



PhD (and two post-docs), University of Oslo: mating systems and speciation genomics

Job description

The Natural History Museum at the University of Oslo announces three fellowships connected to a project funded under the 'Toppforsk Program', jointly financed by the Research Council of Norway and the Natural History Museum: 'SpeciationClock: How fast does the 'speciation clock' tick in selfing versus outcrossing lineages?' The project addresses how and how long it takes for new, reproductively isolated plant species to arise and what factors influence the rate of speciation.

More about the project and positions

The project is organized in four work packages (WPs) which will 1) establish a theoretical framework to understand and predict the effects of mating system on the speciation process, 2) measure the rate of accumulation of intraspecific postzygotic reproductive isolation (RI) in a large set of species representing the selfing-outcrossing spectrum and divergence times spanning the last ~1 million years, 3) test if the rate at which RI loci accumulate is higher in selfers, and 4) quantify the role that selection has played on RI loci using population genomic analyses in one selfing and one outcrossing species. We have selected the tropical African 'sky archipelago' as a study system because the populations in these isolated high mountains represent a wide range of divergence times and levels of intermountain gene flow. Field experiments and collection of material for the SpeciationClock project will be conducted during two long field seasons, starting in the Ethiopian mountains in October 2018. The project also includes extensive cultivation and crossing experiments, genomic analyses, and niche modeling through time.

One of the postdoctoral fellowships (Postdoc no. 1) announced here is a two-year fellowship connected to WP1. The selected candidate for this position will be based at the NHM in Oslo, but will spend considerable parts of the time in France working with the WP1 Leader, Dr. Sylvain Glémin at the ECOBIO lab at the University of Rennes.

The other postdoctoral fellowship (Postdoc no. 2) is a three-year fellowship primarily connected to WP2, but will also contribute to WP3 and WP4.

The PhD fellowship is a four-year fellowship, of which 75% of the time will be devoted to the PhD programme, mainly connected to WP3 and WP4,

and 25% of the time will be devoted to duty work for the museum (teaching, public outreach, collection work).

Principal investigator (PI): Christian Brochmann, Natural History Museum. Co-PI: Anne K. Brysting, Centre for Ecological and Evolutionary Synthesis (CEES), Department of Biosciences.

Who are we looking for?

We seek highly motivated, enthusiastic persons with good social skills and with the ambition to gain new insights and to publish papers in leading international journals.

You will be part of a team with two researchers, three postdocs, one PhD fellow, and several international collaborators, and be offered a unique opportunity for cutting-edge research in a multidisciplinary environment with a focus on academic and personal development. You will carry out research both independently and as part of the team.

To apply for the postdoctoral positions, you must have a completed PhD degree (or education equivalent to a Norwegian doctoral degree) within relevant fields of botany/evolutionary biology, or biomathematics (Postdoc no. 1). Applicants for the Postdoc no. 1 position need to have a solid background in evolutionary biology and population genetics with mathematical or programming skills. Experience in population genetics modeling will be favored. Good knowledge of mating system evolution and/or speciation processes will also be a plus. Applicants for the Postdoc no. 2 position need to have extensive experience with and strong motivation to carry out long and demanding field work under primitive conditions, and applicants with experience with niche modeling through time, plant cultures, and crossing experiments will be preferred. Applicants for the PhD fellowship must have a Master degree or equivalent in evolutionary biology, preferably with experience with high-throughput sequencing approaches and relevant bioinformatics analyses.

We offer

Postdoctoral fellowships: A salary of NOK 515 200 – 597 400 per year, depending on qualifications and seniority (position code 1352). PhD fellowship: A salary of NOK 449 400 – 505 800 per year, depending on qualifications and seniority (position code 1017). A professionally stimulating working environment. Pension agreement with Norwegian Public Service Pension Fund (SPK). Attractive welfare benefits.

How to apply

Please provide an application letter specifying which fellowship you apply for, and including a statement of interest, a brief summary of your scientific work and interests, and a personal assessment focusing on how you fit the description of the person that we seek. In particular, please provide a numbered list to explain whether and how your qualifications meet the following criteria:

1. A PhD or equivalent within relevant fields of botany/evolutionary biology (for the postdoctoral fellowships) or biomathematics (for Postdoc no. 1) or a Master degree or equivalent in evolutionary biology (for the PhD fellowship).
2. Good academic qualifications (grades and relevant research experience).
3. Background and strong interest in topics relevant for this project, focusing on the particular requirements listed above for the specific position you apply for.
4. Strong personal suitability and motivation for the position.
5. Good social and collaboration skills as well as good ability to work independently.

Your application should also include:

CV (summarizing education, positions and academic work, scientific publications and other qualifying activities). Copies of educational certificates and transcript of records. List of publications and academic work that the applicant wishes to be considered by the evaluation committee. Names and contact details of 2-3 references (name, relation to candidate, e-mail address, and telephone number). 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.

A good command of English is required.

The application with attachments must be delivered in our electronic recruiting system, please follow the link "apply for this job" at the following website:

<https://www.jobbnorge.no/en/available-jobs/job/157674/two-postdoctoral-fellowships-and-one-phd-fellowship>

Formal regulations

Please see the guidelines and regulations for appointments to Postdoctoral fellowships at the University of Oslo.

No one can be appointed as Postdoctoral Fellow for more than one specified period at the same institution.

Please see the guidelines and regulations for appointments to PhD fellowships at the University of Oslo.

The PhD fellowship requires admission to PhD programme at the Faculty of Mathematics and Natural Sciences. The application to the PhD programme must be submitted no later than two months after taking up the position.

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.

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

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Professor Anne Krag Brysting, phone number: +47 22857577, e-mail: a.k.brysting@ibv.uio.no.

For questions regarding the recruitment system Jobbnorge or the application procedure, please contact HR Advisor Thomas Brånå, e-mail thomas.brana@nhm.uio.no.