



GÖTEBORGS UNIVERSITET

Postdoctoral fellow in cancer genomics and bioinformatics

Ref PAR 2023/371

The University of Gothenburg tackles society's challenges with diverse knowledge. 56 000 students and 6 600 employees make the university a large and inspiring place to work and study. Strong research and attractive study programmes attract scientists and students from around the world. With new knowledge and new perspectives, the University contributes to a better future.

The Institute of Biomedicine is involved in both research and education. In both of these areas, we focus on fundamental knowledge of the living cell – what it consists of, how it works, how its function is directed by the genetic material, and how it interacts with various kinds of micro-organisms. Using this knowledge, we try to elucidate the causes of diseases, and find new ways to diagnose and treat them.

The Institute is composed of the following four departments:

- The Department of Infectious Diseases
- The Department of Microbiology and Immunology
- The Department of Medical Biochemistry and Cell Biology
- The Department of Laboratory Medicine

At present, the institute has about 360 employees and approximately 450 million SEK in total assets

At the Department of Medical Biochemistry and Cell Biology, we are seeking a highly motivated and enthusiastic postdoctoral candidate to lead our genomic studies of clonal hematopoiesis and blood cancer. The research group studies the mechanisms of cancer development using large genomic and multi-omics data. The main aim is to understand how clonal hematopoiesis originates, evolves, and leads to diseases. The group is affiliated to the [SciLifeLab and Wallenberg National Program on Data-Driven Life Science \(DDLs\)](#) and we collaborate closely with researchers at the Broad Institute

Subject area

Cancer genomics and bioinformatics

Subject area description

Clonal hematopoiesis, defined by driver genetic alterations in blood cells of healthy individuals, is associated with increased risk of blood cancer, mortality, and several diseases of ageing. Whole-exome and whole-genome sequencing data available from large genomic projects provide unprecedented sample size and opportunities to study clonal hematopoiesis and cancer development. Recently, we distinguished two groups of clonal hematopoiesis and stratified risk of blood cancer ([Niroula et al., Nature Medicine 2021](#)). Our projects are focused on understanding the mechanisms regulating clonal expansion of blood cells.

Duties

In this project, you will develop computational methods and workflows to analyze genetic variants in whole-exome and whole-genome sequencing data. You will also work with multi-omic data integration. The workflows will be implemented in high-performance computing platform.

You will work closely with PhD students and other postdocs, and international collaborators.

The recruited candidate will be part of the DDLS program and will benefit from the national DDLS network.

Eligibility

The eligibility criteria for employing teaching staff are set out in Chapter 4 of the Higher Education Ordinance and in the Appointment Procedure for Teaching Posts at the University of Gothenburg.

To be eligible for appointment as a postdoc, the applicant is required to have a doctoral degree, a doctoral degree in art or a foreign degree that is deemed to be equivalent to a doctoral degree. This eligibility requirement must be met before the employment decision is made.

In the first instance, those who have completed their degree no more than three years prior to the end of the application period shall be considered. Those who have completed their degree more than three years prior to the end of the application period may also be considered in the first instance if special grounds exist. Special grounds relate to leave of absence due to illness, parental leave, commissions of trust within union organisations, service within the defence services or other similar circumstances, as well as clinical service or service/assignment relevant to the subject area.

Assessment criteria

The candidate must hold a PhD degree in bioinformatics, computational biology, statistics, computer science, or similar subject, with experience in computational biology and human genomics.

The candidate will have excellent programming skills (in R, Python, UNIX) and knowledge of genomic databases.

The candidate should be self-driven and have the ability to lead projects independently as well as work in collaborative projects.

Fluency in both spoken and written English is essential.

Great emphasis will be placed on personal suitability.

Regulations for the evaluation of qualifications for academic positions are given in Chapter 4, Section 3 - 4 of the Higher Education Ordinance.

Employment

The employment is full time and temporary, two years with the possibility of one year's extension, with placement at the Institute of Biomedicine. First day of employment as agreed.

Selection process

[Help for applicants](#)

Contact information

If you have any questions about the position, please contact *Abhishek Niroula, Assistant Professor*, +46 (0)72 442 0580, abhishek.niroula@gu.se.

Unions

Union representatives at the University of Gothenburg can be found here: <https://www.gu.se/om-universitetet/jobba-hos-oss/hjalp-for-sokande>

Application

Submit your application via the University of Gothenburg's recruitment portal by clicking the "Apply" button. It is your responsibility to ensure that the application is complete as per the vacancy notice, and that the University receives it by the final application deadline.

The application should contain:

- A cover letter giving a brief description of previous research experience, and a motivation to why you are applying
- A CV including a list of publications
- Contact details of two references
- Proof of completed PhD

Applications must be received by: 2023-04-14.

Information for International Applicants

Choosing a career in a foreign country is a big step. Thus, to give you a general idea of what we and Gothenburg have to offer in terms of benefits and life in general for you and your family/spouse/partner please visit:

<https://www.gu.se/en/about-the-university/welcome-services>
<https://www.movetogothenburg.com/>

The University works actively to achieve a working environment with equal conditions, and values the qualities that diversity brings to its operations.

Salaries are set individually at the University.

In accordance with the National Archives of Sweden's regulations, the University must archive application documents for two years after the appointment is filled. If you request that your documents are returned, they will be returned to you once the two years have passed. Otherwise, they will be destroyed.

In connection to this recruitment, we have already decided which recruitment channels we should use. We therefore decline further contact with vendors, recruitment and staffing companies.

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Apply