



GenØk – Centre for Biosafety was founded in 1998 and is a research institution located in the research environment at UiT The Arctic University of Norway and SIVA innovasjonssenter Tromsø. GenØk's vision is safe use of biotechnology. The institution primarily conducts research on environmental, health and social consequences of genetic engineering and genetic modification.

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Researcher position in Molecular Biology, Gene-editing, Molecular Genetics and Bioinformatics (27 months)

GenØk has a vacant research position in molecular biology, starting from 1. January 2021. This is a 27 months project position within the research project 'SeqApp: Sequencing strategies and their applicability for the molecular characterization of current and next generation GMOs'. The project is funded by The German Federal Agency for Nature Conservation – BfN (<https://www.bfn.de/en/about-us.html>).

SeqApp advances knowledge on molecular characterization of gene-edited organisms in the context of European regulations. It aims to have this knowledge help decision-makers in developing and updating biotechnology regulations to meet societal challenges of promoting environmental conservation and effective food-choices. Genetic engineering techniques have evolved in the past decades to the development of CRISPR technologies capable of targeting genetic sequences in the genome of virtually any species. However, it is anticipated that the current European Union regulatory requirements might not be adequate for the identification of unintended changes in next generation GMOs due to the complexity of genomic and epigenomic modifications. SeqApp investigates how different genetically modified GM techniques outcomes impact the identification of genetic modifications, what parameters are necessary to generate effective, reliable and operational GMO molecular characterization, and how new and alternative methods can improve current risk assessment requirements in EU. For proof of concept, we will use a model system based on CRISPR/Cas9 modified soybean lines for testing the proposed molecular profiling analysis. In addition, the project aims at developing a flexible multicriteria decision analysis model (MCDA matrix) suitable for the evaluation and comparison of a variety of analytical methods. SeqApp will build on an existing BfN-funded project called 'GMOmics: omics techniques as useful tools for addressing emerging gaps in GMO risk assessment' and find synergies where appropriate with the Research Council of Norway newly funded project 'FOODPRINT: traceability and labeling of gene-edited products in the context of the food chain', as well as other projects at GenØk. Besides technical experts, also field-related, application-oriented scientists will actively participate in determining the user requirements for the methods to be applied, in the light of current and future European regulations.

The successful candidate is expected to contribute to a world-class, vibrant research project that combines cutting-edge approaches in plant molecular biology, genetic engineering techniques and genomics using quantitative approaches to generate new knowledge on gene-editing off-target effects in plant materials. Any areas of molecular biology will be considered, but applications in the field of plant genomics, bioinformatics and quantitative genetics are specifically encouraged. We are interested in candidates who will take advantage of the existing expertise in gene-editing and plant biology at GenØk, and its larger research environment and network. The successful applicant is also expected to promote biosafety related research and capacity-building activities and engage with strategic initiatives of GenØk.



Qualifications

Applicants should have a PhD in molecular biology, biotechnology or related areas. Applicants must be able to document good experience with various molecular biological methods (e.g. DNA extraction, PCR, cloning and transfection, DNA sequencing, sequencing analysis, etc). Experience from work with gene editing techniques, genomics, as well as bioinformatics is an advantage. The new researcher will be participating in the newly funded research project SeqApp and close collaborating to its research partners and advisors. GenØk's and partners laboratories offer access to state-of-the-art equipment (e.g. real-time PCRs, NGS Illumina, Lumus mass spectrometer, fluorescent microscopes, Minion Sequencer, Digital PCR, etc) and outstanding scientific opportunities to participate in interdisciplinary research programmes. Integration into existing networks will facilitate interactions with the international research community as well. The person hired must be self-driven and able to work both independently and in teams. The candidate must have good proficiency in English, both written and orally.

We offer

GenØk provides a highly interactive and stimulating academic environment for scientists in training. The prospective recruit will join our group which consists of postdoctoral fellows, graduate students and technicians. Lab members will participate in activities within the Gene-editing Department to further their career development. These include bi-weekly science fora, work-in-progress seminars, invited talks, workshops as well as social and professional events. We are located in Tromsø, a touristic and university city located in Northern-Norway which is known as the Paris of north, the city of the northern lights. We offer competitive salary based on the level of education and experience in accordance with the wages as in the University sector in Norway.

GenØk is an equal opportunity employer, which is committed to diversity and inclusion in all aspects of recruiting and employment. All qualified individuals are encouraged to apply and will receive consideration without regard to race, color, gender identity, sexual orientation, national origin, age, religion, or any other factor which cannot lawfully be used as a basis for an employment decision.

Contact

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Mandatory Documents

Covering letter (max 2 pages)

Curriculum vitae

Publication list

Other optional documents (one single PDF only)

Application deadline 15th December. Applications with mandatory documents should be sent electronically via jobb norge.no (job ID: 196940).