UNIVERSITETET I OSLO

Jobbnorge ID: 298895
Deadline: 5/17/2026
Website: http://www.uio.no/
Scope: Fulltime
Duration: Temporary

PhD position in Biostatistics at the Oslo Centre for Biostatistics and Epidemiology (OCBE)

About the position

We are inviting applications for a 3-year PhD Fellowship in Biostatistics to be based at the Oslo Centre for Biostatistics and Epidemiology (OCBE), Institute of Basic Medical Sciences, University of Oslo (UiO).

Join a vibrant and supportive research community with leading national and international collaborations. OCBE is one of Europe's most active biostatistics centres with about 75 researchers. The centre is internationally recognized, with interests spanning a broad range of research areas in biostatistics, machine learning and epidemiology and numerous collaborations with leading bio-medical research groups internationally and in Norway. OCBE is a partner in Integreat - the Norwegian Centre for Knowledge-driven Machine Learning and in TRUST - The Norwegian Centre for Trustworthy AI.

The successful applicant will join the research group Statistical learning in molecular medicine and the high-dimensional statistics environment at OCBE, and be part of a multi-disciplinary research consortium called T-PRESS: Trustworthy Personalized Evidence to Support Sustainable Healthcare Decisions.

About the project

The fellowship period is 3 years and devoted to carrying out a project entitled “Reliable Bayesian prediction models with uncertainty quantification for trustworthy personalized treatment decisions in the T-PRESS Evidence Ecosystem Framework”. The primary objective of the T-PRESS consortium is to make it easier for clinicians and patients to make personalized shared decisions regarding treatment options in cancer. The project will use emerging adjuvant immunotherapy treatment options for renal cell carcinoma as a use case.

The successful applicant will develop Bayesian statistical and machine learning methods for treatment response prediction using clinical information, molecular characterizations of the tumor and results of in vitro drug response experiments with so-called patient-derived organoids (PDOs), with the aim to provide personalized risk assessments and predictions for treatment effect, with explicit uncertainty estimates. The following research questions will be addressed in the project:

1. How can existing statistical models of drug response be adapted to accurately model the biological and technical variability of PDOs/ immune cell co-cultures to identify biomarker candidates?

2. How to effectively integrate heterogeneous data from clinic, high-dimensional multi-omics, and PDO functional assays while accounting for dependency structures and biological knowledge?

3. To what extent does the inclusion of multi-omics and patient-derived organoid data provide added predictive value over established clinical risk factors?

4. How can prediction models be validated to ensure they are trustworthy and reliable for integration into living digital decision aids at the point of care?

About the PhD program

The purpose of the fellowship is research training leading to the successful completion of a PhD degree. The fellowship requires admission to the doctoral degree program at the Faculty of Medicine for a PhD in medicine and health sciences and the fellow is expected to complete the project within the set fellowship period. The admission must be approved within three months.

The PhD studies at the University of Oslo are characterized by a strong research profile: the PhD thesis typically includes several papers which are published in leading scientific journals, while the candidates are required to take a small number of advanced courses as part of the training component of the doctoral degree program. For more information, please see our website.

Qualifications requirements

Applicants must hold a master's degree in biostatistics, bioinformatics, statistics, mathematics, computer science, or a related quantitative subject with proven competence in statistics. We seek a highly motivated and skilled person, able to work effectively as part of an interdisciplinary team, who is eager to both gain and share insight while being focused on publishing papers in leading international journals. Knowledge of the Norwegian language is not required. However, a good command of English is mandatory.

The ideal applicant has a strong background in statistical methodology, ideally in Bayesian statistics and statistical learning for high-dimensional data, solid programming skills (including R or Python) and a strong interest in interdisciplinary research with applications in molecular biology and cancer research.

We need different perspectives in our work

UiO is an open and internationally oriented comprehensive university that strives to be an inclusive and diverse workplace and academic environment. You can read more about UiO's work on equality, inclusion, and diversity at uio.no.

We fulfill our mission most effectively when we draw upon our variety of experiences, backgrounds, and perspectives. We are looking for great colleagues—could you be the next one?

We will do our best to accommodate your needs. Relevant adjustments may include modifications to working hours, task adaptations, digital, technical, or physical adjustments, or other practical measures.

If you have an immigrant background, a disability, or CV gaps, we encourage you to indicate this in the job application portal. We always invite at least one qualified candidate from each group for an interview. In this context, disability is defined as an applicant who identifies as having a disability that requires workplace or employment-related accommodations. For more details about the requirements, please refer to the Employer portal (Norwegian).

The selections made in the job application portal are used for anonymized statistics that all state employers include in their annual reports.

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

We hope you will apply for the position with us.

We offer

- An ambitious, interesting and international research environment.
- Exciting and meaningful tasks in an organization with an important societal mission, contributing to knowledge development, education, and enlightenment that promote sustainable, fair, and knowledge-based societal development.
- A pleasant and stimulating work environment
- Good welfare schemes.
- Opportunity of up to 1.5 hours a week of exercise during working hours.
- A workplace with good development and career opportunities.
- Membership in the Statens Pensjonskasse, which is one of Norway's best pension schemes with beneficial mortgages and good insurance schemes.
- Salary in position as Doctoral Research Fellow, position code 1017 in salary range NOK from 550 800 to 595 000, depending on competence and experience. From the salary, 2 percent is deducted in statutory contributions to the State Pension Fund.

Read more about the benefits of working in the public sector at Employer Portal.

Application

Your application should include:

- Cover letter with a statement of motivation and research interests
- CV (summarizing education, positions and academic work)
- Copies of educational certificates and transcripts of records (academic transcripts only)
- If applicable, documentation of English proficiency
- If applicable, a complete list of publications and academic works
- List of reference persons: 2-3 references (name, relation to candidate, e-mail and webpage)

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 cannot, 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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