UNIVERSITETET I OSLO

Jobbnorge ID: 280960
Deadline: 6/13/2025
Website: http://www.uio.no/
Scope: Fulltime
Duration: Fixed Term

Three-year postdoc position in Statistics at the Oslo Centre for Biostatistics and Epidemiology

About the position and research group

One three-year postdoc position in statistics is available at the Oslo Centre for Biostatistics and Epidemiology (OCBE), Department of Biostatistics, Institute of Basic Medical Sciences (IMB), University of Oslo (UiO), Norway. The candidate shall take part in the research group on "Statistical models for high-dimensional and functional data", led by Associate Professor Valeria Vitelli. Successful candidates will work on Bayesian models for unsupervised learning when multiple data sources are available, mostly tailored to the case of molecular data in cancer genomics.

The position is connected to the project "Bayesian Rank-based unsupervised Integration of multi-source Data in cancer Genomics and the digital Economy (BRIDGE)", recently funded by the Research Council of Norway (RCN) under the open scheme "Researcher Project for Scientific Renewal", and it is fully funded for 3 years. The project is conducted in close collaboration with the SFF Integreat, The Norwegian Centre for Knowledge-driven Machine Learning (ML), a centre of excellence funded by RCN and in operation until 2033. The project PI and team are also in close collaboration with the Epigenomics of Breast Cancer research group at Oslo University Hospital (OUS).

The research group on statistical models for high-dimensional and functional data is part of the larger and active research environment on "High-dimensional statistics" at OCBE. OCBE has expanded considerably during the last decade, becoming one of Europe's most active biostatistics groups with currently over 70 researchers. OCBE is internationally recognized, with interests spanning a broad range of research areas - including methods for high-dimensional data and data integration, especially in molecular medicine; mathematical modelling of cancer; probabilistic modelling and Bayesian inference, stochastic algorithms and simulation-based inference; causal inference and time-to-event analysis; and statistical machine learning in general. OCBE has numerous collaborations with leading biomedical research groups in Norway and abroad.

Main tasks for the position

The candidate will pursue research on Bayesian models for unsupervised learning when multiple data sources are available, mostly tailored to the case of molecular data in cancer genomics. Emphasis will be placed on rank-based models and their successful use in the context of molecular data, but many other research topics may also be relevant for the project, such as scalability, post-Bayesian methods, and in general computational and methodological challenges in integrative unsupervised learning. Method development will be motivated by the research questions of the funded project, but the candidate will be also free and encouraged to pursue her own research agenda.

Being part of a larger funded research project (3 positions in total), the candidate will work closely with other project members at OCBE to pursue common research objectives and will participate in regular project meetings. Therefore, ability to work in a multi-disciplinary team is essential. The candidate for this position will specifically contribute to the project by successfully developing methods to integrate large and complex molecular datasets with information at individual level, with specific attention to open and reproducible research, e.g., in the development of codes and algorithms. We will focus on devising computational solutions that can immediately be of use in other applications contexts as well. The candidate's work will entail the development and implementation of statistical methods, as well as data analyses, preparation of manuscripts and communication of research findings. The funded research project team, as well as the broader research group on high-dimensional statistics at OCBE, provide a friendly and stimulating international research environment.

Qualifications requirements

- Applicants must hold a degree corresponding to a Norwegian doctoral degree in biostatistics, statistics, machine learning, mathematics, data science, computer science or another relevant field. Doctoral dissertation must be submitted for evaluation by the closing date. Appointment is dependent on the public defence of the doctoral thesis being approved.
- Strong quantitative and computational skills are required for this position. Applicants should be proficient in R, Python, or equivalent statistical software.
- Some background knowledge in either (computational) Bayesian methods, or statistical learning for molecular data is required. Relevant research experience within unsupervised learning, or rank-based modelling / preference learning will be an advantage.
- Experience with management and analysis of large datasets is an advantage. Experience with biomedical applications is also an advantage.
- Candidates must have excellent interpersonal and communication skills. Experience with interdisciplinary collaborations is an advantage. Personal suitability and an interest in the themes connected to the funded project will be emphasized.
- Working language in the group and at OCBE is English, hence excellent communication skills in written and oral English are a prerequisite. English requirements for applicants from outside of EU/ EEA countries and exemptions from the requirements: https://www.mn.uio.no/english/research/phd/regulations/regulations.html#toc8

