



Post-doctoral positions in Statistical Genetics and Computational Genomics

Collaborative research efforts co-led by Drs. Juni Palmgren, Dept of Medical Epidemiology and Biostatistics (MEB) (<http://ki.se/meb>), Karolinska Institutet in Stockholm, Sweden and Samuli Ripatti, Human genetics group (www.fimm.fi/en/research/research_groups/group_ripatti/), Institute for Molecular Medicine Finland (FIMM, www.fimm.fi) in Helsinki, Finland are seeking post-doctoral candidates with experience in statistical genetics and computational genomics for projects related to prediction modeling of cancer and cardio-vascular disease.

Two positions are open, one based at MEB and one at FIMM, with expected interaction across the groups.

The projects deal with large-scale genome-wide omics data (whole genome sequence, transcriptome, proteome and metabolome data) from biobank samples as well as clinical data and data on lifestyle, demography and the environment. The purpose of the research is to develop statistical models and computational tools for causal understanding of processes at different scales driving complex diseases. Research in the Palmgren group in Stockholm focuses on cancer, while the Ripatti group in Helsinki studies determinants for cardio-vascular disease. Central challenges in both groups include how to integrate and model multiple types of omics data including genomic variants, in order to pave the way for sharper tools for individual risk prediction, early diagnosis, disease classification, and personalized prognosis and treatment.

The candidate should have received a doctoral degree in statistics, computational biology or related disciplines. He/she should be familiar with modern statistical methods in the analysis of genetic data, and have experience with mining and curating large-scale datasets. A strong background in statistical concepts is essential. Applicants should enjoy working in a multi-disciplinary environment, excel in their interpersonal skills, and pay attention to detail. Demonstrated ability to meet project deadlines, prioritize tasks, manage complex projects, and communicate in spoken and written English effectively is highly desirable.

The target starting date is spring 2011. If interested, please email a cover letter and attach your CV, list of publications and the names/contact information for three professional references to both Marie Jansson (marie.jansson@ki.se) at MEB and Sari Kivikko at FIMM (sari.kivikko@fimm.fi) before February 28, 2011.

The Department of Medical Epidemiology and Biostatistics (MEB)[[link: http://ki.se/meb](http://ki.se/meb)] The Department of Medical Epidemiology and Biostatistics presently

employ approximately 250 staff with 15 full professors and over 40 graduate students. The department is one of the biggest departments of epidemiology in Europe. Unique resources and prerequisites – such as the Swedish Twin Registry, several large prospective studies, ongoing nation-wide case-control studies, large nation-wide databases including the Cancer Registry and the In-patient discharge registry, record linkage capabilities and access to clinical data as well as biological material – are effectively explored at the department. The biostatistics group comprises 3 professors, 8 PhD-level statisticians, 4 masters-level statisticians, and 7 doctoral students involved in theoretical and applied biostatistics research, especially in the areas of statistical genetics, bioinformatics and registry-based epidemiologic modelling.

The Institute for Molecular Medicine Finland (FIMM, www.fimm.fi) was established in 2007 as a partner institution of the European Molecular Biology Laboratory (www.embl.org) together with the new Nordic nodes for molecular medicine in Norway and Sweden. FIMM is a joint venture of the University of Helsinki, the Hospital District of Helsinki and Uusimaa (HUS), the National Institute for Health and Welfare (THL) and the VTT Technical Research Centre of Finland. FIMM laboratories are located in a brand new state-of-the art Biomedicum Helsinki 2 research building on the Meilahti medical campus in Helsinki.

Karolinska Institutet and the Institute for Molecular Medicine Finland aims to promote equal opportunities by encouraging a balanced gender distribution. We therefore particularly invite women to apply for this position. We also value the qualities that ethnic and cultural diversity can contribute.