ETH

Eidgenössische Technische Hochschule Zürich
Swiss Federal Institute of Technology Zurich

Applications are invited for two Postdoctoral Research Fellows and a PhD Student to work in the project "Reverse Engineering of Genetic Regulatory Networks", which is embedded into a major Bioinformatics program at the Swiss Federal Institute of Technology (ETH) Zurich. The project involves four research groups with expertise in Plant Sciences, Information Technology, Statistics, and Computational Science; it aims at analyzing, modeling, and predicting the behavior of genetic regulatory networks on the basis of high-throughput data such as RNA expression levels and metabolite concentrations. For this purpose, ETH Zurich provides an excellent and unique research environment, which includes, e.g., the Functional Genomics Center Zurich (FGCZ).

The following positions are available immediately for a duration of three years:

Postdoctoral Research Fellow in Plant Sciences

Responsibilities: characterization of genetic control of developmental programs and regulation of metabolic pathways in Arabidopsis thaliana by transcriptional profiling experiments; participation in developing procedures to formalize existing biological knowledge. **Qualifications:** PhD degree in Biology; experiences concerning developmental biology of plants and/or control of metabolic pathways. For further information please contact Dr. Lars Hennig, Institute of Plant Sciences, Phone: +41 1 632 2244, lhennig@ipw.biol.ethz.ch

Postdoctoral Research Fellow in Statistics

Responsibilities: development of models, methodology and computing algorithms for estimation and assigning statistical significance in genetic regulatory networks, in close collaboration with scientists from Biology and Computer Science. **Qualifications:** PhD degree in Statistics or Applied Mathematics or related area. For further information please contact Prof. Dr. Peter Bühlmann, Seminar for Statistics, Phone: +41 1 632 7338, buhlmann@stat.math.ethz.ch

PhD Student / Research and Teaching Assistant in Information Technology

Responsibilities: development of appropriate network models; design, implementation, and validation of optimization methods for hypothesis generation and experiment design. **Qualifications:** Master's degree (or equivalent) in Electrical Engineering, Computer Science, or related areas; finishing the PhD within three years is expected. For further information please contact Dr. Eckart Zitzler, Computer Engineering and Networks Laboratory (TIK), Phone: +41 1 632 7066, zitzler@tik.ee.ethz.ch

Candidates should submit a letter of application, a detailed curriculum vitae, and a list of publications to the Project Coordinator Dr. Eckart Zitzler, Computer Engineering and Networks Laboratory (TIK), ETH Zentrum, Gloriastrasse 35, CH-8092 Zurich, Switzerland. At the same time, please email the documents in a single PDF or Word file to zitzler@tik.ee.ethz.ch.