Post-Doc in Evolutionary Analysis of Gene Regulation

We seek a highly motivated and creative individual to join our Bioinformatics for Molecular Biology and Genomics research group at Department of Biosciences, University of Helsinki, Finland

**Project Description.** In this project, biological experimentation is combined with methods development to estimate conserved gene regulatory networks. Initial application area is evolution of leaf formation. Leaves are optimal for the purpose, since they are easy to quantify in large amounts with several replicates per individual, they vary between and within species, and there exists a large amount of publicly available gene expression data from leaf development in different species. In addition to public data, leaf formation is studied in a large birch population (family Betulaceae) which is characterised in a high-throughput plant phenotyping facility, followed by genomic and transcriptomic sequencing of selected phenotypes.

**Research Environment.** Research is carried out in Bioinformatics for Molecular Biology and Genomics research group headed by D.Sc Jarkko Salojärvi. The group is focusing on plant systems biology by combining different omics data to study the evolution and adaptation of gene regulation in plants.

The group is part of Finnish Center of Excellence in Molecular Biology of Primary Producers, and housed within the Viikki Biocentre campus of University of Helsinki. The campus has exceptional research facilities, including state-of-the-art core facilities such as next generation sequencing platforms (Illumina HiSeq, PacBio), plant growth chambers, greenhouses, and a high-throughput plant phenotyping facility.

**Required Qualifications and Application Instructions.** The candidate should have experience or necessary skills to learn machine learning or advanced statistics, and/or population genomics, and programming/scripting experience (preferably R). Previous background of working in a Linux environment with genomic and transcriptomic data analysis is needed. The working language of the group is English, and therefore excellent communication skills in English are imperative.

The position is for two years, and salary is according to the University salary system, which is based on qualifications and personal performance. A post-doctoral fellow will likely be at level 5 (salary before taxes 3100-3700 €/ month). **Preferable starting time is August 2016, but is flexible.**

To apply, please send a letter of motivation describing your reasons for applying to the position, CV, transcripts and contact details for at least two references. All materials should be sent in English to jarkko.salojarvi@helsinki.fi. Review of applications will begin April 1 and will continue until a suitable candidate is found.

Jarkko Salojärvi, D.Sc (Tech)
Bioinformatics for Molecular Biology and Genomics
Dept. of Biosciences
P.O.box 65 (Viikinkaari 1)
FI-00014 University of Helsinki, Finland

E-Mail: jarkko.salojarvi@helsinki.fi
SkypeID: jarkko.salojarvi