Researcher position (50%) in statistics and bioinformatics

Job description

Applications are invited for a 50% Researcher position in statistics and bioinformatics at the Oslo Centre for Biostatistics and Epidemiology (OCBE), Institute of Basic Medical Sciences, University of Oslo.

The researcher will develop and apply methods in statistics and machine learning to study the deterioration of quality of life of head and neck cancer patients after surgery. The project the researcher will work on is part of a H2020 project funded by the European Union, “BD4QoL, Big Data Models and Intelligent tools for Quality of Life monitoring and participatory environment of Head and Neck Cancer survivors”

The project is founded around a large collection of data from clinical trials, which the researcher will study retrospectively, and a prospective clinical trial where a smart-clock based monitoring of some patients will be performed in Italy. The researcher will be responsible for the data management and analysis to contribute important insight to the field, supported by publications in leading scientific journals.

The researcher will be employed in a 50% position at OCBE (https://www.med.uio.no/imb/english/research/centres/ocbe/). OCBE has eight professors, five associate professors, fifteen researchers, many post-doctoral fellows and PhD students, making up a group of about 80 scientists. OCBE is internationally recognized, with interests spanning a broad range of areas (including time-to-event models, data integration, causal inference, statistical genomics, Bayesian inference, stochastic simulation algorithms, probabilistic graphical models, machine learning, evolution and population genetics, informative missingness and measurement error models, epidemiological studies of lifestyle and chronic diseases, stochastic models for infectious diseases, high dimensional data and models) and numerous collaborations with leading bio-medical research groups internationally and in Norway. In the last national research evaluation, OCBE was judged as excellent by an international committee. OCBE has a leading role in the centre of excellence for research-based innovation BigInsight, a consortium of academic, industrial and public partners, with a funding of about 4 mil Euro annually until 2023. Furthermore, OCBE hosts the ERC Advanced Grant of Professor Corander (Scalable inference algorithms for Bayesian evolutionary epidemiology) and several further important projects in the areas of digital life sciences, systems medicine, statistical methods for biobank, health survey and registry data, causal inference and mathematical oncology. Professor Arnoldo Frigessi (https://www.med.uio.no/imb/english/people/aca/frigessi/) will have the responsibility for the researcher. Frigessi develops innovative stochastic models and inferential methods to carefully represent fundamental principles, basic dynamics, intricate patterns of dependence and known mechanisms of life science systems, to be understood or predicted. The project will benefit from the collaboration with professor Eivind Hovig and dr. Marissa LeBlanc, in addition to the international partners of BD4QoL.

More about the position

The researcher will be responsible for the data management of the data obtained from the projects BD4QoL and Supertreat (a further project in head and neck cancer), and their analysis. The researcher will also be invited to participate to OCBE’s advising services for bio-medical projects at the faculty of medicine and the regional research hospitals (for about one week per semester), often leading to significant experiences and further co-authorship.

The researcher will be employed in a permanent position, however the position is linked to external financing and expected work assignments which expires after four years.

Qualification requirements

The following qualifications are required:

- Applicants must hold a PhD degree in statistics or biostatistics.
- Experience with genomic data sets necessary.
- Documented programming skills in R, Python, C, C++ or equivalent are necessary.
- Fluent oral and written communication skills in English, which is the working language in the project and OCBE.

The following qualifications are an advantage:

- Experience with machine learning algorithms is an advantage.
- Knowledge about the European Elixir is an advantage.

Experience in head and neck cancer research is not expected.

Personal skills

- The candidate must express genuine interest in developing and applying statistical and machine learning methodology to outstanding medical research questions.
- The candidate is used to work in interdisciplinary teams and has excellent communication skills.
- The candidate has shown the ability to work independently and efficiently.
We offer

- Salary is 50% of NOK 523,200 - 583,900 per year depending on qualifications as Researcher (position code 1109).
- Access to unique data.
- A friendly, professional and stimulating international working environment.
- Access to a network of top level national and international collaborators.

How to apply

The application must include

- A personal cover letter, stating motivations for this position and research interests
- A CV with full education, positions, academic experiences, details on PhD thesis, detailed computational skills and a list of publications
- Copies of educational certificates (academic transcripts only)
- List of reference persons: 2-3 references (name, relation to candidate, e-mail and phone number)

The application with attachments must be delivered in our electronic recruiting system. Please note that all documents should be in English (or a Scandinavian language).

In assessing the applications, special emphasis will be placed on the documented, academic qualifications, as well as the candidates motivation and personal suitability. Interviews with the best qualified candidates will be arranged.

Formal regulations

According to the Norwegian Freedom of Information Act (Offentleglova) information about the applicant may be included in the public applicant list, also in cases where the applicant has requested non-disclosure.

The University of Oslo has an agreement for all employees, aiming to secure rights to research results etc.

The University of Oslo aims to achieve a balanced gender composition in the workforce and to recruit people with ethnic minority backgrounds.

Contact information

Professor Arnoldo Frigessi, frigessi@medisin.uio.no, mob: +47 957 35 574.

About the University of Oslo

**The University of Oslo** is Norway's oldest and highest ranked educational and research institution, with 28,000 students and 7,000 employees. With its broad range of academic disciplines and internationally recognised research communities, UiO is an important contributor to society.

**The Institute of Basic Medical Sciences** overall objective is to promote basic medical knowledge in order to understand normal processes, provide insight into mechanisms that cause illness, and promote good health. The Institute is responsible for teaching in basic medical sciences for the programmes of professional study in medicine and the Master's programme in clinical nutrition. The Institute has more than 300 employees and is located in Domus Medica.

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