

Job vacancy

Research Assistant - Institute of Microbiology 24/Wi39

University of Greifswald, 18 December 2024 | deadline: 15 January 2025

At the **Institute of Microbiology**, Junior Research Group Microbial Interactions, which belongs to the University of Greifswald's Faculty of Mathematics and Natural Sciences, there is a job vacancy, subject to the allocation of funds, expected to be available from **1 April 2025**, for a part-time position (65 %) as

Research Assistant

The fixed-term position is limited to a period of 45 months. Payment will be made according to pay group 13 *TV-L Wissenschaft.*

We are seeking highly motivated candidates for the newly established Collaborative Research Centre "WETSCAPES2.0," funded by the German Research Foundation (DFG). WETSCAPES2.0 combines expertise from the University of Greifswald, the University of Rostock, the IGB Berlin, GFZ Potsdam, the Ludwig-Maximilians-Universität München, the MPI for Biogeochemistry Jena, and the Humboldt-Universität zu Berlin. WETSCAPES2.0 focuses on the functional understanding of rewetted fens, including coastal peatlands, in Mecklenburg-Vorpommern. The rewetting of previously drained and often agriculturally used fens results in the development of novel ecosystems that differ from natural peatlands and are largely unexplored. The planned monitoring, experimental and modelling research place emphasis on biogeochemical, hydrological and biological processes, focusing on water and matter fluxes within and beyond the peat body and their associated microbiological and biological drivers. In addition to site-level studies, researchers will investigate the role of rewetted fens in the landscape on the whole.

The focus of your project (A3) will be the study of key interactions between peatland plants and their associated microbes in the plants' rhizosphere (i.e. peatland rhizobiomes). Rhizobiomes are central interfaces between plants, soil, and the atmosphere. They play crucial roles for plant health, biomass production and decomposition, and reactions to changing environmental conditions. Thus, in peatlands, they are centrally linked to greenhouse gas production and peat formation potential. We will look at changes in rewetted fen peatland plant-rhizobiome interactions in long-term chronosequences of rewetting, as well as during short-term extreme events. Additionally, we will contrast plant-rhizobiome interactions in peatland soils with those in shallow-water bodies. We will link these interactions to plant growth performance, greenhouse gas emissions, and environmental conditions. For this, you will be involved in field work, as well as in mesocosm experiments, and employ cutting-edge meta-omics techniques, supplemented by microscopic analyses, for generating comprehensive insights into the hidden interactions in peatland rhizospheres.

For more details about the overarching research questions, specific topics, training programme and contact details, please visit <u>http://www.uni-greifswald.de/wetscapes2</u>.

Doctoral researchers will gain insights into multiple aspects of this interdisciplinary project, building comprehensive knowledge of WETSCAPES2.0's research themes and specialised expertise in their chosen topic. The integrated research training group "WETSKILLS" provides structured doctoral training, preparing participants for excellent career opportunities in

academia and the industry.

What are your tasks?

- Sampling of peatland rhizospheres in the field and in peatland mesocosms
- DNA extraction from peatland rhizosphere samples
- RNA extraction from peatland rhizosphere samples
- Preparation of peatland rhizosphere samples for metaproteomics analysis and conducting metaproteomic analyses
- Establishing a mesocosm setup for peatland shallow-water body experiments and conducting these experiments
- Microscopic analyses, including CARD-FISH analysis, of peatland rhizosphere samples
- Bioinformatic data analysis and integration
- Presentation of scientific results
- Preparation of scientific publications
- The position offers the opportunity to continue academic qualification; tasks are assigned that are conducive to the preparation of a doctorate.

Which hiring requirements do you have to meet?

- Completed university degree in natural sciences (master's degree or equivalent) in biology, microbiology, plant sciences or related fields of study
- Experience in microbiological or molecular biology laboratory work
- Bioinformatics skills
- Excellent English language skills

Which other additional skills are desirable?

- Knowledge of microbial (soil) ecology, plant physiology
- Field work experience
- Driving licence class B and the willingness to drive a vehicle from the university's fleet

This vacancy is open to all persons, irrespective of gender. Severely disabled applicants with the same qualifications will be considered with preference. In accordance with § 68(3) PersVG M-V, the Staff Council will only be involved in staff matters of the academic or artistic staff on request.

Unfortunately, application costs (e.g. travel expenses for interviews) will not be reimbursed by the state of Mecklenburg-Vorpommern.

Please note that by submitting your application, you provide your consent pursuant to data protection law for our processing of your application data. Further information about the legal bases and the use of your data can be found <u>here</u>.

Applications comprising all usual documents must be sent with reference to the job advertisement number **24/Wi39** by **15 January 2025**, preferably via email (one PDF file), to:

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