Eawag, the Swiss Federal Institute of Aquatic Science and Technology, is an internationally networked aquatic research institute within the ETH Domain (Swiss Federal Institutes of Technology). Eawag conducts research, education and expert consulting to achieve the dual goals of meeting direct human needs for water and maintaining the function and integrity of aquatic ecosystems.

The Altermatt lab at the Department of Evolutionary Biology and Environmental Studies of University of Zurich (https://www.ieu.uzh.ch/en/staff/member/altermatt_florian.html) and the Department of Aquatic Ecology of Eawag (https://www.eawag.ch/en/department/eco/) has a vacancy for a

**PhD position in experimental Meta-Ecosystem Ecology (4 years position)**

A fundamental goal of ecology is to understand the drivers of diversity, productivity and stability of natural ecosystems. Increasing research highlights the relevance of spatial processes on shaping ecological communities and ecosystems. The meta-ecosystem concept offers a general and unified framework for studying the flows of organisms and resources among ecosystems.

**The PhD student will be part of the MetaPerspect project** "A meta-ecosystem perspective to understand diversity, productivity and stability of ecological systems"), which will combine experiments, comparative studies, and theoretical models to study meta-ecosystems in a changing world. Specifically, we will study effects of perturbations for spatially realistic meta-ecosystem networks, such as dendritic networks. The overall goal of the project is to understand how abiotic drivers, such as resource availability, destructive environmental perturbations or the spatial layout of the landscape, affect diversity, productivity and stability of meta-ecosystems. The PhD student is expected to develop, lead and conduct a series of protist microcosm experiments. These experiments will build on our extensive experience on the protist microcosm study system, dendritic networks as well as the tools to analyse such data (e.g., semi-automated analysis of videos for quantification and identification of protists). This may be combined with theoretical modeling in collaboration with the postdoc of the project.

**The project is based** in the group of Prof. Dr Florian Altermatt (University of Zurich and Eawag; www.altermattlab.ch) and in close collaboration with Dr Isabelle Gounand (CNRS/Sorbonne Université, Paris; https://isabellegounand.wordpress.com/). The project includes this four-year PhD position and a four-year postdoctoral position. A high interaction and complementarity between these two positions is expected. The project builds on extensive experience and research output by the project leaders on experimental and theoretical work on meta-ecosystem dynamics.

A MSc in Ecology, Biology, Physics, or a related science field is necessary for admission. The candidate will lead a series of protist microcosm experiments, and existing expertise on experimental ecology, microbiology or general techniques used for conducting protist experiments is ideal. A strong conceptual background in community ecology and understanding of ecological theory, excellent coding, data analysis and writing skills are expected. The working language in the group and the institutes is English. Fluency in speaking and writing is required.

**The successful applicant** will be based and hired in the group of Prof. Dr Florian Altermatt (www.altermattlab.ch) at University of Zurich and be also affiliated with Eawag (Zurich, Switzerland). The candidate will be part of the PhD program in Ecology of the Life Science Zurich Graduate School (https://www.ieu.uzh.ch/en/teaching/phd/graduate.html). There is the possibility for research-visits in the lab of Dr Isabelle Gounand (Paris, France). The position is fully-funded for four years, and is expected to start in the second half of 2021.

**We are looking for** a highly motivated, enthusiastic and independent person with a passion for science to join our team. The Altermatt lab has a shared base at University of Zurich and Eawag. It offers a stimulating and international research environment, excellent research facilities and a lively and social working place. Zurich hosts many other research groups in ecology and biodiversity research, and is among the world’s leading cities in terms of science, culture and quality of life. The project is fully financed by a project from the Swiss National Science Foundation.

We promote gender equality and are committed to staff diversity and inclusion. Women and members of ethnic and cultural groups underrepresented in ecology, and biodiversity sciences are especially encouraged to apply.

**Applications must be submitted by 24 May 2021.** Your application should include a letter describing your interests and their relevance to this position, a complete CV, university diplomas, and the names and contact information for three references (all in one pdf file). For further questions, consult www.altermattlab.ch or contact Prof. Dr Florian Altermatt

We look forward to receive your application through this webpage. Any other way of applying will not be considered. Please click on this link, it will take you directly to the application form.