PhD student in Computational Medicine

Uppsala University is a comprehensive research-intensive university with a strong international standing. Our ultimate goal is to conduct education and research of the highest quality and relevance to make a long-term difference in society. Our most important assets are all the individuals whose curiosity and dedication make Uppsala University one of Sweden's most exciting workplaces. Uppsala University has over 54,000 students, more than 7,500 employees and a turnover of around SEK 8 billion.

The Department of Immunology, Genetics and Pathology at Uppsala University (www.igp.uu.se) has a broad research profile with strong research groups focused on cancer, autoimmune and genetic diseases. A fundamental idea at the department is to stimulate translational research and thereby closer interactions between medical research and health care. Research is presently conducted in the following areas: medical and clinical genetics, clinical immunology, pathology, neuro-oncology, vascular biology, radiation science and molecular tools. Department activities are also integrated with the units for Oncology, Clinical Genetics, Clinical Immunology, Clinical Pathology, and Hospital Physics at Akademiska sjukhuset, Uppsala. The department has teaching assignments in several education programmes, including Master Programmes, at the Faculty of Medicine, and in a number of educations at the Disciplinary Domain of Science and Technology. The department has a yearly turnover of around SEK 420 million, out of which more than half is made up of external funding. The staff amounts to approximately 345 employees, out of which 100 are PhD-students, and there are in total more than 700 affiliated people.

[Read more about our benefits and what it is like to work at Uppsala University](#)

Duties

A PhD student position is available for highly motivated individuals with interest in

large-scale computations and of genetic / medical epidemiology. The position is in the laboratory of Associate Professor Åsa Johansson group at Uppsala University, Department of Immunology, Genetics and Pathology. The research group works with identifying risk factors for common diseases and building models for risk assessment or stratification of patients based on molecular data. More information about the research group's activity can be accessed at https://www.igp.uu.se/forskning/genetik_genomik/asa-johansson/   The aim of the doctoral project is to evaluate how neural networks can be used in various medical research questions.

This PhD position is part of the eSSENCE - SciLifeLab graduate school in data-intensive science. The school addresses the challenge of data-intensive science both from the foundational methodological perspective and from the perspective of data-driven science applications. It is an arena where experts in computational science, data science and data engineering (systems and methodology) work closely together with researchers in (data-driven) sciences, industry and society to accelerate data-intensive scientific discovery.

eSSENCE is a strategic collaborative research programme in e-science between three Swedish universities with a strong tradition of excellent e-science research: Uppsala University, Lund University and Umeå University.

SciLifeLab is a leading institution and national research infrastructure with a mandate to enable cutting-edge life sciences research in Sweden, foster international collaborations, and attract and retain knowledge and talent.

The successful candidate will devote most of the time towards his/her research level education. Other service activities within the department, e.g. education and administrative work can be included within the framework of the employment (maximum 20%). The position will be extended with the time devoted to teaching to allow four years of full-time graduate studies. The student is expected to take part in courses and other activities of the graduate school.

Requirements
To be admitted to the PhD position, a master's degree is required (http://www2.medfarm.uu.se/utbildning/forskarniva/vill_du_borja/), and for the advertised position it is required that the degree is in bioinformatics, technical biology,

computer science, mathematics or similar. A degree in medicine or biology complemented by courses in computer science and mathematics can also be accepted. Experience of working in the Unix / Linux environment and documented experience of working in R or Python is a requirement. Proficiency in oral and written English is required.

Additional qualifications
Basic experience and interest in machine learning and neural networks, bioinformatics, biostatistics and medical research is a merit. Strong merits are also previous research experience (e.g. degree project) in genetic or medical epidemiology and documented experience of large-scale data analyzes.

Rules governing PhD students are set out in the Higher Education Ordinance chapter 5, §§ 1-7 and in Uppsala University's rules and guidelines.

About the employment
The employment is a temporary position according to the Higher Education Ordinance chapter 5 § 7. Scope of employment 100 %. Starting date as agreed. Placement: Uppsala.

For further information about the position, please contact: Åsa Johansson, asa.johansson@igp.uu.se.

Please submit your application by 13 April 2022, UFV-PA 2022/547.

Are you considering moving to Sweden to work at Uppsala University? Find out more about what it´s like to work and live in Sweden.

Please do not send offers of recruitment or advertising services.

Submit your application through Uppsala University's recruitment system.

Placement: Department of Immunology, Genetics and Pathology
Type of employment: Full time , Temporary position longer than 6 months
Pay: Fixed salary

Number of positions: 1

Working hours: 100 %

Town: Uppsala

County: Uppsala län

Country: Sweden

Union representative: ST/TCO tco@fackorg.uu.se

Seko Universitetsklubben seko@uadm.uu.se

Saco-rådet saco@uadm.uu.se

Number of reference: UFV-PA 2022/547

Last application date: 2022-04-13

Apply for position