



UNIVERSITETET I BERGEN

**University of
Bergen**
Department of
Mathematics

Jobbnorge ID: 227878

Deadline: 8/1/2022

Website: <https://www.uib.no/om/84775/ledige-stillinger-ved-uib>

Scope: Fulltime

Duration: Fixed Term

Postdoctoral Research Fellow position within biostatistics

UiB - Knowledge that shapes society

Through robust and close interaction with the world around us - globally, nationally and locally - we shall be instrumental in building a society based on knowledge, skills and attitudes.

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Video: <https://www.youtube.com/watch?v=JRdMR-PhbBQ&t=4s>

Postdoctoral Research Fellow position within biostatistics

At the [Department of Mathematics](#), there is a vacancy for a postdoctoral research fellow position within the statistics group. The position is for a fixed term of 3 years and is associated with the Trond Mohn-funded CAMRIA centre for antimicrobial resistance.

About the project/work tasks

Antimicrobial resistance (AMR), where disease-causing bacteria evolve resistance to the drugs we use to treat infections, is a huge and growing global health concern. Designing appropriate strategies to combat AMR requires understanding of how this evolution occurs. Recent work at the University of Bergen has developed statistical inference approaches to learn and predict the evolutionary pathways of AMR emergence.

This project will develop, generalise, and apply these approaches to genetic and phenotype data from clinical collaborators and the literature to make actionable predictions about AMR emergence, and its determinant factors, worldwide. A central target is to compare AMR evolution between countries and demographics, to better understand the diversity of behaviours and how best to design specific treatments across the world. The project will develop and use statistical approaches based around Markov and hidden Markov models, in conjunction with tools for parameter inference and model selection, to learn the dynamics by which genetic and phenotypic AMR traits evolve in bacteria.

Qualifications and personal qualities

- Applicants must hold a Norwegian PhD or an equivalent degree within statistics, applied maths, or comparable topic. PhD-students may apply if defence of the PhD-thesis is completed by August 1, 2022. It is a condition of employment that the PhD has been awarded.
- Experience with constructing statistical models, inferring their parameters given data, and producing publishable code is a requirement.
- Experience with Markov models, hidden Markov models, Bayesian model selection approaches (including RJMCMC), and working with genetic data are an advantage.
- Applicants must be able to work independently and in a structured manner, and have the ability to cooperate with others.
- Applicants must have excellent skills in oral and written English.

Personal and relational qualities will be emphasized. Research experience, ambitions and potential will also count when evaluating the candidates.

Special requirements for the position: the project will involve close collaboration with clinicians, including the opportunity to experience the clinical lab environment. The ability to communicate with collaborators from different disciplinary backgrounds is an advantage.

About the position of postdoctoral research fellow

The postdoctoral position is a fixed term position with the primary objective of qualifying the appointee for work in top academic positions. If the appointee lacks teaching experience, or other relevant qualifications, the employment period may be extended by 3 months. Teaching and other duties will in such cases be added to the position. The position may be extended by up to one year (maximum 4 years in total) if the appointee is granted externally financed research stays abroad. Individuals may not be hired for more than one fixed-term period as a postdoctoral research fellow at the same institution.

For postdoctoral research fellow positions associated with externally financed projects, the completion of the project proposal for the qualifying work, as well as a progress plan, will be developed in cooperation with the supervisor and head of department.

It is a requirement that the project is completed in the course of the period of employment.

We can offer

- A good and professionally stimulating working environment
- Salary at pay grade 62 (code 1352 / pay range 24, alternative 6) according to the state salary scale upon appointment. This constitutes a gross annual salary of NOK 563 900. Further promotions are made according to length of service. For particularly highly qualified applicants, a higher salary may be considered.
- Enrolment in the Norwegian Public Service Pension Fund
- Good [welfare benefits](#)

Your application must include

- a brief account of the applicant's research interests and motivation for applying for the position.
- the names and contact information for two referees. One of these should be the main advisor from the PhD programme.
- CV
- Transcripts and diplomas. If you have not yet completed your PhD degree, please submit a statement from your institution confirming the expected date of award of your degree. Your PhD degree must be documented with transcripts and/or diploma, alternatively a confirmation from your institution on completed degree, by August 1, 2022.
- relevant certificates/references
- list of any works of a scientific nature (publication list)
- publications (as applicable)

The application and appendices with certified translations into English or a Scandinavian language must be uploaded at JobbNorge

General information:

For further details about the position, please contact:

Prof. Iain Johnston, Department of Mathematics, iain.johnston@uib.no.

The state labour force shall reflect the diversity of Norwegian society to the greatest extent possible. Age and gender balance among employees is therefore a goal. People with immigrant backgrounds and people with disabilities are encouraged to apply for the position.

We encourage women to apply. If multiple applicants have approximately equivalent qualifications, the rules pertaining to moderate gender quotas shall apply.

Upon the expiry of the closing date for applications, an evaluation committee will be appointed. As an applicant, you have a right of access to the committee's description of your formal and professional qualifications. If you wish to take advantage of this right of access, please contact the executive officer in charge after receiving information about the appointment of the evaluation committee.

The University of Bergen applies the principle of public access to information when recruiting staff for academic positions. Information about applicants may be made public even if the applicant has asked not to be named on the list of persons who have applied. The applicant must be notified if the request to be omitted is not met.

Further information about our employment process can be found [here](#).

About The University of Bergen (UiB)

The University of Bergen is a renowned educational and research institution, organised into seven faculties and approximately 54 institutes and academic centres. Campus is located in the centre of Bergen with university areas at Nygårdshøyden, Haukeland, Marineholmen, Møllendalsveien and Årstad.

There are seven departments and several centres at Faculty of Mathematics and Natural Sciences. [Read more about the faculty](#) and [departments](#).

Additional information

Place of service:

Bergen 5007 Bergen (Bergen Municipality)