PhD Candidate in the taphonomy of ancient sedaDNA related to several projects currently running in the Centre for Ecosystem Genomics, including “TerrACE, IceAGenT and ECOGEN”

Apply for this job

The position

The University Museum at The Arctic University Museum of Norway and Academy of Fine Arts seeks a candidate who wishes to obtain the degree of Philosophiae Doctor (PhD). The position is related to several projects currently running in the Centre for Ecosystem Genomics including “TerrACE, IceAGenT and ECOGEN”. The position is for four years, and vacant from 1st October 2019.

The project

At present the interpretation of sedaDNA is severely hampered by our lack of knowledge of the transport of DNA from organism to sediment – its taphonomy. Currently there are two models the independent transport model known to be the case with water transport of pollen/spores and the adsorbed model in which DNA fragments are adsorbed onto the charged surfaces of clays and organic matter. Preliminary studies suggest statistically different DNA yields from different sediment fractions and that these differences may be environment specific (e.g. soil, lake cave). The techniques to be used include sediment tagging, trapping, analysis and fractionation with investigation of DNA concentrations and damage patterns. It is also planned that a paired lake-river-catchment study area will be used and developed for the future testing of new techniques in sedaDNA research. The research will be important for all the current projects in the Centre and hence will be integrated fully into the core area of Centre activities. The successful candidate will do metabarcoding, shotgun sequencing and lithological analyses on soils and lake-sediment cores from both the catchment study and elsewhere in Europe to obtain information on sedaDNA preservation and past ecological communities.

The PhD position is for a fixed term, with the objective of completion of training and research to the level of a doctoral degree. Admission to a PhD programme is a prerequisite for employment, and the programme period starts on commencement of the position. The PhD Candidate will participate in the faculty’s organized research training or alternative training organized by (for example) the research school in biosystematics (http://www.forbio.uio.no/). The PhD project will be completed during the period of employment. Information about the application process for admission to the PhD programme, application form and regulations for the degree of Philosophiae Doctor (PhD) are available at this site.
The position’s affiliation

The position is attached to the University Museum. The University Museum is responsible for research, dissemination and collection of both natural history and cultural-historical material from Northern Norway. The position is attached to the scientific community within Natural Sciences, which has the responsibility for developing and maintaining scientific collections of objects as well as public outreach, including the Tromsø Arctic Alpine Botanical Garden. Natural Sciences has a permanent staff of 16, of which nine are in academic positions. At the moment, four PhD students, two postdocs and two researcher are connected to the Natural Sciences, and we have laboratories for modern and ancient DNA analyses. The position is within the research group for Ecosystem Genomics, which currently host five large projects: Norwegian Barcode of Life, ECOGEN, ERC – TerrACE.NO, Biodiversa FATE, and ERC - IceAGenT. For more information about Natural Sciences, visit this site.

Contacts

Further information about the position is available by contacting the project leader, Professor Tony Brown, +47 77 64 50 18, antony.g.brown@uit.no

Qualifications

The successful applicant must fulfil the requirements for admission to the faculty’s PhD programme as described by Regulations for the degree of Philosophiae Doctor (PhD) at UiT, The Arctic University of Norway (see below). In addition, he/she must be able to document proficiency in English equivalent to the Norwegian Higher Education Entrance Qualification, as described in the PhD regulations at UiT.

This position requires a Master’s degree in an appropriate subject such as biology, geology, hydrology or science archaeology. Experience in aquatic ecology or hydroecology is particularly relevant, and experience in phylogeography, palaeoecology, molecular biology, fluvial geomorphology and bioinformatics or biostatistics are advantages. English language skills are required. Scandinavian language skills are advantages. Personal fit to the team and teamwork skills are important. Average physical condition is sufficient for the fieldwork. A driver’s license valid in Norway is also desirable.

The applicant must present a one-page outline with suggestions for the PhD project, including brief descriptions of aims and methods.

During the assessment emphasis will be put on your potential for research, motivation and personal suitability for the position Emphasis shall also be attached to personal suitability

The position requires admission to the PhD programme. Information about requirements and the PhD programme is available here: https://uit.no/bfe/phd

Qualification with a Master’s degree is required before commencement in the position. If you are near completion of your Master’s degree, you may still apply and submit a draft version of the thesis. You must document completion of your degree before commencement in the position.

Language skills - adapt according to requirement: Documented fluency in English is required, and working knowledge of Norwegian or a Scandinavian language is desirable.

Application

Your application must include:

- Cover letter explaining your motivation and research interests
- CV - summarizing education, positions and academic work
- Diplomas and transcripts from completed degrees
- Documentation on English proficiency
- 2-3 references with contact details
- Master thesis, and any other academic works
- Project description (1-2 pages)

Documentation has to be in English or a Scandinavian language. We only accept applications through Jobbnorge.

We offer

- Involvement in an interesting research project
- A good academic environment with dedicated colleagues
- A large degree of independence in work
- Flexible working hours and a state collective pay agreement
- Pension scheme through the state pension fund

The appointment is for a period of 4 years, and the nominal length of the PhD program is three years. The fourth year is distributed as 25% of each year, and will consist of (teaching or other duties for the department)/three years.

Remuneration of PhD positions are in state salary code 1017. A compulsory contribution of 2% to the Norwegian Public Service Pension Fund will be deducted.

More practical information for working and living in Norway can be found here: Welcome to UiT!

General information

We make the appointment in accordance with the regulations in force concerning State Employees and Civil Servants, and guidelines at UiT. At our website, you will find more information for applicants.

UiT The Arctic University of Norway has HR policy objectives that emphasize diversity, and encourages all qualified applicants to apply regardless of their age, gender, functional ability and national or ethnic background. The university will emphasize making the necessary adaptations to the working conditions for employees with reduced functional ability.

We process personal data given in an application or CV in accordance with the Personal Data Act. You may request to not be registered on the public list of applicants, but the University may decide that your name will be made public. You will receive advance notification in the event of such publication.

UiT, The Arctic University of Norway

UiT is a multi-campus research university in Norway and the northernmost university of the world. Our central location in the High North, our broad and diverse research and study portfolio, and our interdisciplinary qualities make us uniquely suited to meet the challenges of the future. At UiT you can explore global issues from a close-up perspective.

Credibility, academic freedom, closeness, creativity and commitment shall be hallmarks of the relationship between our employees, between our employees and our students and between UiT and our partners.
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