

Til: Styret for Naturhistorisk museum

Sakstype:	Vedtak
Saksnr.:	04/13
Journalnr.:	13/1029
Møtedato:	12. desember 2013
Saksansvarlige:	Mehlum, Bjørlykke

Sakstittel: Utlysning av stilling som professor/1. amanuensis innen museums-genomikk

De viktigste problemstillingene

Det vises til V 5/2013 hvor det ble gjort følgende vedtak: "Styret gir sin tilslutning til at NHM prioriterer å videreutvikle museums-genomikk som satsingsområde. Som en del av prosessen utarbeides det et forslag til utlysningstekst for et professorat (evt. førsteamanuensis) innen feltet. Forslaget legges fram til behandling i neste styremøte."

Forslag til utlysningstekst med bakgrunn for og beskrivelse av stillingen følger som vedlegg.

Forslag til vedtak

Styret slutter seg til forslaget til utlysningstekst og vedtar at stillingen lyses ut.

Vedlegg: Utkast til utlysningstekst for stilling som professor/1. amanuensis innen museums-genomikk



Professor/Associate Professor in Evolutionary Genomics

The Natural History Museum (NHM) of the University of Oslo holds extensive collections of animals, plants and fungi. Natural history collections are important repositories for studying various aspects of geographical and temporal variation in biodiversity. With the development of new techniques for sequencing ancient or degraded DNA from historical museum specimens, natural history museum collections have become a unique resource for molecular studies and will significantly expand the potential use of museum collections through a museum genomics approach to biodiversity research.

The museum's strategy emphasizes on the importance of using the collections as a gene bank and to extract the genetic information of specimens for use in science. The museum is also building up new collections of DNA/tissue samples from its on-going research projects and has started a DNA-barcoding programme. The museum has established an ancient DNA laboratory for extraction of highly degraded DNA from museum samples and from environmental samples (for DNA – metabarcoding studies). The museum also has a regular DNA laboratory and has access to the central NGS sequencing facilities at the University. In the near future a new aDNA laboratory will be established at the Department of Biosciences in collaboration with the NHM and the Museum of Cultural History of the University of Oslo.

The museum will strengthen its focus on collection-based research and build a strong team of scientists that will make significant contributions to the development of the discipline of evolutionary genomics by utilizing degraded DNA in museum and environmental samples to study biodiversity.

Important research topics include:

- Integration of molecular and classical taxonomy
- Genomic characterization of type specimens
- Quantitative, comparative analysis of evolution
- Phylogenomics and biogeography
- Speciation
- Adaptation and hybridization
- Species distributions and genetic diversity
- Changes in biodiversity over time
- Changes in biodiversity in response to environmental change

Molecular studies have been the basis for most of the biological research at the museum in recent years. The museum established in 2002 National Centre for Biosystematics (NCB) to coordinate and strengthen its basic research and research training in biological systematics. NCB integrates research across the disciplines of zoology, botany and mycology, as well as between field- and collection-based taxonomy, molecular systematics, evolutionary biology, and biogeography. Scientists and students from the

museum have made significant contributions to these fields of research. NCB functions as an umbrella for several smaller research groups. It is expected that key researchers at NHM will associate with the new museum genomics initiative.

Job description

In order to strengthen its focus on collection-based research, NHM is now offering a new professorship position in evolutionary genomics. The appointed professor will lead the development of the museum's capacity in the field of museum genomics. The museum is prepared to allocate internal resources to museum genomics, including PhD and postdoc positions and technical and bioinformatics support. How the museum genomics research should be organised at NHM will be decided after the successful candidate has been appointed.

We seek an active researcher in evolutionary genomics with a strong publication record. The successful candidate should be on an upward trajectory and is expected to have strong potential to execute research projects at a high international level and to perform research in areas that will have synergistic effects with current research in the museum. He/she should have the ability to create an attractive research environment. The ideal candidate's research would address fundamental questions in evolutionary genomics and biosystematics. The candidate should have a solid background in high-throughput DNA sequencing applied to degraded DNA and in bioinformatics. The successful candidate will be expected to attract extramural research funding, and a proven record of accessing such funding is essential. The candidate is expected to participate in teaching evolutionary genomics, including courses under the bachelor and master programs, and be a capable and enthusiastic supervisor of the research of master and PhD students. Relevant background for taking the scientific responsibility for parts of the museum's collections is an advantage, but not a requirement.

Qualifications

To qualify for appointment as Professor/ Associate Professor, the applicant must have documented scientific work equivalent to a doctorate, and several years of post-doctoral experience.

Candidates for the position should supply a research plan, which demonstrates how the applicant's research will strengthen or create synergy effects on current research at the museum. Applicants, who at the time of appointment cannot document formal teaching competence, must acquire such competence in the course of two years.

The teaching languages at the University of Oslo are Norwegian and English. The person appointed to the position is expected to be able to teach in Norwegian or English or both.

Evaluation

As a general rule an interview will be used in the appointment process, and it may be appropriate to require trial lectures. In the assessment of applicants,

emphasis will be placed on the research potential and then teaching and other academic qualifications, as well as those for management and administration. Personal qualities, such as international networking skills, ability to collaborate, communication skills, team-working skills and scientific leadership will be emphasized. The quality and extent of the applicants' scientific production during the last five years will be given particular weight, as well as experience in modern research methods and techniques.