

Open PhD student position

The Department of Aquatic Microbial Ecology, Institute of Hydrobiology, Biology Centre CAS, invites applications from a prospective PhD student

A PhD student position is open in the Department of Aquatic Microbial Ecology, Institute of Hydrobiology, České Budějovice, Czech Republic to study the evolution of genome streamlining in freshwater microbes using high-throughput isolation, comparative genomics and experimental approaches.

Background: Small microbes with reduced (streamlined) genomes are the most abundant component of freshwater lakes, however, their ecology and evolutionary history remains largely elusive. The major focus of this project lies in eco-genomics of such microbes. High-throughput isolation of abundant freshwater microbes will be combined with cultivation experiments and comparative genomics. Whole genome sequencing of >150 strains and deep sequencing of

metagenomes gained from lakes in CZ, CH, AT, and IT will allow comparative population genomics.

In collaboration with other members of the institute, a polyphasic approach, combining (meta-)genomics, cultivation experiments of environmentally relevant strains and environmental quantification via e.g. specific FISH probes targeting the major players in lakes will be used to disentangle the underlying ecological reasons for the widespread but yet enigmatic phenomenon of genome-streamlining.

Requirements: Applicants should have a M.Sc. in Biological Sciences (e.g. Limnology, Microbiology, Ecology) and must be strongly motivated to work in an eco-genomics laboratory. The majority of the work is expected to be computational (60%) and laboratory based (40%). Prior experience in linux/unix/perl/python programming might be favourably considered but is not a prerequisite for selection. Candidates must be proficient in English.

Please submit 1) a detailed CV (including your grades), 2) a brief statement of your research interests and work performed and 3) the name and contact information for at least one referee (preferably all this information combined into a single PDF file). The position will remain open until a suitable candidate is found, applications will be evaluated monthly (starting Feb 15). Target starting date is spring 2019 (negotiable), the position is initially for 3 years, but can be prolonged to 4 years.

Contact: Please send your application to michaelasalcher@gmail.com and indicate "PhD Application" in the subject. Please don't hesitate to contact me for further information about the positions.

Dr. Michaela M. Salcher (current position)
Limnological Station
University of Zurich
Seestrasse 187
8802 Kilchberg, Switzerland

Dr. Michaela M. Salcher (from Spring 2019 onwards)
Institute of Hydrobiology
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37005 České Budějovice, Czech Republic

Links

<https://www.botinst.uzh.ch/en/research/limnology/salcher>

<https://www.bc.cas.cz/en>

https://www.researchgate.net/profile/Michaela_Salcher

České Budějovice (Budweis) is a medium-sized town ca. 150 km south of Prague with 100,000 inhabitants, a relaxed atmosphere, and a growing expat community at the Biology Centre and the University. Both the town and the surrounding countryside provide numerous opportunities for research and leisure activities. Living costs are low by international standards. PhD students have access to accommodation in dormitories at the campus shared by the Biology Centre and the University. Czech courses are available for foreign students to reach a basic level of proficiency in everyday situations.