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 Department of Environmental Toxicology (Utox) has openings for

2 PhD students and 1 PostDoc position in Toxicology to develop alternatives to animal testing for fish

In a collaborative project of natural and social scientists from Eawag and Utrecht University, we aim to develop and promote a socio-technical framework for toxicity assessment, employing different permanent fish cell lines. Alone or in combination with computational models, these can inform about toxicity mechanisms and outcomes, ultimately allowing prediction of short- and long-term impacts of chemical toxicity to fish. To accelerate the acceptance and implementation of our framework, we will take regulatory routines and procedures, as well as the industrial innovation practices, into account. This **"Fish Invitrome"** project is embedded within the Swiss National Research Programme 79 (NRP79) "Advancing 3R – Animals, Research and Society".

The two PhD projects will focus on (1) jointly characterizing the functional repertoire of a selected set of fish cell lines, (2) one student to establish a protein marker panel for monitoring toxicity in fish cell lines to inform adverse outcome pathways, and (3) the other student to develop fish cell-based models for neurotoxicity testing. The Postdoctoral researcher will work in close collaboration with the PhDs and other team members to build a modular testing in vitro-computational modelling framework. Conditions for adopting this new framework into regulatory practices will be analysed jointly with experts from industry, government and civil society.

We are looking for candidates who share our passion for developing alternatives to animal testing and facilitating their timely implementation. **PhD candidates** should hold an MSc in environmental science or life sciences, with a background in either cell biology, molecular biology, toxicology or bioanalytics, such as proteomics. The **Postdoc candidate** should have a PhD in natural sciences or engineering with considerable expertise in incorporating experimental biological data into modelling frameworks and a strong interest in working together with stakeholders and social scientists to facilitate broader uptake of the Fish Invitrome. Solid work ethics, mature teamwork attitude and good English skills are essential for all candidates.

Eawag is a modern employer and offers an excellent working environment where staff can contribute their strengths, experience and ways of thinking. We promote gender equality and are committed to staff diversity and inclusion. The compatibility of career and family is of central importance to us. For more information about Eawag and our work conditions, please consult www.eawag.ch and www.eawag.ch/en/aboutus/working/employment.

Deadline for applications is 15 July 2022. Your application should include a cover letter explaining your research background and motivation to apply for this position, a CV with list of publications, copies of your academic qualifications and contact information for two references. The project runs for four years; the starting date is as soon as possible upon agreement. For further information, please contact Dr Ksenia Groh.

We look forward to receiving your application. Please send it through this webpage, as any other way of applying will not be considered. A click on the link below will take you directly to the application form.

Applications from employment agencies/personnel consultants are not welcome and will not be considered.

https://apply.refline.ch/673277/0945/pub/1/index.html