UiT The Arctic University of Norway
Department of Arctic and Marine Biology

Faculty of Biosciences, Fisheries and Economics

PhD Fellow in Molecular Plant Physiology and Genetics

The position

The Department of Arctic and Marine Biology (AMB), Faculty for Biosciences, Fisheries and Economics (BFE), is seeking a PhD fellow for molecular, genetic or physiological studies of plant-plant interactions. The position will be affiliated to the «Microbes and Plants» Research Group.

The PhD candidate will be a member of the National Graduate School «Photosyntech», which comprises a network of Norwegian universities and companies. The Graduate school has a broad scope of research within the plant and algal sciences, with an increased focus on three areas: bioproduction, biotechnology and sustainable resources in changing climates/environments. Employability and work life relevance is an explicit goal of «Photosyntech» and a mixture of special courses, workshops, conferences, internships and networking activities that strengthen the academic skills, business/innovation skills and communication/outreach skills of the members are designed to meet that goal.

The position is for a period of four years. The nominal length of the PhD programme is three years. The fourth year is distributed as 25 % each year and will consist of teaching and other duties. The objective of the position is to complete research training to the level of a doctoral degree. Admission to the PhD programme is a prerequisite for employment, and the programme period starts on commencement of the position.

The workplace is at UiT in Tromsø. You must be able to start in the position within a reasonable time after receiving the offer.

The Department of Arctic and Marine Biology (AMB)

The Department of Arctic and Marine Biology (AMB) includes 5 research groups. Research and teaching at AMB has a broad span, from molecular mechanisms at cellular/subcellular levels via studies of adaptations at the organismal level, to ecological interactions in aquatic and terrestrial environments. The institute is an exciting and cutting-edge academic and research unit in biology that addresses challenges in basic research, industrial and administrative-oriented research with a strong focus on the North. The Institute has extensive national and international research collaboration including regional institutions like Framsenteret, IMR and NIBIO.

The position's field of research

The research group has generated extensive resources and know-how for the analysis of the parasitic plant genus Cuscuta and the interactions with its hosts, including genomic and transcriptomic databases, protocols for laser microdissection and in situ hybridization for tissue specific expression profiling, protocols for transient transformation, and green house as well as in in vitro culturing of several species. See for example our publications:

- Footprints of parasitism in the genome of the parasitic flowering plant Cuscuta campestris
- A rapid preparation procedure for laser microdissection-mediated harvest of plant tissues for gene expression analysis
- A highly efficient protocol for transforming Cuscuta reflexa based on artificially induced infection sites

In addition, climate-controlled phytotron chambers and plant phenotyping equipment (PlantEye, hyperspectral imaging cameras) are available to study physiological aspects of parasite-host interactions. The group is situated in newly built facilities with well-equipped laboratories and modern scientific infrastructure for molecular, physiological and biochemical work.

We invite applications from candidates strongly motivated to obtain a PhD within molecular plant sciences and who want to build on and expand the available know how on Cuscuta. He/she shall investigate aspects relating to its unusual lifestyle, and possibly exploit the generated knowledge in pursuit of novel applications relevant for bioproduction or biotechnology. In particular, applications involving Cuscuta-derived molecules, the unusual shade attraction of the parasite or the molecule exchange with hosts are of interest, and the use of transgenomic, in vitro or grafting techniques as well as the use of our image-based plant phenotyping platforms are explicitly encouraged.

The applicants must present a description outlining their ideas for the PhD project. The project description shall not exceed 2 pages, literature references excluded. It must include a description of the theme, research question(s) and a reasoning of the choices. It should also indicate the methodologies to be used. The final project description will be developed in cooperation with the supervisor.

Contact

For further information about the position, please contact Professor Kirsten Krause:

- phone: +4777646415
- email: kirsten.krause@uit.no

Qualifications

To be eligible for the position, a candidate must have a MSc degree in Molecular Biology, Genetics, or Physiology with a documented strong focus on plants. Suitable applicants must be inquisitive and open-minded and have a high motivation to further develop the skills they so far obtained. The following skills are regarded as relevant for being considered for the position:

Mandatory scientific skills:

- Documented good theoretical knowledge of plant biology, particularly molecular biology, physiology and genetics of higher dicotyledonous plants
- Documented good practical knowledge in state-of-the art molecular lab techniques, plant transformation techniques and/or in vitro culturing or grafting techniques (as documented by their scientific works)

Mandatory other skills and talents:

- Basic bioinformatic skills for data management and -analysis
- Excellent oral and written communication skills in English
- Good presentation skills

Additional beneficial skills and expertise:

- Experience in working with non-model higher plants and/or
- Experience with plant pathogens or plant-plant interactions and/or
- Experience with plant phenotyping (including hyperspectral imaging) and/or
- Experience with communication of science through webpages or social media and/or
- Experience in interacting with non-academic interest groups (e.g. farmers, media, politicians, business leaders, scholars,…) within a scientific context and/or
- Documented interest in and talent for leadership or mentorship roles

In the assessment, the emphasis is on the applicant's potential to complete a research education based on the master's thesis or equivalent, and any other scientific work. The project description will also be considered. In addition, other experience of significance for the completion of the doctoral programme may be given consideration.

