

The Alfred Wegener Institute Helmholtz Centre for Polar and Marine Research (AWI) is a member of the Helmholtz Association (HGF) and funded by federal and state government. AWI focuses on polar and marine research in a variety of disciplines such as biology, oceanography, geology, geochemistry and geophysics thus allowing multidisciplinary approaches to scientific goals.

## **Postdoc (m/f/d) in Global Change Impact on Plankton Food Webs and Ecosystem Services**

### **Background**

This position is part of the BMBF-funded project PlanktoSERV in the junior working group led by Dr. Cédric Meunier (<https://www.awi.de/en/science/junior-groups/planktoserv.html>). The aim of this project is to realistically assess the impact of global change on plankton individuals, populations, and communities, and to provide a robust understanding of future ecosystem services alterations. This project supports three PhD students and two postdocs. We are looking for a highly motivated and driven postdoc (m/f/d) with excellent analytical skills.

Planktonic organisms are at the base of aquatic food webs and, while being crucial for the functioning of ecosystems, they are particularly sensitive to environmental change. The impact global change has on planktonic food webs may in turn alter ecosystem services such as nutrient turnover, provision of food to higher trophic levels, and carbon sequestration/export. Despite the urgent need to understand and predict how global change will influence ecosystem services provided by planktonic food webs, there is still a striking lack of information on the cumulative effects of multiple drivers. Without understanding the synergistic or antagonistic effects of those stressors, it is obvious that we cannot predict alterations in ecosystem services, making it difficult to efficiently manage coastal ecosystems.

### **Tasks**

This project will realistically assess the impact of simultaneous changes in temperature, pH, and nutrients on planktonic food webs, and will provide a robust evaluation of how ecosystem services provided by plankton are and will be affected by abiotic changes. To do so, you will conduct ecological network analyses and trait-based modeling work to numerically describe changes in planktonic food webs. This will allow to (1) understand how global change affects the structure of planktonic food webs, (2) quantify alterations in interaction strengths between different components of the food web, and (3) evaluate cascading effects on ecosystem services. This work will be primarily based on extensive data collected during numerous micro- and mesocosm experiments, as well as from the unique long-term dataset of Helgoland Roads.

You will also gain supervising experience by working together with bachelor and master students, as well as with the three PhD students already working in PlanktoSERV. You will present scientific results at international conferences and will be given the opportunity to teach at Bremen University. You will also closely collaborate with the other postdoc of PlanktoSERV responsible of communicating ecological results to stakeholders and decision makers to optimize mitigation strategies.

### **Requirements**

- PhD degree in Ecology or Aquatic Sciences
- strong experience in ecological or statistical modelling including programming skills
- profound knowledge of plankton ecology
- good publication record
- strong team player skills

- strong cooperation and communication skills in English language written and oral

You are expected to develop an independent line of research targeting the sensitivity of plankton food webs to environmental drivers. You are therefore required to submit a two-pages research proposal together with the other application documents.

### **Further Information**

For further information please contact **Dr. Cédric Meunier** ([Cedric.Meunier@awi.de](mailto:Cedric.Meunier@awi.de), +49(4725)819-3143).

The position is limited to 3 years, expected starting date September 1st, 2019. The salary will be paid in accordance with the German Tarifvertrag des öffentlichen Dienstes (TVöD Bund), up to salary level **13**.

The place of employment will be **Helgoland**.

### **This characterizes us**

- our scientific success - excellent research.
- collaboration and cooperation - intra-institute, national and international, interdisciplinary.
- opportunities to develop – on the job, aiming at other positions and beyond AWI.
- a culture of reconciling work and family – audited, and even more than that.
- our outstanding research infrastructure – ships, stations, aircraft, laboratories and more.
- an international environment – everyday contacts with people from all over the world.
- having an influence – fundamental research with social and political relevance
- flat hierarchies – freedom and responsibility.
- exciting topics – also in technology, administration and infrastructure.

Equal opportunities for women and men are an integral part of our personnel policy. Therefore, we encourage women to apply.

Disabled applicants will be given preference when equal qualifications are present. The AWI fosters the compatibility of work and family through various means. Because of our engagement in the area of work-life compatibility we have been awarded the certificate “Career and Family”.

### **We look forward to your application!**

Please forward your application (letter of motivation, two-pages research proposal, CV, references, publication list) by **April 21st, 2019** exclusively online.

Reference number **27/D/Bio**