



Jobbnorge-ID: 216363
Søknadsfrist: 29.01.2022
Nettside: <http://www.uio.no/>
Omfang: Heltid
Varighet: Prosjekt

Postdoctoral Research Fellow in Microbiology/bioinformatics

Job description

We offer a 35 months position within the research project "MarMib: Impact of marine microplastic associated biofilms on environmental and human health", funded by The Norwegian Research Council.

No one can be appointed for more than one Postdoctoral Research Fellowship at the University of Oslo. Starting date as soon as possible.

The project aims to assess the linkage between biofilms forming on microplastics (MP), spread of antimicrobial resistance genes (AMRGs) in biofilms and marine ecology. The primary objective is to describe how bacteria, and their ecological function, associated with MP may differ based on different amount of MP, antibiotic and metal pollution in the waters and geographic location (from tropics to arctic). Plasmid-borne AMRGs are of particular interest since they have a potential for rapid spread. Understanding how the plasmid resistome varies in Asia, with heavy MP pollution and high antibiotic consumption, from other areas such as Northern Norway, is also a part of the primary objectives.

In addition to this position located at the University of Oslo, Department of Bioscience with Prof. Alexander Eiler, a second post-doc position within the project with a highly similar profile is offered at Genøk - Centre for Biosafety in Tromsø and Leibniz-Institute of Freshwater Ecology and Inland Fisheries in Potsdam, Germany ([see](#)). Candidates may apply for both positions.

In this highly collaborative project, the successful candidate is required to participate in and run milestone activities in the different work packages in MarMib. The post-doctoral fellow will oversee the microbiome sequencing, and perform metagenome (including the meta-plasmidome) and single cell analysis in collaboration with the Norwegian Sequencing Centre's new single cell facility. The candidate is expected to make data and analysis code available to the research consortia with collaborators from Vietnam, South Africa, Costa Rica, Germany and Estonia who will provide samples and data from across the globe. The main envisioned research direction is on evolutionary dynamics of the plasmidome in the plastisphere; here a combination of state of the art metagenomic and single cell genomics is expected to give new insights into the resistome dynamics of marine particles and their associated risks. Thus, we seek a candidate with excellent skills in omics data analysis and strong interest in eco-evolutionary research.

Besides the duties described above, the recruited person will be expected to participate in bioinformatics teaching and graduate student supervision. The new researcher will be participating in MarMib research network and be involved in science communications and developing a communication platform for the project. The person will be encouraged to secure independent funding and will be allowed to dedicate some time to administer self-initiated research activities. It is expected that the required persons will be able to complete the project in the course of the period of employment.

The main purpose of a postdoctoral fellowship is to provide the candidates with enhanced skills to pursue a scientific top position within or beyond academia. To promote a strategic career path, all postdoctoral research fellows are required to submit a [professional development plan](#) no later than one month after commencement of the postdoctoral period.

Qualification requirements

The Faculty of Mathematics and Natural Sciences has a strategic ambition is to be among Europe's leading communities for research, education and innovation. Candidates for these fellowships will be selected in accordance with this, and expected to be in the upper segment of their class with respect to academic credentials.

- Applicants must hold a degree equivalent to a Norwegian doctoral degree in molecular biology, biotechnology, bioinformatics or related areas. Doctoral dissertation must be submitted for evaluation by the closing date. Appointment is dependent on the public defence of the doctoral thesis being approved.
- Must have excellent command of written and oral English.

We seek candidates that are flexible and open minded with interest to learn and set up new techniques, with the following qualifications:

- Must be well experienced with bioinformatics data analysis, including functional and/or object-oriented programming preferable in python.
- Must have a documented research focus on microbial ecology and/or evolution.
- Should preferably be experienced in various molecular techniques (e.g. environmental DNA extraction, sequence library preparation, single cell techniques, microfluidics).
- Should be experienced with statistical analysis.
- Experience from leading/managing projects is an advantage.

When assessing applications, particular emphasis will be placed upon the candidate's expertise in bioinformatics and their research interest. Any areas of biology will be considered, but applicant with a background in the field of microbiology and bioinformatics are specifically encouraged.

Personal suitability for the position will be assessed.

We offer

The University of Oslo provides a highly interactive and stimulating international academic environment for scientists in training. The prospective recruit will join our group which consists of postdoctoral fellows, graduate students and technicians. Lab members will participate in activities within the Section of Aquatic Biology and Toxicology, Department of Biosciences to further their career development.

- salary NOK 534 400 - 615 800 per annum depending on qualifications in position as Postdoctoral Research Fellow (position code 1352)
- a professionally stimulating working environment
- [postdoctoral development programmes](#)
- 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

How to apply

The application must include

- Cover letter (max 2 pages)
- Curriculum vitae (summarizing education, positions, pedagogical experience, administrative experience and other qualifying activity)
- Copy of PhD diploma when available
- A complete list of publications
- 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.

It is expected that the successful candidate will be able to complete the project in the course of the period of employment.

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.

Inclusion and diversity are a strength. The University of Oslo has a personnel policy objective of achieving a balanced gender composition. We also want to have employees with diverse expertise, combinations of subjects, life experience and perspectives. We will make adjustments for employees who require this.

If there are qualified applicants with special needs, gaps in their CVs or immigrant backgrounds, we will invite at least one applicant in each of these groups to an interview.

Contact information

Project Coordinator, Odd-Gunnar Wikmark (odd-gunnar.wikmark@uit.no), Prof. Alexander Eiler (alexander.eiler@ibv.uio.no) or Prof. Hans-Peter Grossart (hgrossart@igb-berlin.de).

For questions regarding the recruitment system, please contact HR adviser Nina Holtan (nina.holtan@mn.uio.no).

About the University of Oslo

The University of Oslo is Norway's oldest and highest rated institution of research and education with 28 000 students and 7000 employees. Its broad range of academic disciplines and internationally esteemed research communities make UiO an important contributor to society.

Department of Biosciences (IBV) is one of nine departments at the Faculty of Mathematics and Natural Sciences. Research in the department is organised in five sections covering topics within biochemistry, molecular biology, physiology, cell biology, genetics, aquatic biology, toxicology, ecology, and evolutionary biology. Education across these topics is offered for around 380 bachelor, 170 master, and 75 PhD students. With 52 permanent professors/associate professors, post-docs, researchers, technical, and administrative personnel, the Department has a total staff of 340 from more than 30 different countries. The Department aims to maintain high international standards within both research and teaching. The new bachelor program in bioscience is the first of its kind to include programming and computational modelling as core elements.

Tilleggsinformasjon

Arbeidssted:

Blindern 0371 Oslo (Oslo Kommune)