We will also emphasize motivation and personal suitability for the position. We are looking for candidates who:

- Have good collaboration skills
- Have good communication and interaction with colleagues and students
- Want to contribute to a good working environment

The project may involve spending some time abroad, thus the successful candidate should be positive towards short-term mobility. The ability to work independently as well as in a team is desired. English is the principal language in our work environment and applicants are asked to submit their application in English.

As many as possible should have the opportunity to undertake organized research training. If you already hold a PhD or have equivalent competence, we will not appoint you to this position.

Admission to the PhD programme

For employment in the PhD position, you must be qualified for admission to the PhD programme at the Faculty of Biosciences, Fisheries and Economics and participate in organized doctoral studies within the employment period.

Admission normally requires:

- A bachelor's degree of 180 ECTS and a master's degree of 120 ECTS, or an integrated master's degree of 300 ECTS.
- A master's thesis with a scope corresponding to at least 30 ECTS for a master's degree of 120 ECTS.
- A master's thesis with a scope corresponding to at least 20 ECTS for an integrated master's degree of 300 ECTS.

Grade requirements applies both to the master thesis as well as courses part of the master's degree. The minimum requirements are grade C or better on the master's degree, and grade C or better on courses that are part of the master's degree. A grade lower than C in one course may be compensated by a higher grade than C in another course. If the applicant has two subjects with the grade D or lower, the applicant is not qualified for admission. A more detailed description of admission requirements can be found here.

Applicants with a foreign education will be subjected to an evaluation of whether the educational background is equal to Norwegian higher education, following national guidelines from NOKUT. Depending on which country the education is from, one or two additional years of university education may be required to fulfil admission requirements, e.g. a 4-year bachelor's degree and a 2-year master's degree.

If you are employed in the position, you will be provisionally admitted to the PhD programme. Application for final admission must be submitted no later than six weeks after taking up the position.

Inclusion and diversity

UiT The Arctic University of Norway is working actively to promote equality, gender balance and diversity among employees and students, and to create an inclusive and safe working environment. We believe that inclusion and diversity are a strength and we want employees with different competencies, professional experience, life experience and perspectives.

If you have a disability, a gap in your CV or immigrant background, we encourage you to tick the box for this in your application. If there are qualified applicants, we invite at least one in each group for an interview. If you get the job, we will adapt the working conditions if you need it. Apart from selecting the right candidates, we will only use the information for anonymous statistics.

We offer

- Involvement in an interesting research project
- Good opportunities to establish a scientific network through the Graduate School “Photosyntech"
- Good career opportunities
- A good academic environment with dedicated colleagues
- Flexible working hours and a state collective pay agreement
- Pension scheme through the state pension fund
- More practical information for working and living in Norway can be found here: https://uit.no/staffmobility

Application

Your application must include:

- Cover letter explaining the applicant’s specific motivation for the project, past achievements, and career goals
- CV including (if available) publication record
- Project description outlining the research question(s) the applicant would like to pursue, methodologies to be used and a reasoning of the choices (max. 2 pages excluding references)
- Diploma for bachelor's and master's degree
- Transcript of grades/academic record for bachelor's and master's degree
- Explanation of the grading system for foreign education (Diploma Supplement if available)
- Documentation of English proficiency
- At least two written references with contact information
- Master’s thesis, and any other academic works

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 and a statement from your supervisor or institution indicating when the degree will be obtained. You must still submit your transcripts for the master’s degree with your application.

All documentation to be considered must be in a Scandinavian language or English. Diplomas and transcripts must also be submitted in the original language, if not in English or Scandinavian. We only accept applications and documentation sent via Jobbnorge within the application deadline.

General information

The appointment is made in accordance with State regulations and guidelines at UiT. At our website, you will find more information for applicants.

A shorter period of appointment may be decided when the PhD Fellow has already completed parts of their research training programme or when the appointment is based on a previous qualifying position PhD Fellow, research assistant, or the like in such a way that the total time used for research training amounts to three years.

Remuneration for the position of PhD Fellow is in accordance with the State salary scale code 1017. A compulsory contribution of 2 % to the Norwegian Public Service Pension Fund will be deducted.

We process personal data given in an application or CV in accordance with the Personal Data Act (Offentleglova). According to the Personal Data Act information about the applicant may be included in the public applicant list, also in cases where the applicant has requested non-disclosure. You will receive advance notification in the event of such publication, if you have requested non-disclosure.

UiT - Developing the High North

UiT The Arctic University of Norway is a multi-campus research university 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.

The Faculty of Biosciences, Fisheries and Economics (BFE) consists of Department of Arctic and Marine Biology, Norwegian College of Fishery Science (NFH) and School of Business and Economics.

The main task of BFE is to conduct teaching and research dissemination at a high national and international level within all relevant fields. Prioritized research areas are aquatic and terrestrial ecosystems, climate, life in the arctic, marine bioprospecting, fish health, seafood products, business and macroeconomics, resources and environment, markets and management of marine resources. The interdisciplinary profile of the faculty provides good opportunity to develop research projects involving several research groups at the faculty according to its strategy.

Jobbnorge-ID: 229526, Søknadsfrist: Ikke søkbar