

Bern, January 2019



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**UNIVERSITÄT  
BERN**

Aquatic Ecology & Evolution  
Institute of Ecology &  
Evolution  
University of Bern

## PhD in Evolutionary Biology, University of Bern, Switzerland

We are seeking to fill a PhD position funded for 4 years in the group of Aquatic Ecology & Evolution, led by Prof. Ole Seehausen, at the University of Bern and the Eawag Center for Ecology, Evolution & Biogeochemistry in Kastanienbaum, Switzerland. We are looking for an enthusiastic young researcher to work as part of a research team to explore 15,000 years of evolution and ecosystem dynamics in Lake Victoria, East Africa, through investigation of sediment cores, fossils and ancient DNA. This Swiss NSF Sinergia project is a cooperation between U Bern, EAWAG (Swiss Federal Institute of Aquatic Science and Technology), the Centre for Geogenetics at U of Copenhagen, Denmark, the Tanzania Fisheries Research Institute, U of Arizona, U Massachusetts and others.

The group of Ole Seehausen focusses on the phenotypic and genomic evolution of Lake Victoria's super-diverse cichlid fish radiation. The **PhD in evolutionary biology and paleogenetics** will investigate the evolution of the cichlid radiation through study of time series of fossils and ancient DNA. We want to understand how the ecological and phenotypic diversity changed through time, how genetic variation arose and got assembled into new species in the course of the adaptive radiation. This is one of 4 PhD and several Postdoc positions in the project. In close collaboration with ecologists, paleo-ecologists and paleo-genomics researchers, we want to address how the evolutionary diversification of the cichlid fish interacted with the Lake Victoria ecosystem. The student will analyse subfossil remains of cichlid fish from sediment cores for their morphology and ancient DNA content. Extensive reference collections of modern cichlids and their genome sequences will be available to aid interpretation of fossil phenotypes and ancient DNA data. The PhD will be co-supervised by Dr. Moritz Muschick.

Ideally, the candidate has extensive prior training in molecular genetic techniques, statistical shape analysis, computational analysis of genomic sequence data, or evolutionary biology. The candidate is motivated to learn and apply advanced laboratory techniques and to work independently. The group's working language is English and fluency in writing and speaking is required. Knowledge of German or French is not required.

Besides Uni Bern, the student will spend time at Eawag's Center for Ecology, Evolution & Biogeochemistry. The Centre is located at Lake Lucerne and is a strong nucleus of Eawag research groups aimed at integrating evolutionary biology, community ecology, and ecosystem science [http://www.eawag.ch/forschung/cc/ceeb/index\\_EN](http://www.eawag.ch/forschung/cc/ceeb/index_EN).

Supervisor: Prof. Dr. Ole Seehausen, Institute of Ecology and Evolution  
Salary: Swiss NSF PhD Fellowship (47,000 to 50,000 CHF, 100%).  
The position is available from **March 1, 2019** (for 4 years).

Review of applications starts on January 20, 2019 and continues until the position is filled.

Please direct inquiries to Prof. Dr. Ole Seehausen, [ole.seehausen@iee.unibe.ch](mailto:ole.seehausen@iee.unibe.ch).

**Applications: One pdf file only**, with CV, letter of motivation, if applicable transcript of MSc with grades, publication list, and contact details of three referees should be send by email to [therese.oesch@iee.unibe.ch](mailto:therese.oesch@iee.unibe.ch)