



## PhD position in evolutionary ecology of Arctic *Daphnia* (m/f/d)

For the DFG-funded project "Living time capsules: tracing evolutionary adaptation in a changing world" we are inviting applications for a PhD position starting in November 2021 with a duration of 36 months. We seek to recruit a highly motivated and excellent doctoral student with an interest in evolutionary physiology / transcriptomics.

The PhD project centres on the adaptation of Arctic *Daphnia* to environmental change with a strong focus on experimental work, including physiological assays and life history experiments. *Daphnia* will be hatched from lake sediment of the past 200 years, a time frame during which warming and related environmental fluctuation have been particularly rapid and severe in the Arctic. Applying the powerful experimental approach of "resurrection ecology", clonal lineages hatched from eggs of several time periods will be established in the laboratory to represent historic and modern *Daphnia* populations. Clonal lineages of different age will be experimentally exposed to environments reflecting historic and modern conditions in a controlled reciprocal transplant design. By integrating phenotype and gene expression data, this study will test to what extent phenotypic responses are reflected in the functional genome. The successful candidate will join an interdisciplinary team to integrate the fields of paleolimnology, genomics, transcriptomics and ecophysiology, with partners in the UK and Germany. The workplace is IGB in Berlin, associated with The Berlin Center for Genomics in Biodiversity Research (BeGenDiv). At least one field expedition to collect lake sediment cores in southwest Greenland near Kangerlussuaq is planned.

### Your tasks

- Isolation and resurrection of Arctic *Daphnia* (includes 1 - 2 field expeditions to Greenland)
- Set-up and maintenance of *Daphnia* and algal cultures
- Set-up and performance of experiments
- RNA isolation, and bioinformatic analysis of RNAseq data
- Publication of results in scientific journals and presentation at conferences
- Completion of a doctoral dissertation

### Your profile

Essential:

- MSc or equivalent in Molecular or Evolutionary Biology, Ecology or related field
- Demonstrated experience in experimental or molecular work
- Ability to perform intense lab work
- Computational and data analysis/statistics skills
- Collaborative teamworker
- Good communication skills in verbal and written English

Preferred:

- Bioinformatic skills are desirable but not essential

### Our offer

We offer an exciting position in a multidisciplinary project. We foster your **career development** by providing qualification and training opportunities. We actively support the reconciliation of work and family life. Applicants are treated equally regardless of gender. Qualified women are particularly encouraged to apply. Severely disabled applicants with equal qualification and aptitude will be given preferential consideration.

This is a full-time position with 3 years duration and a tentative start date of 01.11.2021 (or shortly thereafter). Salary is paid according to the German salary scheme for the public sector for doctoral research (65% TVöD). The working language at IGB is English.

### Are you interested?

We look forward to receiving your application (letter of motivation indicating research interests and experience, CV, Bachelor and Master certificates, publication list, and two letters of recommendation) by **15.07.2021**. Please state the job reference number 18/2021 and apply exclusively via our recruitment platform at [www.igb-berlin.de/en/jobs](http://www.igb-berlin.de/en/jobs).

Enquiries can be directed to Dr. Dagmar Frisch at [dghfrisch@gmail.com](mailto:dghfrisch@gmail.com).

"Research for the future of our freshwaters" is the mission of the **Leibniz Institute of Freshwater Ecology and Inland Fisheries (IGB)**. The IGB is Germany's largest and one of the leading international research centres for freshwaters. We seek to understand the fundamental processes governing freshwaters and their communities. Our research findings help to tackle global environmental changes and to develop measures for sustainable water management. The IGB is a diverse and inspiring place to work and conduct research. We promote individual development at every career level and stand for lively exchange and cooperation. With more than 350 employees and guests from all over the world, we conduct research at five locations in Berlin and at Lake Stechlin (Brandenburg). IGB closely collaborates with numerous national and international universities and other partners in science and society and is a member of the **Leibniz Association**, which connects 96 independent public research institutes in Germany. [www.igb-berlin.de](http://www.igb-berlin.de)