INVITATION FOR APPLICATIONS

FIMM is part of the Nordic EMBL Partnership for Molecular Medicine, composed of the European Molecular Biology Laboratory (EMBL) and the centres for molecular medicine in Norway, Sweden and Denmark. At the national level, FIMM was founded in 2007 as a joint research institute of the University of Helsinki (primary host), the Hospital District of Helsinki and Uusimaa, the National Institute for Health and Welfare, and VTT Technical Research Centre of Finland. At the beginning of 2017, FIMM joined the University of Helsinki’s new life science research centre, Helsinki Institute of Life Science HiLIFE, as an operational unit.

FIMM is currently seeking

BIOINFORMATICIAN

FIMM is the leading genetics and genomics research unit in Finland. We are managing petabytes of human genetics and health data, and these datasets will likely increase tenfold in the forthcoming years. We are daily collaborating with top researchers and research institutes in the world and international health-care companies to improve health and well-being on a global scale.

FinnGen is one of the very first personalised medicine projects at this scale, and the public-private collaborative nature of the project is exceptional compared to many ongoing studies. FinnGen brings together Finnish universities, hospitals and hospital districts, THL, Blood Service, biobanks and international pharmaceutical companies, researchers.

We are looking for a bioinformatician with experience on large scale genetic data handling and analyses (e.g. exome and whole-genome data processing, quality control, GWAS, related method development). The bioinformatician would be working in one of the largest genetic projects in the world in collaboration with some of the leading genomic institutes (Broad Institute of Harvard and MIT) and pharmaceutical companies. The FinnGen project aims to genotype 500,000 Finnish individuals and utilise the outstanding healthcare records from the Finnish healthcare system and registries (e.g. diseases, prescription drugs) to identify genetic variants and genes associated with health and disease outcomes.

Responsibilities of the bioinformatician include evaluation and application of published computational/statistical methods for quality control and processing of genetic data (SNVs, InDels, CNVs), and execution of genome-wide analysis of thousands of phenotypes (pheWAS). The successful candidate will also take part in related statistical/computational method development and in automating these tools into efficient and scalable computational workflows.

Essential skills include knowledge of applied statistics, excellent Linux/Unix user skills (no admin skills required), experience with high-performance computing clusters, statistical programming in R and knowledge of commonly used statistical genetics tools (e.g. Plink, Hail, bcftools). Command of some general-purpose programming language (preferably Python) and cloud computing experience are an asset.

The successful applicant does not need to be an expert in all listed fields, but high and continuous motivation to learn more is a must-be. Do not hesitate to contact us with inquiries about the position and if your unique skill set would be a good fit for the position!
INVITATION FOR APPLICATIONS

The primary responsibilities of the position include (depending on qualifications of the applicant):

- Large scale genetic data processing and analysis in high performance computing cluster and cloud environments.
- Participating in development and R&D of automated large-scale genetic data processing and analysis pipelines.
- Support research projects by preparing and delivering analyses in a timely fashion.
- Evaluate new methods and solutions for genetic data processing, analysis and visualisation.
- Pre-processing and quality control (QC) of sequencing variant (VCF) and SNP array data.

Qualification and experience:

- Master’s/Bachelor’s degree (or soon graduating) in statistical genetics, bioinformatics, statistics, computer science, computational biology, molecular biology (with strong computational skills) or other relevant quantitative fields. PhD is an asset.
- Capability to work effortlessly in Linux/Unix environment, at least intermediate programming skills.
- Previous experience with handling and analysis of genome-wide SNP array and sequencing data, data science, software engineering, method development, high-performance computing environment (e.g. Grid Engine/ IBM LSF) and cloud computing (preferably Google Cloud) are highly valued – yet ability and motivation to learn new things are essential.
- Proactive, solution-seeking and responsible way of working independently and as part of a larger team, keeping deadlines under pressure.
- Proficiency in oral and written English, our team is international.

We offer an excellent opportunity to be part of leading big data projects working in the forefront of the new wave of big data application for genome health in the field of genomics and building solutions with a real positive impact on healthcare and well-being. We are a young, vibrant and highly motivated international team. Our friendly, flexible, and supportive working culture make us a great place to work.

Salary and contract:
We will offer a competitive salary that will be based on previous qualifications, experience and performance in the position according to University pay-scale. The contract will be offered until mid-August 2023 and may be extended.

To apply, please submit your application, together with your CV and a cover letter in PDF format with salary request, through the University of Helsinki electronic recruitment system by clicking on the Apply link. Internal applicants (i.e., current employees of the University of Helsinki) please submit your applications through the SAP HR portal. Please apply no later than February 15, 2020.

For further information please visit our websites at https://www.finngen.fi and http://www.fimm.fi and/or contact Priit Palta priit.palta(at)helsinki.fi or project coordinator Sari Kivikko, sari.kivikko(at)helsinki.fi (+358 40 567 0826).

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