



LUDWIG-
MAXIMILIANS-
UNIVERSITÄT
MÜNCHEN

DEPARTMENT FÜR GEO- UND UMWELTWISSENSCHAFTEN
PALÄONTOLOGIE & GEOBIOLOGIE
Molecular Geo- & Palaeobiology Lab



Predocutorial Research Associate position in genomics of species identification in sponges (Phylum Porifera).

We invite applications for a 36-month (predocutorial) Research Associate position in the project **SpongeTaxonOMICS v2** funded by the German Research Foundation (Deutsche Forschungsgemeinschaft, DFG) within the framework of the Priority Program SPP 1991 Taxon-OMICS (www.taxon-omics.com). The project is located at the **Department of Earth- and Environmental Sciences** (Chair of Paleontology and Geobiology) and the **GeoBio-Center^{LMU}** of the Ludwig-Maximilians-Universität (LMU) München.

Sponges (Porifera) are difficult to identify and DNA barcoding does not reliably work for all its lineages. In this project, we aim at further developing novel species identification procedures based on target enrichment and NGS technologies. We will apply the methods developed to a very diverse and taxonomically very difficult group of demosponges, the Haplosclerida, aiming at providing reliable species distinction and delimitation procedures in this group. For this, we will use fresh and recently collected specimens from the Red Sea as well as material from museum collections, including (holo)types ("museomics"). The project will be conducted in close collaboration with Professor Grace McCormack of the National University of Ireland Galway, an internationally leading expert in haplosclerid sponges.

We are seeking a highly motivated applicant with excellent and demonstrated bioinformatics expertise, sound background in evolutionary biology, and willingness to tackle the challenging task of working with the genomes of non-model invertebrates. Previous experience in sponge biology or laboratory skills are not necessary, but beneficial.

The predocutorial research associate is afforded the opportunity to pursue scientific qualification, i.e., preparation for a doctoral degree at LMU MUnich, based on the project's results.

Finally, we expect the successful candidate to contribute to the lab's ongoing genome sequencing efforts, contribute to expanding the bioinformatic tools available in the lab, and collaborate with other lab members and projects.

The successful candidate will join an international and dynamic lab focussing on the geobiology and evolution of marine animals. High-performance computing infrastructure is available in the lab (LINUX cluster, Galaxy Server) as well as through the Leibniz Rechenzentrum (www.lrz.de). More information about the lab can be found at www.geobiology.eu.

Requirements: M.Sc. in Biology, Bioinformatics, or a related field; demonstrated expertise and understanding of molecular evolution including phylogenetic methods, expertise in processing and analyzing next-generation sequencing data; programming skills (e.g., in commonly used bioinformatic languages such as Python and/or R, etc.) and experience working with *NIX systems. Evidence of this expertise must be provided. The working language of the group is English and therefore candidates must have excellent English language skills.

German language skills are not required..

The position is available for 36 months and will be paid according to the German public service salary scheme (TV-L E13 65%).

Application: The application must include a letter of motivation, CV, PDFs of the most significant publications (or a pdf version of the master thesis if publications are not available), and contact details of 2 referees in a **single PDF**. **Please send the application** by email to geobiologie@geo.lmu.de using **"SpongeTaxonOMICs.v2.YOURLASTNAME"** as subject. Informal inquiries may be directed to Professor Gert Wörheide through the same email address.

The application deadline is 31 October 2020.

The Department of Earth- and Environmental Sciences, Palaeontology & Geobiology of the Ludwig-Maximilians-Universität Munich offers an excellent multidisciplinary research environment, one of its particular strength being due to the close interaction between Geosciences and the Faculty of Biology in the framework of the GeoBioCenter^{LMU} (<http://www.geobio-center.uni-muenchen.de>).

The LMU Munich is the leading research university in Germany, with a more than 500-year-long tradition, and builds upon its success in the Excellence Initiative, a Germany-wide competition promoting top-level university research. Munich has been repeatedly voted Germany's most livable city and is among the Top 5 most livable cities worldwide.

The LMU Munich is an Equal Opportunity/Affirmative Action Employer and has an affirmative action policy for the disabled.