GEOMAR
Helmholtz-Zentrum für Ozeanforschung Kiel

GEOMAR Helmholtz Centre for Ocean Research Kiel is a foundation under public law jointly financed by the Federal Republic of Germany (90%) and the State of Schleswig-Holstein (10%). It is one of the internationally leading institutions in the field of marine research.

Through our research and our commitment to the transfer of knowledge and technology, we contribute significantly to the preservation of the function and protection of the ocean for future generations.

The research unit Marine Evolutionary Ecology of the research division Marine Ecology (PI Prof. Thorsten Reusch) is offering a

# PhD position (m/f/d)
# "Molecular Physiology of Seagrass Stress Ecology"

The position offers the possibility to attain a doctoral degree awarded by the Faculty of Mathematics and Natural Sciences at Kiel University, Germany. The employment is for three years, desired starting date is 1st September 2024.

**Background and Project Description**

The position is embedded into the newly established DFG Research Unit "PlantCoChallenge" with a main base at Kiel University (speaker Prof. Eva Stukenbrock) that seeks to identify unified mechanisms of abiotic and biotic stress tolerance in a range of terrestrial and aquatic plants. Our model species is the widespread seagrass *Zostera marina* (eelgrass) which features broad tolerances to adverse abiotic conditions such as warming, as well as reducing, oxygen-free sediments. In contrast, the interacting role of biotic stressors, in particular pathogens and grazing, is currently not well understood. The objective of this project will be to examine how the plant integrates, responds and allocates resources to multiple stressors as a function of its local microhabitat. How the plant integrates stress signals and orchestrates responses and defenses will be studied through state-of-the art omic approaches in combination with systems biology. Through two central projects of this research unit, additional support in high-throughput microbiome analysis as well as in transcriptomic and metabolomic analysis along with systems biological approaches is provided. The successful candidate will closely cooperate with another doctoral candidate in the group of Prof. Sabine Hilt at IGB Berlin on similar questions in the freshwater plant *Stuckenia pectinata*.

**Your profile**

Requirements for successful application are:

- a university degree (Master or equivalent) in biology, biotechnology, bioinformatics or in a related subject
- experiences with metabolomic or transcriptomic analyses
- basic knowledge in plant physiology or plant stress ecology
- basic skills in scripting languages such as Python or PERL, or in multivariate statistics (R-package)
- proficiency in English

Desirable qualifications would be:

- experience in the design and execution of eco-evolutionary experiments
- experience with microbiological techniques

- knowledge on seagrasses or other macrophytes
- knowledge in the basics of (coastal) marine ecology
- research diving qualification

**GEOMAR is directly located at the Kiel Fjord with many leisure and recreational opportunities. As a workplace, we offer you:**

- An exciting and international work environment in a topic of global importance
- Work in the field of marine and climate research, a forward-looking area with social significance
- Integration into the PlantCoChallenge network with the opportunity for attending different workshops and courses offered by the Principal Investigators
- Attention to questions of work-life balance, including the possibility of working remote and other flexible working time arrangements
- Vacation camps for children of employees
- Support in finding a place in a daycare center
- Support services for professional and personal life situations
- 30 vacation days and additional time off at public holidays
- Company pension plan and capital-forming benefits

The position is available for a funding period of three years. The salary depends on qualification and could be up to the class 13 TVöD-Bund of the German tariff for public employees. This is a part-time position according to 65% of a full-time equivalent. The position cannot be split. Flexible working time models are possible in principle.

GEOMAR Helmholtz Centre for Ocean Research Kiel seeks to increase the proportion of female scientists and explicitly encourages qualified female academics to apply.

GEOMAR is an equal opportunity employer and encourages scientists with disabilities to apply. Qualified disabled applicants will receive preference in the application process.

Please send your application for this post **not later than June 26th, 2024** under the following link:

**Online application**

As soon as the selection procedure has finished, all your application data will be removed according to data protection regulation.

For further informal inquiries, regarding the position and research unit please contact Prof. Thorsten Reusch (treusch@geomar.de).

Further questions will be answered by e-mail to bewerbung@geomar.de. In doing so, please refer to the keyword “Seagrass Stress Ecology”.

For further information on GEOMAR Helmholtz Centre for Ocean Research Kiel or the Helmholtz Association, please visit www.geomar.de or www.helmholtz.de.

GEOMAR is committed to an objective and non-discriminatory personnel selection. This job advertisement addresses all people. Please do not submit application photographs.

The TOTAL E-QUALITY award is presented to GEOMAR for efforts in terms of human resource management aimed at providing equal opportunity.