

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.

PhD Researcher in Plankton Ecology (m/f/d)

Background

This position is part of the DFG funded priority Programme Dynatrait (<https://www.dynatrait.de>).

In phytoplankton, as the availability of light and nutrients fluctuate, there is variation in the nutrient stoichiometry of the algae. This variation is further influenced by growth rates, which culminates in most cases in the fact that fast growth is linked with a certain optimal nutrient content of the algae (less variation at higher growth rate), whereas slow growing algae can have a large array of different nutrient compositions. These patterns have been identified between populations of algae by averaging the individual responses of many different cells, but up until now, it is unclear whether this also holds within populations, between single algal cells. Thus, it is an open question whether the link between growth rate and nutrient stoichiometry of algae is a population response or an individual response.

Zooplankton typically has a more constant nutrient stoichiometry, and a stronger degree of homeostasis. Here, we will investigate variation in population growth rate in microalgae, link this to intra-population variation in nutrient stoichiometry, and investigate the effect of these growth rate-induced variations in cell nutrient quota on growth and dynamics of predators.

Tasks

You will:

- Carry out experiments to investigate the effects of growth conditions of algae on their stoichiometry and the variation therein
- Assess the effects of variation in algal characteristics on grazers
- Design experiments and develop theory together with other members of the Dynatrait project

Requirements

- a Master degree (or equivalent) in Aquatic Sciences
- a strong background in Aquatic Ecology/Marine Biology
- working experience in plankton ecophysiology including plankton culturing
- proven analytical skills
- strong teamplayer skills
- strong cooperation and communication skills in English language written and oral

Further Information

For further information please contact **Prof.Dr. Maarten Boersma** (maarten.boersma@awi.de; +49(0)4725 819 3350).

The position is limited to 3 years. The salary will be paid in accordance with the German Tarifvertrag des öffentlichen Dienstes (TVöD Bund), up to salary level **13 (66%)**.

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.

As Ph.D. student at AWI you will be member of the Helmholtz Graduate School for Polar and Marine Research 'POLMAR' (<http://polmar.awi.de>) or another graduate school.

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 by **April 17th, 2019** exclusively online.

Reference number: 28/D/Bio-b