

PhD position on genetics and bioinformatics at Folkhälsan Research Center at Biomedicum Helsinki

We are searching for a PhD student to pursue bioinformatic and genetic research in our multi-disciplinary research group including geneticists, bioinformaticians, cell biologists, and medical doctors. Half of the individuals with diabetes develop long-term micro- and macrovascular complications including diabetic kidney disease, retinopathy, and cardiovascular disease. With nearly 10,000 participants, the Finnish Diabetic Nephropathy (FinnDiane) study is one of the World's largest study on type 1 diabetes and its long-term complications. Our main aim is to identify genetic and environmental risk factors for diabetic complications, and eventually, to improve the quality of life of the individuals with diabetes. Our recently published studies can be found online at www.finndiane.fi/publications.

We offer inspiring and multidisciplinary working environment, cutting edge research projects as a part of international research collaboration, and support for your work and career development. In addition to the detailed clinical characterization of the participants, we have extensive omics data including genetic (genome-wide genotyping and whole-exome/ whole-genome sequencing), epigenetic (genome-wide DNA methylation), proteomic (>5,300 proteins) and metabolomic (NMR/ mass spectrometry) data. Specific projects that we offer are related (but not limited) to:

- Epigenome-wide association studies on diabetic complications
- Proteomic and metabolomic analysis of diabetic complications
- Integration of the genetic, epigenetic, clinical, and biomarker data

We are looking for an enthusiastic, independent, collaborative person eager to learn new things, with attention to detail, and good problem-solving and analytical skills. Desired skills and experience include:

- Suitable higher university degree (Master's degree on bioinformatics, computer science, genetics, or other related fields)
- Knowledge on statistics, bioinformatics and/or genetics
- experience on unix computing environment and statistical programming (e.g. with R, python)
- fluent English language proficiency with good writing and presenting skills

Our research group is located at the Biomedicum Helsinki at the Folkhälsan Research Center (<https://www.folkhalsan.fi/en/knowledge/research/genetics/group-groop/>). The research group is also affiliated with the University of Helsinki and Helsinki University Hospital, and the doctoral thesis will be pursued at the University of Helsinki. Applications should be sent by email to niina.sandholm@helsinki.fi at latest by February 23rd. Please, include a letter of motivation, your CV, transcript of records, and contact information of reference(s). For more information on the position, please contact Niina Sandholm, niina.sandholm@helsinki.fi, or tel. +358 44 788 1045.