All candidates and projects will have to undergo a check versus national export, sanctions and security regulations. Candidates may be excluded based on these checks. Primary checkpoints are the Export Control regulation, the Sanctions regulation, and the national security regulation.

We offer

- Salary in the range 579 700 - 615 700 NOK depending on competencies and experience, in the position of Postdoctoral Fellow, position code 1352. From the salary, 2 percent is deducted in statutory contributions to the State Pension Fund.
- A friendly professional and stimulating international working environment at OCBE, with committed colleagues that care and help each other. Special focus is also given to newly employed personnel relocating from abroad, with a dedicated central office at UiO for international relocation.
- Exciting and meaningful organization with an important societal mission, contributing to knowledge development, education, and enlightenment that promote sustainable, fair, and knowledge-based societal development.
- Opportunity of up to 1.5 hours a week of exercise during working hours, and employee-dedicated facilities and training classes in the campus.
- A workplace with good development and career opportunities. Access to a network of top-level national and international collaborators.
- Good welfare schemes. Read more about the benefits of working in the public sector in Norway at the Employer Portal.
- Full access to public health services through membership of the National Insurance Scheme.
- A reliable and generous pension agreement via the membership in the State Pension Found, which is one of Norway's best pension schemes with beneficial mortgages and good insurance schemes.
- Oslo's family friendly environment with its rich opportunities for culture and outdoor activities.

Inclusive worklife and diversity at UiO

Inclusion and diversity are a strength, and this is officially recognized at the workplace. The University of Oslo has a personnel policy objective of achieving a balanced gender composition. Furthermore, we want employees with diverse professional expertise, life experience and perspectives.

If there are qualified applicants with disabilities, employment gaps or immigrant background, we will invite at least one applicant from each of these categories to an interview.

We hope that you will apply for the position.

More information about gender equality initiatives at UiO can be found here.

Application

Your application should include:

- Cover letter - statement of motivation and research interests
- CV (summarizing education, positions and academic work - scientific publications)
- Copies of the original Bachelor and Master's degree diploma and transcripts of records
- Documentation of English proficiency if applicable
- Complete list of publications and academic work that the applicant wishes to be considered by the evaluation committee
- Contact information for 3 references
  (name, relation to candidate, e-mail and telephone number)
- Description of the candidate's relevant experience and training
- Documentation of the candidate's experience with statistical software and data analysis
- Description of the candidate's experience with biomedical applications

Application with attachments must be submitted via our recruitment system Jobbnorge, click "Apply for the position".

When applying for the position, we ask you to retrieve your education results from Vitnemålsportalen.no. If your education results are not available through Vitnemålsportalen, we ask you to upload copies of your transcripts or grades. Please note that all documentation must be in English or a Scandinavian language.

General information

The best qualified candidates will be invited for interviews.

Applicant lists can be published in accordance with Norwegian Freedom of Information Act § 25. When you apply for a position with us, your name will appear on the public applicant list. It is possible to request to be excluded from this list. You must justify why you want an exemption from publication, and we will then decide whether we can grant your request. If we can't, you will hear from us.

Please refer to Regulations for the Act on universities and colleges chapter 3 (Norwegian), Guidelines concerning appointment to post doctoral and research posts at UiO, and Regulations for the degree of Philosophiae Doctor (PhD) at the University of Oslo.

The University of Oslo has a transfer agreement with all employees that is intended to secure the rights to all research results etc.

University of Oslo

The University of Oslo is Norway's oldest and highest ranked educational and research institution, with 26 500 students and 7 200 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

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Place of service:

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