



UPPSALA
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PhD student in medical genetics for early detection of ovarian cancer

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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 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 biology, 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 at the Disciplinary Domain of Science and Technology. The department has a yearly turnover of around SEK 500 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. Feel free to read more about the department's activities here: www.igp.uu.se

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

Duties

The doctoral project aims to investigate the possibilities of using self-collected samples for early detection/screening of ovarian cancer. The project uses large-scale analysis of, for example, DNA, RNA and proteins in tumour tissue and plasma as well as self-collected samples such as vaginal fluid or dried capillary blood to search for combinations of biomarkers with good predictive properties.

The doctoral student will primarily work with computer-based analyses using, for example, machine learning/AI of multiple types of large-scale biological data (multi-omics) with the aim of finding robust signals for early detection of gynecological cancer, mainly ovarian cancer. The doctoral student will also delve deeper into the relevant subject area during the doctoral studies. Other tasks include writing research articles about their findings and publishing them in scientific journals as well as presenting their research at relevant international conferences. Other tasks at the department, for example administration and teaching can be included to a level not exceeding 20% of the working time.

Further information about the research group is available on the website: www.igp.uu.se/research/genomics-neurobiology/ulf-gyllensten/more-info/

Requirements

To meet the entry requirements for doctoral studies, you must

- hold a Master's (second-cycle) degree in bioinformatics, biotechnology or similar subjects
- have completed at least 240 credits in higher education, with at least 60 credits at Master's level including an independent project worth at least 15 credits, or
have acquired substantially equivalent knowledge in some other way.

The applicant must be able to work independently but also function well in a group. The applicant should be highly motivated, thorough and goal-oriented. Applicants must be able to express themselves well in English, both orally and in writing. Documented experience in statistics and bioinformatic analyses. Documented experience in low-level analyses of high-throughput sequencing data.

Additional qualifications

Previous research experience in or interest in machine learning, large-scale data and bioinformatics is desirable. Previous experience in cancer research is also relevant, especially with regard to early detection/screening, processing of large data sets, and/or knowledge in linux/unix, programming in Python and/or R, bioinformatics or biostatistics. Speaking Swedish is an advantage. Knowledge and experience within laboratory work, especially within protein/DNA extraction and library preparation is an advantage. Emphasis will be placed on individual suitability, in terms of who is judged to have the best conditions to contribute to the planned project.

The application should include a personal letter in which you describe yourself, your research interest, your experiences and why you are interested in the doctoral position (max. 1 page). CV containing education and other qualifications, list of publications, and description of relevant knowledge based on the qualifications. Also attach certified copies of relevant diplomas. Contact information for two reference persons and/or letters of recommendation from previous supervisors.

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 as agreed. Placement: Uppsala.

For further information about the position, please contact: Stefan Enroth, stefan.enroth@igp.uu.se

Please submit your application by 12 May 2023, UFV-PA 2023/933.

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

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 2023/933

Last application date: 2023-05-12

Apply for position