1 PhD student in the research education subject: Biology, specifically plant development

How does biotic and abiotic stress modify plant development?

A 4-year PhD position is available at the Swedish University of Agricultural Sciences (SLU) in Uppsala to investigate how biotic and abiotic stresses modify plant development. In particular, this project will investigate how parasitic plants overcome recognition and defense barriers to fuse tissues and connect their vasculature to the host plant.

Parasitic plants are devastating global pathogens that infect a wide range of agriculturally important species. Despite their economic importance, there are many unanswered questions regarding how parasitic plants infect their hosts. Interestingly, certain parasitic plants can infect a wide range of unrelated species, something that is not possible when plants are cut and joined together through the process of grafting. The aim of this PhD project is to understand how the parasite forms vascular connections, how the parasite overcomes recognition barriers, and whether there is a shared mechanism between parasitism and wound healing such as during the process of plant grafting when vascular strands are severed and connected between different plants. The project will involve working closely with international collaborators.

The PhD position is funded by SLU, and the successful applicant will work in the group of Charles Melnyk (https://melnyklab.wordpress.com/). 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 (25 minutes by train).

Qualifications

Applicants should have a university degree in biology or biochemistry with emphasis on molecular biology, genetics, plant physiology, developmental biology or corresponding topics. Candidates with experience in plant molecular biology or plant developmental biology are especially encouraged to apply. You will work in close collaboration with other researchers and graduate students in a creative and inspiring environment. You should work well with others but also have the ability to work independently with your own research topics. Creativity and drive are important personal characteristics as is excellent proficiency in English since English is the working language in the research group.

The PhD student is expected to start the project during the fall of 2017.

SLU is an Equal Opportunity Employer.

A person has basic eligibility for third level education if he or she has taken a second level qualification or has completed course requirements of at least 240 higher education credits, including at least 60 higher education credits at second level.

Selection among applicants meeting the requirements is made with reference to written application including curriculum vitae, copies of degrees and transcripts of academic records, one copy of the dissertation for masters or undergraduate degree, a list of at least two references familiar with the applicant's qualifications, certified knowledge of the English language and an interview.

Read about the PhD education at SLU at www.slu.se/en/education/programmes-courses/postgraduate-studies/

Use this APPLICATION FORM

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Applications, marked with ref no SLU ua 707/2017, must have arrived at the Registrar of SLU, P.O. Box 7070, S- 750 07 Uppsala or registrar@slu.se no later than 2017-03-24.