PhD position in Plant-Pathogen Interactions

Understanding and exploiting autophagy to enhance plant pathogen resistance

Project: Research in the Hofius lab focuses on molecular mechanisms of autophagy, a conserved degradation and recycling process involved in cellular homeostasis and stress adaptation. The PhD project builds on our recent findings demonstrating a paramount role of autophagy in immune responses to different viral, bacterial, and fungal pathogens. We now aim to further elucidate the autophagy resistance pathways and identify their targets during pathogen infection with the long-term goal to enhance disease resistance in crop species. The work will involve proteomic, genetic, biochemical and cell biological approaches in Arabidopsis and Nicotiana benthamiana models as well as potato crop plants. For more information about the Hofius lab and recent publications, please visit the homepage http://www.slu.se/D_Hofius and Pubmed https://www.ncbi.nlm.nih.gov/pubmed/?term=Hofius+D.

Environment: The successful applicant will work in the research group of Prof. Daniel Hofius at the Department of Plant Biology, Swedish University of Agricultural Sciences (SLU) (www.slu.se/en/vbsg) and Linnean Centre for Plant Biology in Uppsala, Sweden (http://lcpu.se/). The department offers a creative and stimulating international environment and is one of several departments that make up the cluster ‘Uppsala BioCenter’ at SLU.

Qualifications: We are looking for a highly motivated candidate with a higher university degree in molecular biology (Degree of Master or Master of Science) with emphasis on molecular genetics, functional genomics, plant physiology, or related topics. Documented abilities to manage a laboratory research project and experience with molecular biology techniques in plants are required. Knowledge of genetic, biochemical, cell biological and/or proteomic approaches as well as pathogen handling in Arabidopsis/plant systems is highly valued. Excellent communication skills in both oral and written English and the ability to work in a team are expected.

Employment: The PhD student position is financed by a grant from the Swedish Research Council FORMAS and comprises 4 years of postgraduate studies.

Starting date: By agreement, preferably August/September 2018

Applications: The application deadline is 25 May 2018. The evaluation process will start immediately upon receipt of applications. Please visit the SLU homepage at https://www.slu.se/en/education/programmes-courses/postgraduate-studies/new-phd-student/Read-more/?sprak=e&Uid=2285 for the application details and send your full application (ref no SLU ua 2018.2.5.1-1582) to daniel.hofius@slu.se and the registrar of SLU (registrator@slu.se).