Associate Professor in Environmental DNA

Job description

The Natural History Museum is recruiting an Associate Professor in environmental DNA. The appointment is a fulltime, permanent position with a starting date no later than 1 January 2021.

The Natural History Museum (NHM) at the University of Oslo holds Norway’s most extensive collections of animals, plants, and fungi. These natural history collections are invaluable repositories because they enable the scientific community to answer key questions about geographical and temporal variation in biodiversity. As a museum, we seek to be at the forefront of developments in biology and adapt our infrastructure to the needs of science and society today. To develop our position at the cutting edge of modern biodiversity research, we are recruiting an associate professor in eDNA. This person enters a vibrant research environment in which five out of eight research groups at the museum apply and develop metabarcoding and metagenomics approaches for various research questions. These include molecular biodiversity assessments, applied work on the authentication of food and medicine, as well as ecological or evolutionary questions using aquatic environmental DNA, trophic material, bulk invertebrate and plant samples, soil DNA, and sedimentary ancient DNA. Traditionally, the museum’s strategy emphasizes the use and collection of individual specimens for morphological or molecular research. The collection infrastructure requirements of environmental samples calls for a reassessment of our workflows, including physical sample storage, DNA bank storage, in-silico repositories, and reproducibility of analysis pipelines.

The appointed associate professor will lead the development of the museum’s capacity in the field of environmental DNA. This capacity includes the initiation of new research programs, teaching and supervising students, and curating and developing scientific collections of eDNA samples based on the applicant's taxonomic expertise.

We seek an active researcher with a relevant and strong publication record, and with a clear vision for developing an independent museum-based research program in eDNA. The successful candidate should be on an upward trajectory and is expected to have strong potential to execute competitive research projects at a high international level. He or she should have the ability to create an attractive research environment and perform research that inspires synergistic interactions with current research at the museum. The ideal candidate would focus on using environmental DNA to study fundamental questions in biology, rather than applying or developing methods for monitoring purposes.

An attractive start-up package is available. However, the successful applicant will be expected to obtain extramural research funding, and a proven record of acquiring such funding is essential.

NHM has a collaborative agreement with the Department of Biological Sciences about teaching and supervision of students at the bachelor and master’s level, and with the Faculty of Mathematics and Natural Sciences for supervision of doctoral candidates. NHM also hosts an international research school in biosystematics (ForBio). The successful candidate is expected to participate in teaching at all levels and be a capable and enthusiastic supervisor of master’s and PhD students. Relevant background in working with museum collections will be an advantage in building up a physical infrastructure for eDNA samples. Up to 50% of the working time will be devoted to curating collections (main activity), teaching and supervision of students, outreach and administrative tasks at NHM. Lectures and tuition are given in Norwegian and English. Foreign language speakers are expected to be able to teach in a Scandinavian language within two years after being hired.

Qualification requirements

The successful applicant must have

- A PhD or an equivalent doctoral degree in biology
- A postdoctoral research profile with relevant experience in environmental DNA, e.g., biodiversity assessments using molecular approaches
- Experience with relevant sample types, e.g., bulk samples, aquatic eDNA, faecal DNA, soil DNA, sedimentary ancient DNA and the analytical challenges associated with these samples
- Experience with bioinformatic analyses of high-throughput sequence data, statistical analyses and visualization of results of metabarcoding/metagenomics data
- Actively publishing scientific papers of high quality
- Excellent English language skills (written and spoken)

The successful applicant should have

- Coherent taxonomic expertise relevant to their eDNA research
- Proven ability to attract external research funding
- Teaching and supervision skills of master’s and PhD students
- Leader or team experience from research groups or projects
- Team-working and networking skills
- Command of a Scandinavian language

We offer
Salary NOK 640 200 - 765 100 per annum depending on qualifications (position code 1011)
A stimulating and friendly working environment
Membership in the Norwegian Public Service Pension Fund
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
The opportunity to apply for promotion to full professor at a later stage

How to apply

The application must include:

- A cover letter which includes a statement of motivation and a summary of scientific background and research interests
- CV (summarizing education, positions, research profile and merits, pedagogical qualifications, curatorial experience, administrative experience and other qualifying activity)
- A list of all scientific publications
- A summary of up to 7 selected scientific key publications the applicant wishes to include in the evaluation describing their significance and impact. PDFs of these publications must be provided
- A research plan, which describes ideas for future research, scientific collaborations, and extramural funding proposals, and how the applicant's research will strengthen or create synergistic effects with current research at the museum (up to 5 pages)
- A teaching portfolio: a document describing the applicant’s pedagogical competence including formal and practical qualifications and teaching philosophy
- List of reference persons: 3 references (name, relation to candidate, e-mail and phone number). No reference letters should be submitted

The application with attachments must be delivered in our electronic recruiting system. Please note that all documents should be in English. Interviews will be part of the appointment process, along with a trial lecture.

Formal regulations

The basis for assessment will be the scholarly production of the applicant, other qualifications, pedagogical or educational, the applicant’s qualifications within leadership and administration as well as the general personal suitability. In ranking the competent applicants, the full range of qualifications will be considered and explicitly assessed. Cf. the Rules for appointments to Associate Professorships.

The successful candidate who at the time of appointment cannot document basic teaching qualifications will be required to obtain such qualifications within a two-year period. Please see rules for the assessment and weighting of pedagogical competence.

The successful candidate must demonstrate mastery of both English and one of the Scandinavian languages as working languages. If an appointee is not fluent in a Scandinavian language, the appointee will be expected within a two-year period to learn sufficient Norwegian to be able to participate actively in all functions the position may involve.

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.

The University of Oslo has a goal of recruiting more women in academic positions. Women are encouraged to apply.

Contact information

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For questions about the recruitment system, please contact HR-Officer Thomas Brånå, thomas.brana@nhm.uio.no

About the University of Oslo

The University of Oslo is Norway’s oldest and highest ranked educational and research institution, with 28 000 students and 7000 employees. With its broad range of academic disciplines and internationally recognised research communities, UiO is an important contributor to society.

The Natural History Museum at the University of Oslo is Norway’s most comprehensive natural history collection. For almost 200 years, specimens of animals, fungi, plants, rocks, minerals and fossils have been collected, studied and preserved here. The museum is located at Økern and in the beautiful Botanical Garden, which is not only popular for recreation, but is a scientific collection in itself.

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