

Research IT position at the University of Basel, Switzerland

Start date: Immediately, or upon mutual agreement.

Duration: 3 years, with possible extension.

A research IT position is available in the context of a large systems biology project that aims to decipher the transcriptional and epigenetic regulatory circuitry of cellular differentiation in mammals. The CellPlasticity project, part of the Swiss SystemsX.ch initiative, is a collaboration between a number of experimental and theoretical groups at the Biozentrum, the center for biomedicine of the university of Basel, and the Friedrich Miescher Institute. The topic of CellPlasticity is the study of gene regulatory networks that control cellular differentiation in mammals. We are interested in particular to unravel how the interplay between sequence-specific binding of transcription regulators, and epigenetic changes to the state of the chromatin implements cellular differentiation. Using next-generation deep sequencing technology we will obtain genome-wide time courses of RNA expression, DNA methylation, and histone modifications for a number of mouse systems in which stem cells differentiate into well-specified cellular differentiation states. See www.cellplasticity.org for further information on the project.

The available position is for a bioinformatician that will provide bioinformatics support to the experimental groups of the Cell Plasticity project and will act as a liaison between the experimental and theoretical groups. The successful candidate will be provided with a highly stimulating interdisciplinary working environment, and will be integrated in a research IT group at the Biozentrum whose members provide similar bioinformatic support positions to other SystemsX.ch projects.

Requirements are a masters degree, or higher, in software engineering, bioinformatics, computer science or equivalent, good programming skills, in particular with scripting languages, and proven experience with application of bioinformatics methodologies to molecular biological data-sets. Experience with and knowledge of statistical data-analysis methods are highly desirable, as is experience with analysis of data from high-throughput molecular biology experiments such as gene expression micro-arrays and next-generation sequencing data. The successful candidate should be fluent in English and competence in German is a plus. Although detailed knowledge of molecular biology is not a formal requirement, the candidate should have enough knowledge to allow her/him to interact effectively with experimental collaborators, and the candidate should be eager to learn in this area. An ability to work both independently and as part of a team, and the ability to effectively communicate with researchers from different backgrounds are also requirements.

To apply send your application letter, CV, and the contact information for at least two references to:

Prof. Erik van Nimwegen
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Evaluation of applications will start June 1, 2010