Postdocs: African cichlid fish evolution, University of Bern & Eawag, Switzerland

Postdoc positions are available in the Aquatic Ecology & Evolution group of Ole Seehausen at the University of Bern and Eawag, Switzerland.

The radiations of cichlid fish in the Great Lakes of Africa created some of the largest known concentrations of endemic species in record time. Hundreds of endemic species evolved in less than 20,000 years in Lake Victoria, possibly unparalleled among contemporary animals elsewhere. The African cichlid fish are a great system also for studying interactions between adaptive radiation and ecosystems because complex new consumer food webs have evolved, unparalleled by any other recent species radiation. Unfortunately, African lake cichlids also experienced the fastest large scale extinction event ever observed by humans: about 200 endemic species have disappeared in the past 40 years in Lake Victoria. We study these fish in nature, breed them in our aquarium systems and study their genomic diversity and differentiation. We have sequenced the complete genomes of more than 250 species from Lake Victoria and most other lakes in the region. Our long term goals are to understand how this large radiation could emerge so incredibly fast, how its evolution and its loss affect the ecosystem, and what is required to safeguard diversity amidst environmental change. It is a perfect study system for anyone who wants to uncover the workings of evolution, its interactions with ecology and its relevance for nature conservation.

Because some of my recent Postdocs moved on to permanent positions, I am hiring new Postdocs. Fields of interest include evolutionary community ecology, island biogeography, integrative taxonomy, functional morphology, GWAS and QTL mapping, evolutionary genomics of speciation, hybridization and adaptive radiation and comparative phylogenomics.

Qualifications: PhD in evolutionary biology or a similar field. Strong conceptual background in speciation, excellent coding, data analysis and writing skills. Experience with fieldwork in tropical ecosystems and social skills for interactions with fisher folks and government authorities and some knowledge of Kiswahili are assets.

Funding is for two years, but continuation for additional years is strongly expected.

The Postdocs will also work closely with graduate students in my group and with our Lake Victoria paleoecology and aDNA team. The goal of the larger team is to achieve a holistic understanding of evolutionary diversification in an ecosystem context and to apply the knowledge to conservation.

The team of Ole Seehausen is based at the Institute of Ecology & Evolution of the University of Bern (https://www.iee.unibe.ch/) and at the Eawag Centre for Ecology, Evolution & Biogeochemistry (CEEB; https://www.eawag.ch/en/department/fishec/) in Kastanienbaum (Lucerne) and we have labs and fish rooms in both places. The Postdocs will become part of a large team of ecologists, evolutionary biologists and conservation biologists. The larger group works on the ecology, evolution and conservation of freshwater fish with a strong focus on the fish of the African Great Lakes region, the Alpine region of Europe and Greenland. The working language in the group, in the Institute of
Ecology and Evolution and at the Eawag CEEB is English. Fluency in speaking and writing is required. Salary will be according to University of Bern salary scheme and commensurate with experience.

Because we work on African lakes, I wish to transfer system knowledge to young scientists that want to commit their career to the study and conservation of these systems. I therefore encourage applications from African countries. Because of persistent gender, ethnic and cultural biases in ecology, evolution and conservation, I especially encourage applications from women and scientists identifying as belonging to ethnic and cultural groups that are underrepresented in ecology, evolution and conservation.

Supervisor: Prof. Ole Seehausen, Institute of Ecology and Evolution
The positions are available from **May 15, 2021**.

**Review of applications starts on April 25, 2021** and continues until all positions are filled.

Please direct inquiries to Prof. Ole Seehausen, ole.seehausen@iee.unibe.ch.

**Applications: One pdf file only**, with CV, short letter of motivation, publication list and contact details of three referees should be sent by email to ole.seehausen@iee.unibe.ch.