UNIVERSITETET I OSLO

Jobbnorge ID: 292171
Deadline: 2/12/2026
Website: http://www.uio.no/
Scope: Fulltime
Duration: Fixed Term

4-year PhD position in Biostatistics

Job description

Applications are invited for a 4-year PhD position in Biostatistics, in a project on causal inference for the effects of vaccines and other pharmaceuticals, at the Oslo Centre for Biostatistics and Epidemiology (OCBE), Department of Biostatistics, University of Oslo (UiO).

This is an opportunity to join the Oslo Centre for Biostatistics and Epidemiology (OCBE). OCBE is one of Europe's most active biostatistics groups with currently about 75 researchers. OCBE is internationally recognized, with interests spanning a broad range of areas, including causal inference and time-to-event analysis, clinical trials, epidemiology, high dimensional statistics, infectious disease, machine learning and mathematical modelling. The centre has numerous collaborations with leading biomedical research groups internationally and in Norway.

About the position

The candidate will be part of the UiO:Life Science convergence environment “UiO:Real-World Evidence: Capitalizing on Norwegian Health Data for Rapid Generation of Real-World Evidence on Effectiveness and Safety of Pharmaceuticals”, funded by UiO's interdisciplinary strategic area UiO:Life Science. The position is full-time for a duration of four years and includes 25% work dedicated to career promoting work such as teaching, advising and other activities within UiO:Life Science, the convergence environment and OCBE.

The candidate will work on methodological challenges in defining, identifying and estimating the causal effects of vaccines and other pharmaceuticals from observational data. The project will focus on real-world studies of effectiveness and safety of pharmaceuticals using linked data from population-wide Norwegian health registries, in addition to data simulations (e.g. based in mathematical models for infectious diseases).

A main focus of the project will be on the analysis of complex event history data, with some relevant topics being the analysis of outcomes under competing risks, studies of individual heterogeneity, estimation using machine learning methods and particular challenges present when studying infectious diseases. An overall goal of the project is to improve current practice in the analysis of linked health registries though the development, implementation and application of methods for causal inference in time-to-event outcomes.

The candidate will work closely with the other members of the convergence environment, including partners at the Causal Inference group at OCBE, UiO, the Department of Pharmacy, UiO, Oslo University Hospital, the Norwegian Institute of Public Health and others.

The candidate’s workplace will be at OCBE’s premises in the UiO building Domus Medica, with access to desk space and activities in the nearby Life Sciences Building, where the UiO Real World Evidence convergence environment is located.

The research fellow must take part in the Faculty of Medicine’s approved PhD program at UiO and is expected to complete the project within the set fellowship period. The main purpose of the fellowship is research training leading to the successful completion of a PhD degree. The PhD program is characterized by a strong research profile, and the PhD thesis will include scientific papers in peer-reviewed journals of high quality.

The candidate will be a member of the National Research School in Epidemiology (EPINOR), in which OCBE is a partner institution.

Starting date for the position should be no later than October 1st, 2026. Eligible candidates may apply before completing their master's degree. However, you must have documented proof of a master's degree upon appointment. No one may be appointed to more than one term as a PhD fellow at the University of Oslo.

About The UiO:Real-World Evidence convergence environment

The PhD position is one of four PhD and post doc positions within the UiO:Real-World Evidence convergence environment. Convergence environments are interdisciplinary research groups that will aim to solve grand challenges related to health and environment.

UiO:Real-World Evidence aims to generate high-quality real-world evidence on the effectiveness and safety of pharmaceuticals. The initiative

leverages Norway's national health registries, advanced analytical methods, and clinical trial data to inform regulatory decisions, clinical practice, and public health.

The convergence environment includes four work packages, spanning pharmacology, epidemiology, biostatistics, machine learning and clinical medicine, addressing key scientific and methodological gaps through two integrated stages: (1) development of a robust data analytical platform for health data analyses, and (2) applied real-world studies of monoclonal antibodies and new vaccines across autoimmune, neurological, and infectious diseases, assessing both effectiveness and rare or delayed safety outcomes using advanced causal inference and machine learning approaches.

Read more about UiO:Real-World Evidence **here**

About the UiO:Life Science initiative

UiO:Life Science is the largest priority area at UiO. UiO:Life Science is an interdisciplinary strategic area that will strengthen quality and interaction in research; recruit, educate and develop talents; and promote innovation in the life sciences related to environment and health. Read more **here**.

Qualification requirements

• Master's degree or equivalent in statistics, data science or similar (with documented knowledge in statistics) with an average grade of B or above. Strong background in methodological statistics is an advantage.
• Interest in developing methods relevant for applied problems in medical science, including studies of vaccine effects. Knowledge of, and experience with, causal inference and/or survival analysis is an advantage, but not necessary.
• Good programming skills (in R, Python or similar). Experience with analyzing large datasets or registry data is an advantage, but not necessary.
• Fluent oral and written communication skills in English.

Personal skills

• Ability to work independently and efficiently.
• Good communication and collaborative skills.
• Ability to give and receive constructive scientific criticism.

We offer

• A friendly, ambitious and international working environment.
• Opportunities for national and international collaborations.
• Attractive welfare benefits and a generous pension agreement, in addition to Oslo's family-friendly environment with its rich opportunities for culture and outdoor activities.
• Salary NOK 550 800-600 000 per annum depending on qualifications in a position as PhD Research fellow (position code 1017).

How to apply

The application must include:
• Cover letter with statement of motivation and research interests.
• CV (summarizing education and relevant experience, including details on master's thesis, statistical expertise and programming skills).
• Copies of educational certificates (academic transcripts only).
• List of 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 follow the link: "Apply for this job". 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).

When evaluating the application, emphasis will be given to the applicant's academic and personal prerequisites to carry out the project.

Formal regulations

Please see the guidelines and regulations for appointments to Research Fellowships at the University of Oslo.

According to the Norwegian Freedom and 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 appointment may be shortened/given a more limited scope within the framework of the applicable guidelines on account of any previous employment in academic positions.

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

The 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

Contact person:

Professor Jon Michael Gran ,
Phone: +47 99229156 | E-mail: j.m.gran@medisin.uio.no

Place of service:

Sognsvannsveien 9 0372 Oslo (Oslo Municipality)