



PhD positions at the University of Bern

Population Genomics of Adaptive Radiation

Two PhD positions are available in the Institute of Ecology & Evolution, University of Bern. The projects will investigate the population genomics of adaptation and speciation in adaptive radiations. We will investigate different stages in the progression of adaptive radiation, from invasion of a new adaptive zone to speciation and niche partitioning. We are using two of the best vertebrate systems available today for this purpose: East African cichlids and Threespined stickleback.

High-throughput next-generation sequencing, specifically RAD tag sequencing, on an Illumina HiSeq platform, will be used to study the signatures of selection, gene flow, reproductive isolation and hybridization, as well as the genomic architectures of adaptation and speciation. Our approach is based on comparative population genomics where we are making use of natural variation in the process of adaptation and speciation in replicate adaptive radiations.

We are looking for strongly motivated candidates eager to address cutting-edge questions in evolutionary biology, to analyse NGS data and develop and apply bioinformatics in an evolutionary genetics context. Candidates have a Masters degree in Biology or Bioinformatics and should possess an aptitude to work with very large data sets, strong desire to develop new analytical methods, and ability to work in team. Ideal candidates will have either a strong grounding in evolutionary biology with experience in programming and genetic data processing, or a strong grounding in bioinformatics or computer science with interest in evolution.

Both students will be supervised by Ole Seehausen, Arjun Sivasundar (Aquatic Ecology Division) and Laurent Excoffier (Population Genetics Division). Aquatic Ecology has its labs in Bern and at the Center for Ecology, Evolution & Biogeochemistry of Eawag in Kastanienbaum, Population Genetics has its labs in Bern. For details see our homepages at http://www.iee.unibe.ch/content/index_eng.html and http://www.eawag.ch/forschung/cc/ceeb/index_EN. The students will also enroll in our new SNSF doctoral program in Population Genomics (<http://www.unil.ch/pg>) and benefit from its activities.

Both positions are available to start immediately. Salary will be according to SNSF guidelines. Application deadline is May 13th, but applications will be considered until the positions are filled.

Please send an application letter, CV and contact information of two references to Susanne Maurer (Susanne.maurer@iee.unibe.ch)

For inquiries please write to either

Ole Seehausen (ole.seehausen@eawag.ch)

Laurent Excoffier (laurent.excoffier@iee.unibe.ch)

u^b

**UNIVERSITÄT
BERN**

