 **Leibniz-Institute of Freshwater Ecology and Inland Fisheries**

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The Leibniz-Institute of Freshwater Ecology and Inland Fisheries (IGB) is the largest freshwater ecology research institute in Germany. It is a member of the Forschungsverbund Berlin e.V. and the Leibniz-Association (www.wgl.de). The FVB manages 8 large research institutes in Berlin that have close links to all three universities in the German capital. IGB offers excellent laboratory and field facilities for interdisciplinary research, large-scale experimental facilities, and long-term research programs and data sets.

In the frame of the Priority Programme of the German Science Foundation (DFG) entitled

“Flexibility matters: Interplay between trait diversity and ecological dynamics using aquatic

communities as model systems (DynaTrait)” (SPP 1704) we offer:

**1 PhD Student in**

**Theoretical Ecology**

The position is available for three years. Salary is according to the TVöD (60% position).

The PhD student will work in the subproject FungiTrait on phytoplankton-zooplankton-parasite interactions. Parasitic fungi can serve as food for zooplankton, creating a feeding link from otherwise inedible algae to zooplankton (mycoloop). This link can lead to alternative states of the microbial predator-prey-parasite system through its influence on competition between small edible and large inedible algae. In this project we want to investigate possible alternative states and their dependence on the strength of the fungi-zooplankton link as well as on trait adaptation of algal strains in presence of parasitic fungi. This project will use experimental as well as theoretical tools to investigate the role of parasitic fungi and trait-adaptation for food web dynamics and energy flow to zooplankton. The advertised PhD position is therefore closely linked to the experimental PhD position within this project, aiming for a mutual stimulation between empirical research and theory in aquatic microbial ecology.

**Requirements**

* Knowledge on the analysis of differential equation systems
* Expertise in computation in Matlab or related Software
* Background in theoretical ecology is beneficial

Enquiries or questions should be directed to Hans-Peter Grossart (hgrossart@igb-berlin.de) and Sabine Wollrab (wollrab@igb-berlin.de).

We are seeking to recruit outstanding scientists to establish an innovative research program with high

international visibility. Competitive applicants will hold a M.Sc. in (bio-)mathematics or ecology/biology with a strong theoretical background. Positions will be based at the department “Experimental Limnology” in Neuglobsow, Germany. In keeping with the IGB's policy regarding gender equality, female applicants are particularly encouraged. Severely disabled applicants with equal qualification and aptitude are given preferential consideration.

Please upload complete application documents as a single pdf-file including CV, a letter of motivation, copies of relevant degrees as soon as possible but no later than **31st January 2018** via the IGB’s (www.igb-berlin.de/job-offers.html) online job-application facility (button “Apply online”).

**We are looking forward to your application!**