Postdoctoral Research Fellowship in Comparative genomics

Job description

Position as a post doc fellow in Comparative genomics is available at Department of Biosciences, Faculty of Mathematics and Natural Sciences, University of Oslo.

The position will be affiliated with the Section for Genetics and Evolutionary Biology (EVOGENE) with collaborators at the Centre for Ecological and Evolutionary Synthesis (CEES) at the Department of Biosciences, University of Oslo.

The post doc fellow will be working on the project "Genomics of speciation: dissecting mechanisms of reproductive barriers in fungi" lead by Dr. Inger Skrede and funded by the Research Council of Norway. The candidate will work in close collaboration with the PI and a PhD research fellow. In addition, the candidate will be part of a research team from the EVOGENE and CEES, including Dr. Mark Ravinet, Prof. Håvard Kauserud, Prof. Glenn-Peter Sætre, Dr. Sundy Maurice and Dr. Jørn-Henrik Sønstebø. This research team provides an excellent scientific framework, with specialists in mycology, speciation, evolutionary biology, and population genomics.

Speciation, the process that generates the diversity of species on earth, has mainly been studied in animal and plant systems. Despite their large species diversity, far less is known about how species evolve in microorganisms such as fungi. Owing to their small genome sizes, short generation time and widespread occurrence, fungi are ideal organisms for studying genomic mechanisms underlying reproductive barriers. In this project, we use a widespread species complex in the basidiomycete genus Trichaptum as a model to understand speciation mechanisms in fungi. We investigate the genomic differences among cryptic species and populations with different levels of reproductive barriers, divergence and differentiation; and aim to reveal mechanisms underlying the evolution of reproductive barriers.

The post doc fellow will mainly analyse genomic data, and compare genome content, genome size, genome organization, amount of repetitive DNA and variation in selection pressure among the inter-sterility groups in the species complex. We aim to investigate the role of chromosomal rearrangements as drivers of speciation in fungi, and whether the extent of structural variation among genomes are associated with the number and activity of transposable elements.

The post doctoral fellow is expected to spend 3 months in the research group of Professor Eva Stukenbrock (Max Plank Institute, Plön, Germany) to learn and apply methods in comparative genomics.

More about the position

The fellowship will be for a period of 2 years, with no compulsory work.

The main purpose of the fellowship is to qualify researchers for work in higher academic positions within their disciplines.

Qualification requirements

The Faculty of Mathematics and Natural Sciences has a strategic ambition of being a leading research faculty. 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 a field relevant for the project, including evolutionary biology and genomics. Doctoral dissertation must be submitted for evaluation by the closing date. Appointment is dependent on the public defence of the doctoral thesis being approved.
- Knowledge and experience in bioinformatic analyses of genome data is required
- Fluent oral and written communication skills in English

Preferred candidates should have

- A strong interest in evolutionary biology, comparative genomics, speciation, and population genomics
- Knowledge in fungal biology, fungal genomics, and bioinformatics
- Experience in bioinformatic and comparative genomic analyses of high-throughput sequencing data
- Demonstrated ability in scientific writing and publications in relevant renown scientific journals

Personal skills

We seek a highly motivated, enthusiastic and hard-working candidate. Applicant must show good interpersonal skills and be willing to work in close collaboration with the project PI and other members of the project team, as well as have the ability to work independently.

We offer

- Salary NOK 515 200 - 597 400 per annum depending on qualifications in position as Postdoctoral Research Fellow (position code 1352)

- A professionally stimulating working environment
- 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

- Application letter
- CV (summarizing education, positions, pedagogical experience, administrative experience and other qualifying activity)
- A brief account (one page, as a separate file) of the applicant's interest and motivation for applying for the position including a brief description on how the applicant envisions his/her experience could be used to address the project goal
- Copies of educational certificates, academic transcript of records and letters of recommendation
- A complete list of publications and unpublished work
- Names and contact details of 2-3 references (name, relation to candidate, e-mail and telephone 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 required for this project, 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 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 University of Oslo has an agreement for all employees, aiming to secure rights to research results etc.

The University of Oslo aims to achieve a balanced gender composition in the workforce and to recruit people with ethnic minority backgrounds.

Contact information

For further information please contact: Inger Skrede, phone: +47 228 54588, e-mail: inger.skrede@ibv.uio.no

For questions regarding the recruitment system, please contact: HR-officer Nina Holtan, e-mail: 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.

Jobbnorge-ID: 170181, Søknadsfrist: Avsluttet