

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). It conducts research to achieve the dual goals of meeting direct human needs for water and maintaining the function and integrity of aquatic ecosystems.

The Department of Surface Waters Research and Management (Surf) has a vacancy for a

PhD student in Microbial Ecology of Antibiotic Resistance

This PhD position is part of the 4-year research project "Swiss River Resistome", financed through the Swiss National Research Programme NFP72 "Antimicrobial Resistance". The discharge of wastewater treatment plants is a known source for antibiotic resistance determinants for the receiving surface waters. In the planned project we will study the fate of the resistance determinants in different compartments of rivers (water, sediment, biofilms, biota). We will determine the host organisms that contribute to persistence and transport of resistance in the environment, and develop a framework to assess exposure and risk associated with the presence of resistance determinants in aquatic environments. The PhD candidate will use microbiological and metagenomic approaches to study resistance in Swiss rivers, and will contribute to modeling resistance in the environment and human exposure to it. A team of experienced scientists from Eawag and ETH Zurich will support you in your work.

We seek applications from individuals with a profound interest in environmental microbiology and limnology as well as in public health microbiology. You should hold a MSc degree (or equivalent) in a relevant discipline (microbiology, environmental sciences). We expect experience in Microbiological and Molecular Biology laboratory techniques. Prior experience with metagenomics is an advantage. Applicable knowledge of aquatic ecosystems, microbial ecology, microbial source-tracking, bioinformatics and statistics is a plus. We expect excellent writing and conversation skills in English. Since you will be working in a collaborative project, good team skills are also essential.

You will join the Microbial Ecology group at Eawag (www.eawag.ch/forschung/surf/schwerpunkte/microbial_ecology) and your workplace will be at the Centre of Ecology, Evolution and Biogeochemistry in Kastanienbaum, Lucerne, Switzerland. Eawag Kastanienbaum lies at the shore of beautiful Lake Lucerne and offers a friendly, collaborative and interdisciplinary working environment, state of the art laboratories, and excellent working and living conditions.

Eawag offers a unique research (www.eawag.ch/en/aboutus/working/researchenvironment) and working environment and is committed to promoting equal opportunities for women and men and to support the compatibility of family and work. Applications from women are especially welcome. For more information about Eawag and our work conditions please consult www.eawag.ch and www.eawag.ch/en/aboutus/working/employment.

The successful candidate will be enrolled at ETH Zurich, one of the highest ranked Universities in Europe. The project involves collaborations with experts from different disciplines at Eawag as well as opportunities to interact with other scientists active in NFP72 and internationally.

The starting date for the position is anticipated for March 2017 or as soon as possible.

For further information about the position, please contact Dr Helmut Bürgmann (helmut.buergmann@eawag.ch; +41 58 765 2165).

Applications should be submitted by 15 January 2017. 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 two references. We look forward to receive your application through this webpage, any other way of applying will not be considered. Please click on the link below, this will take you directly to the application form.

<https://apply.refline.ch/673277/0478/pub/1/index.html>