Postdoc in Plant Breeding of Perennial Crops - stipend



Ref SLU.ua.2022.2.5.1-4724

Are you interested in plant breeding and the development of novel crops for a sustainable agriculture and mitigation of climate change? We are looking for a highly motivated person to join our research on the domestication and breeding of perennial cereal grain crops at the Swedish University of Agricultural Sciences (SLU), Uppsala, Sweden. The postdoc project focuses on intermediate wheatgrass (*Thinopyrum intermedium*), which is a perennial wild relative of wheat that is being developed to produce human-edible grain in temperate climates.

Department of Plant Biology

The postdoc is associated with the research group of Anna Westerbergh at the Department of Plant Biology, SLU, Sweden.

(https://www.slu.se/en/departments/plantbiology-forest-genetics/research/groups/annawesterbergh/). You and the research group will work closely with researchers at The Land Institute, Salina, Kansas, USA (https://landinstitute.org/scientific-pubcategory/intermediate-wheatgrass/).

The department of Plant Biology conducts fundamental and strategic research in plant biology and breeding on agricultural crops, forest trees, biofuel crops and model organisms. The Department of Plant Biology is located at the Uppsala BioCenter, which brings together departments with strong competence of international standard in plant biology, pathology, microbiology, food science, chemistry and biotechnology of great relevance for agriculture and forestry. The Uppsala BioCenter offers excellent facilities for breeding activities including state-of-the art greenhouses and climate chambers and molecular genetics and microscopy laboratories. The Department of Plant Biology is also a part of the Linnaeus Centre for Plant Biology in Uppsala, where researchers from SLU and Uppsala University discuss functional aspects of plants and interactions with the environment of direct relevance for agriculture, forestry and biodiversity management.

Duties

The focus of the postdoctoral project is to develop genomic selection models that will be applied in an ongoing intermediate wheatgrass (IWG, *Thinopyrum intermedium*) breeding program in Sweden. You will work with large genotypic and phenotypic datasets and apply biometric approaches on different selection cycles and populations of IWG. You will also assist in evaluation of plant and agronomic traits important for yield in the field and in the laboratory.

Qualifications

The successful candidate should have a PhD degree in plant breeding, quantitative genetics, population genetics, bioinformatics or similar. Prior experience with statistical analysis of large data sets and genomic selection is a merit. You should have demonstrated an ability to conduct and complete research projects, as evidenced by scientific publications in international peer reviewed journals. You should also be able to formulate a research vision that shows how you plan to use previously acquired knowledge and skills to advance the research project. Ability to work independently as well as in a team are considered important qualities. Good skills in written and oral communication in English are required.

Place of work Uppsala, Sweden.

Form of employment and starting date Tax-free stipend, 24 months, with the possibility of extension. Start according to agreement.

Application

We welcome your application no later than 2023-01-09. To submit the application, please, use the Apply button at the advertisement web page <u>https://www.slu.se/en/about-slu/work-at-slu/jobs-vacancies/?rmpage=job&rmjob=7589&rmlang=UK</u>

The application must be written in English and contain (1) CV with full publication list, (2) a description of research experiences, (3) a copy of the PhD diploma, (4) contact information of two to three referee persons.



Contact person

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About the Swedish University of Agricultural Sciences (SLU) <u>www.slu.se/en/</u>

SLU is a world-class international university within the sciences for sustainable life and brings together people who have different perspectives, but with the same goal to create the best conditions for a sustainable, thriving and better world. It develops the understanding and sustainable management of biological natural resources through research, education and environmental monitoring and assessment, in collaboration with the surrounding community. The principal sites are in Uppsala, Umeå and Alnarp, but activities are also conducted at research stations, experimental parks and educational establishments throughout Sweden. SLU has about 3 000 employees and 5 000 students. The environment at the campuses is modern and attractive.

Academic union representatives

https://internt.slu.se/en/my-employment/employee-associations/kontaktpersoner-vid-rekrytering/

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