PhD fellow in Plant Biotechnology

Department of Plant and Environmental Sciences, Faculty of Science at University of Copenhagen is offering a PhD scholarship in Plant Biotechnology commencing 01.09.2020 or as soon as possible thereafter.

Description of the scientific environment

The Department of Plant and Environmental Sciences (PLEN) constitutes a highly competitive, stimulating, and international research environment with state-of-the-art infrastructure. Within PLEN, the PhD fellow will be part of the recently funded NovoCrops Research Centre, which is dedicated to the accelerated domestication of resilient and climate change-friendly plant species (http://shorturl.at/aotS4). In particular, the PhD fellow will be part of the Geu-Flores research group, which investigates how toxic alkaloids are made and moved around in promising legume crops (http://shorturl.at/COYZ2).

Project description

Narrow-leafed lupin (NLL) is a legume crop that produces seeds with a high protein content. However, NLL accumulates defense-related, toxic alkaloids in most tissues, including the seeds. Recently, the Geu-Flores group has shown that the alkaloids in the seeds are not made locally and are instead transported from other parts of the plant (https://t.co/oxOcland60?amp=1). This has opened the possibility to carry out transport engineering to block the transport of alkaloids to the seeds and produce lines that retain defensive alkaloids in most tissues yet produce alkaloid-free seeds. The PhD fellow will join current efforts aimed at discovering and knocking out lupin alkaloid transporters in NLL. The work will contribute to the generation of a sustainable, resilient source of protein that can be grown locally in Europe. The project will be carried out in collaboration with the research group of Associate Professor Hussam Nour-Eldin, who uncovered the only known long-distance transporters of specialized metabolites in plants (https://www.nature.com/articles/nature11285).

Principal supervisor is Associate Professor Fernando Geu-Flores, Department of Plant and Environmental Sciences, feg@plen.ku.dk, +45-35332852. Co-supervisors are Associate Professor Hussam Nour-Eldin and postdoc Karen Michiko Frick.

Job description

The position is available for a 3-year period and your key tasks as a PhD student at SCIENCE are:

- To manage and carry through your research project
- Attend PhD courses
- Write scientific articles and your PhD thesis
- Teach and disseminate your research
- To stay at an external research institution for a few months, preferably abroad
- Work for the department

Formal requirements

Applicants should hold an MSc degree in Biotechnology, Molecular Biology, Biochemistry or similar, with good results and good English skills. As criteria for the assessment of your qualifications, emphasis will also be laid on previous publications (if any) and relevant work experience.

Terms of employment

The position is covered by the Memorandum on Job Structure for Academic Staff. Terms of appointment and payment accord to the agreement between the Ministry of Finance and The Danish Confederation of Professional Associations on Academics in the State.

The starting salary is currently at a minimum DKK 328.355 (approx. €43,750) including annual supplement (+ pension at a minimum DKK 53,360). Negotiation for salary supplement is possible.

Integrated MSc and PhD Scheme

The position is also available for candidates who are (or are eligible to be) enrolled at one of the faculty’s master programmes in Biology-Biotechnology, Biotechnology, Biochemistry, or similar. The duration of the
The integrated programme depends on the amount of credits that you have passed on your MSc programme. For further information about the study programme please see: [www.science.ku.dk/phd](http://www.science.ku.dk/phd), “Study Structures”.

**Scholarship and terms of employment for integrated MSc and PhD / PhD grant portions (Ph.D.-SU klip)**

In the period up to the completion of the MSc programme (up to three years), the student is entitled to so-called PhD grant portions. The grant portions are financed by the grant donor but not by the Danish State Educational Grant and Loan Scheme Agency (as is the case for the ordinary study grant portions on the BSc and MSc programmes). They are called PhD grant portions because this kind of remuneration is regulated and described in the Executive Order on the State Educational Grant and Loan Scheme in Denmark (SU-bekendtgørelsen), and because the value of a PhD grant portion corresponds to the value of an ordinary Danish study grant portion. Students are awarded 48 PhD grant portions during the period of their MSc and PhD studies.

48 PhD grant portions at DKK 6,243 each, corresponding to DKK 299,664 (approx. €39,955).

**'Duty work'**

As a supplement to the PhD grant portions, the student may, in accordance with the collective agreement of the Danish Confederation of Professional Associations (AC), be offered 'duty work'. In the period up to the completion of the MSc programme, students performing 'duty work' are paid by the hour. UCPH has decided to offer students on integrated MSc and PhD schemes 150 hours of 'duty work' per year during Part A of the programme (until two years of the combined programme of study remain). 'Duty work' during Part A if it has a duration of three years: 450 hours at a rate of DKK 217.94 (+ 12.5% holiday pay), corresponding to DKK 110,331 (approx. €14,710).

For further information about Part A please see: [https://www.science.ku.dk/phd/studystructure/integratedphd/](https://www.science.ku.dk/phd/studystructure/integratedphd/)

**Salary in accordance with the collective agreement with the Danish Confederation of Professional Associations (AC)**

In the period after the completion of the MSc programme, the student is employed as a PhD scholar and is remunerated in accordance with the collective agreement with the Danish Confederation of Professional Associations (AC). The scheme is arranged in such a way that students graduate from the MSc programme at a time when there are two years left of the integrated programme. For this reason, the salary must be paid for a period of two years in accordance with the collective agreement with the Danish Confederation of Professional Associations (AC). The amounts specified include a supplement locally agreed upon as well as pension contributions: Salary as a PhD scholar: 24 months at a rate of DKK 31,809 (including pension contributions and supplement), corresponding to DKK 763,430 (approx. €101,790).

**Application Procedure**

The application, **in English**, must be submitted electronically by clicking **APPLY NOW** below.

**Please include**

- Cover Letter detailing your motivation and background for applying for the specific PhD project
- CV
- Diploma and transcripts of records (BSc and MSc)
- Research proposal detailing a strategy to discover and characterize alkaloid transporters in narrow-leafed lupin (maximum 1 page)
- Acceptance Letter for the relevant MSc Programme at SCIENCE, if any
- Other information for consideration, e.g. list of publications (if any),
- Full contact details (Name, address, telephone & email) of 1-3 professional referees

The University wishes our staff to reflect the diversity of society and thus welcomes applications from all qualified candidates regardless of personal background.

**The deadline for applications is Sunday 19 April 2020, 23:59 GMT+2.**

After the expiry of the deadline for applications, the authorized recruitment manager selects applicants for assessment on the advice of the Interview Committee. Afterwards an assessment committee will be appointed to evaluate the selected applications. The applicants will be notified of the composition of the committee and the final selection of a successful candidate will be made by the Head of Department, based on the recommendations of the assessment committee and the interview committee.
The main criterion for selection will be the research potential of the applicant and the above mentioned skills. The successful candidate will then be requested to formally apply for enrolment as a PhD student at the PhD school of Science. You can read more about the recruitment process at http://employment.ku.dk/faculty/recruitment-process/.

Questions
For specific information about the PhD scholarship, please contact the principal supervisor, Associate Professor Fernando Geu-Flores, Department of Plant and Environmental Sciences, feg@plen.ku.dk, +45-35332852. General information about PhD programmes at SCIENCE is available at http://www.science.ku.dk/phd.

Part of the International Alliance of Research Universities (IARU), and among Europe's top-ranking universities, the University of Copenhagen promotes research and teaching of the highest international standard. Rich in tradition and modern in outlook, the University gives students and staff the opportunity to cultivate their talent in an ambitious and informal environment. An effective organisation – with good working conditions and a collaborative work culture – creates the ideal framework for a successful academic career.