
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. Dr. Thorsten Reusch) is offering a

Postdoctoral position (m/f/d)
"Seagrass-pathogen interactions under global change"

for 20 months with a desired starting date of 1 May 2026.

Background and Project Description

The position is embedded into the DFG Research Unit "PlantsCoChallenge" (speaker Prof. Dr. 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 such as endophytic protists, 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 and to compare reactions in an evolutionary ecology framework. The integration of stress signals and of defense responses will be studied through state-of-the art omic approaches along with assessing microbiome changes. Through two central projects of the research unit, additional support in high-throughput microbiome analysis as well as in transcriptomic and metabolomic analysis along with systems biological approaches is provided. Access to pathogen isolates and to different populations of eelgrass are provided, as are experimental set-ups in gnotobiotic culture chambers. The successful candidate will closely cooperate with the group of Prof. Dr. Sabine Hilt at IGB Berlin on similar questions in the freshwater plant *Stuckenia pectinata*.

Qualifikation

required:

- a doctoral degree in biology or in a related subject
- experience in plant-pathogen interactions or plant-microbe research
- knowledge in plant physiology or plant stress ecology
- proficiency in English (written and spoken)

desirable:

- experience in the design and execution of eco-evolutionary experiments
- basic skills in scripting languages such as Python or PERL, or in multivariate statistics (R-package)
- experiences with metabolomic or transcriptomic analyses
- knowledge on seagrasses or other macrophytes
- knowledge in the basics of (coastal) marine ecology

At a workplace, directly on the Kiel Fjord with many leisure and recreational opportunities, we offer you:

- Good conditions for work-life balance: We offer, among other things, the possibility of mobile working and individual working time arrangements, vacation courses for the children of our employees, and good support in finding a place in a daycare center at the Kiel site
- Support services for professional and personal life situations
- An exciting work environment with the opportunity to provide important impetus for the development of sustainable solutions
- Exciting topics in an international environment
- Work in the field of marine and climate research, a forward-looking area with social significance
- 30 vacation days + additional time off at Christmas Eve and New Year's Eve
- Company pension plan and capital-forming benefits

The position is available for a funding period of 20 months. 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 full-time position. The position can be split.

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 (including a letter of motivation and a resume (CV)) for this post **not later than 1 March 2026** 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. Dr. Thorsten Reusch (treusch@geomar.de).

We will answer all your questions if you send us an e-mail to bewerbung@geomar.de. In doing so, please refer to the keyword “**PlantsCoChallenge**”.

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. We expressly renounce the submission of application photos.



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