



Jobbnorge ID: 196535
Deadline: 4/30/2021
Website: <http://www.uio.no/>
Scope: Fulltime
Duration: Temporary

2-year Postdoctoral Position in Statistics for COVID-19 modelling at the Oslo Centre for Biostatistics and Epidemiology (OCBE)

Job description

Applications are invited for one postdoctoral position of 2 years at the [Oslo Centre for Biostatistics and Epidemiology \(OCBE\)](#), Institute of Basic Medical Sciences, University of Oslo.

The candidate will develop new statistical methodology and models to describe the dynamics of the COVID-19 pandemics in Norway and across the Nordic countries. The present position is part of a Nordic collaboration project financed by NordForsk with Tom Britton, Stockholm University, Arnoldo Frigessi, Oslo University and Lasse Leskelä, Alto University as co-PIs. This recently funded Nordic research project will develop new mathematical and statistical methods for covid-19 analyses, including uses of new data streams, and to apply the methods on data in order to make conclusions of relevance to public health authorities, with a focus on the Nordic countries.

The main goal of the Oslo based project is to develop statistical models and inferential methods to describe the spread of the infection in space and type, also across the Nordic borders; exploit human mobility data in real time described by telecom mobility data; short term prediction and long term scenario predictions of the development of the pandemics; evaluation and comparison of alternative interventions. The project has unique access to COVID-19 data streams. The Nordic project will last for three years, with one postdoc employed in each of the three countries. The three research themes will collaborate closely. A similar Post Doc position is also announced at Stockholm University. It is expected that the postdoc also takes part in joint collaborative activities in the Nordic project. The candidate is expected to publish methodological and/or applied papers in high impact peer-reviewed scientific journals, and to present results at scientific conferences.

The Oslo candidate will be employed at 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](#) will supervise the postdoc

Qualification requirements

- Applicants must hold a PhD degree in statistics, biostatistics, machine learning, mathematics or related field. Doctoral dissertation must be submitted for evaluation by the application deadline. Appointment is dependent on the public defence of the doctoral thesis being approved.
- A qualified applicant should have competence and experience in one or preferably several of the following areas: statistical modelling, probability, statistical analysis, stochastic processes, mathematics, high-dimensional data-analysis and infectious disease epidemiology.
- Documented high level programming skills in R, Python, C, C++, matlab or equivalent are necessary.
- Experience with High Performance Computing is an advantage, but not necessary.
- Relevant and significant scientific publications, at the level of the career status of the applicant.
- Fluent oral and written communication skills in English, which is the working language in the project and OCBE.

Personal skills

- The candidate is highly motivated to combine relevant elements from computational/mathematical/statistical disciplines to answer public health/epidemiological questions.
- The candidate is used to work in a team and has excellent communication skills.
- The candidate shows the ability to work independently and efficiently.

We offer

- Salary is NOK 526 000 - 586 500 per annum depending on qualifications as a Postdoctoral Research Fellow (position code 1352)
- A unique project, with multiple opportunities to develop own research themes and join common research projects, so to develop the candidate's own curriculum towards a tenure track/permanent position in a leading university worldwide.

- A friendly, professional and stimulating international working environment.
- Access to a network of top level national and international collaborators.
- A career development programme designed for researchers at the beginning of their career
- Health insurance through membership with the [Norwegian National Insurance Scheme \(Folketrygden\)](#) and very attractive welfare benefits.
- A generous pension agreement.
- Oslo's family-friendly environment with its rich opportunities for culture and outdoor activities.

Starting date is as soon as possible and no later than July 1, 2021.

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. Foreign applicants are advised to attach an explanation of their University's grading 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

Please see the [guidelines and regulations](#) for appointments to Postdoctoral fellowships at the University of Oslo.

No one can be appointed for more than one Postdoctoral Fellow period at the University of Oslo.

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

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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 7000 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.

Additional information

Place of service:

Domus Medica 0317 Oslo (Oslo Municipality)