animal Ecology,

Evolution and Biodiversity at Ruhr

University Bochum (working group Dr. Florian Leese) in collaboration with the Bavarian State Collection of Zoology (working group Prof. Dr. Roland Melzer) offers 1 PhD position (67% TvL E13) in the field of marine molecular evolutionary biology. The candidate will work in the project "Speciation and adaptation in Antarctic sea spiders" as part of the DFG Priority Programme 1158 ("Antarctic Research", www.spp-antarktisforschung.de/

). The project seeks to extend our knowledge of speciation in the Southern Ocean benthos. In the past years, population genetic studies have shown that many species have radiated in the Antarctic probably in ice-free refugia on the Antarctic shelf during the last glacial maxima. In the studies, speciation is often seen as a result of random genetic drift / lineage sorting in geographic isolation (allopatric speciation). The importance of selection in this context has been largely neglected. In the project, we apply next-generation sequencing techniques to study patterns of genetic variation in the genomes/transcriptomes of two "cryptic" Antarctic sea spider flocks (*Colossendeis megalonyx* and *Pallenopsis patagonica*) inside and outside the Antarctic to compare neutral and non-neutral variation in the species groups. In addition, modern morphological techniques will be used to screen for adaptive morphological traits in co-existing species on the shelf. The candidate will be based primarily in Bochum but will also conduct analyses at the Bavarian State Collection in Munich as well as in the labs of international collaboration partners. Applicants should hold a degree (M.Sc, Diploma) in a relevant field (e.g., Biology, Ecology, Biodiversity, Marine Biology, Molecular Genetics). We expect a solid knowledge of population genetic and molecular evolutionary concepts. The candidate should have acquired expertise in the preparation of next-generation sequencing libraries (e.g. transcriptome, genome, RAD) and respective bioinformatic analyses. Knowledge of sea spiders (Pycnogonida) as well as of morphological and morphometric analysis techniques will be of advantage. She/he is fluent in English language, very motivated and able to work independently in different working groups. Please contact Dr. Florian Leese (

florian.leese@rub.de

) for further information. Applications should be send as a single pdf file not later than the **26th**

of September 2014

to

florian.leese@rub.de

. They should include a letter of motivation, a complete curriculum vitae with university certificates as well as names and contact details of two academic referees. Candidates will be invited for interviews by the end of September 2014 and interviews for the position will take place in the second week of October 2014. The candidate should start on December 1st in Bochum. Ruhr University Bochum is committed to promoting the careers of women and therefore actively welcomes applications from female candidates. As an equal opportunities employer, we also encourage applications from suitably qualified disabled candidates and other groups.