



PhD Program between the Freie Universität Berlin (FUB) and the China Scholarship Council (CSC)

Open PhD position at FUB for CSC scholarship candidates 2016

Please note: the PhD position is only offered to Chinese PhD candidates for application in the framework of the FUB-CSC PhD Program.

<u>Department/Institute:</u>	Institute of Biology / Leibniz Institute of Freshwater Ecology and Inland Fisheries, IGB
<u>Subject area:</u>	Evolutionary Ecology
<u>Name of Supervisor:</u>	Prof. Dr. Justyna WOLINSKA (Ms.)
<u>Number of open PhD positions:</u>	1
<u>Type of the PhD Study:</u>	Full-time
<u>Project title:</u>	Role of parasitic chytrids in regulating cyanobacterial blooms

PhD Project description:

Parasitic fungi of the order Chytridiales (i.e. Chytrids) are able to infect a wide number of phytoplankton species. Although overlooked for a long time, chytrids are an important factor driving the dynamics of phytoplankton. For example, Chytrids seem to be involved in the decline of toxic cyanobacteria blooms, by inducing direct mortality of parasitized cells and indirectly by the mechanistic fragmentation which weakens the resistance to grazing. On the other hand, selection on host populations exerted by Chytrids is also thought to be responsible for maintaining high host diversity in nature. The candidate will use a novel host-parasite system (based on a cyanobacterial host and its chytrid parasite) for advancing in the field of parasitism in phytoplankton. The scope of the project will address different questions related to the physiology, molecular genetics and genomics (including next-generation-sequencing) of the interactions and their ecological and evolutionary implications.

Language requirements:

Excellent English skills (fluent conversation and good writing skills) (IELTS 6,5 or TOEFL 95 ibt)

Academic requirements:

Master degree in biology or bioinformatics.
Solid background in ecology, evolution and/or molecular biology.

Information of the professor or research group leader:

We are a group of evolutionary ecologists who study how rapid evolutionary changes are being influenced by environmental challenges. We have a long-standing experience working with the Cladoceran model system: Daphnia and its microparasites. Recently, we also employ a Cyanobacteria-Chytrid system to explore a number of ecological and evolutionary questions.

<http://www.igb-berlin.de/staff-a2/show/573.html>

Please note:

In a first step the complete application should be submitted to the Beijing Office for evaluation by January 4th, 2016. Please don't contact the professor before. He/She will get in contact with you after having received the complete application in January.