Postdoc - Plant Developmental Biology

Ref: SLU.ua.2017.2.5.1-4048

Department of Plant Biology

Duties:

A Post-doctoral position is available at the Swedish University of Agricultural Sciences (SLU) in Uppsala to investigate how plants regenerate wounded tissues. In particular, this project will investigate how after cutting, grafted plants fuse tissues and connect their vasculature across the graft junction.

Plant grafting is a widely used technique in horticulture to improve yields and introduce disease resistance, but we have little idea how mechanistically plants graft. The aim of this Post-doc is to build upon recent discoveries made in grafting (Melnyk et al. 2015. Current Biology. 25(10):1306-18) and to understand the mechanism by which plants fuse tissues and connect the vasculature at a cut surface. The project will use a combination of forward and reverse genetics to build upon recently obtained transcriptomics data. The project will include several international collaborators and will focus on understanding the role of hormones, cell wall modifications, plasmodesmata and mechanical force to ultimately better understand how plants regenerate tissues.

Research environment:

The Post-doc position is funded by the Wallenberg foundation, and the successful applicant will work in the group of Charles Melnyk (https://melnyklab.wordpress.com/) for an initial period of two years. The department is located in the recently built Uppsala BioCenter at the Swedish University of Agricultural Sciences (SLU). Uppsala is a lively university city, conveniently located close to Stockholm (40 minutes by train) and Stockholm’s main international airport (20 minutes by train).

Qualifications:

Candidates should have a PhD in plant developmental biology, plant genetics, plant molecular biology or related topics. Prior work with Arabidopsis thaliana, genetics, transcriptomics, microscopy and molecular biology are assets. Experience with techniques that require micro-manipulation such as grafting, tissue culture or meristem dissection would be valuable. Creativity, motivation and drive are important personal characteristics as is excellent proficiency in English since English is the working language in the research group. You should also have an ability to conduct independent research, take initiative, ask pertinent scientific questions, and interact with other scientists. A demonstration of
Previous scientific output is also highly desirable, such as a first author or joint-first author published paper.

Specific documents to include: Applications must contain (1) CV with full publication list, (2) a description of research experiences, (3) a letter of motivation and (4) contact information of two to three references.

Place of Work:

Uppsala

Form of Employment:

2 year employment as postdoc

Extent:

100%

Starting date:

By agreement (Winter/Spring 2017/2018).

Welcome with your application via the applications button below no later than 2017-11-17.

Union representatives:


The Swedish University of Agricultural Sciences (SLU) develops the understanding and sustainable use and management of biological natural resources. The university ranks well internationally within its subject areas. SLU is a research-intensive university that also offers unique degree programmes in for example rural development and natural resource management, environmental economics, animal science and landscape architecture.

SLU has just over 3,000 employees, 5,000 students and a turnover of SEK 3 billion. The university has invested heavily in a modern, attractive environment on its campuses in Alnarp, Umeå and Uppsala.

www.slu.se

SLU is an equal opportunity employer.

Contact person