Lund, 1 December 2023

Post-doctoral researcher in plant molecular biology

A two-year position is offered to study stress responses at a molecular level in plants in the lab of Olivier Van Aken, Lund University, Sweden. The project will focus on understanding signal transduction pathways that regulate gene expression in response to environmental stress. As plants are sessile organisms and cannot not move away from adverse conditions, they have developed extensive molecular and physiological defence systems. Plants can thus respond to a range of stimuli such as water availability, pathogen infection, hypoxia, changes in light intensity and temperature, etc. These signalling events often involve multiple cellular organelles including mitochondria, chloroplasts, plasma membrane and the endoplasmic reticulum. The researcher will be involved in the detailed characterisation of a transcriptional network involved in organelle-to-nuclear signalling, with the aim of identifying key regulatory mechanisms and understanding the downstream effects.

The researcher will join the Van Aken lab focusing on molecular signalling in plants, as part of the Molecular Cell Biology unit at the Department of Biology. Lund University is one of the oldest and most prestigious universities in Northern Europe and ranks consistently in the top 100 of universities worldwide. The successful candidate will have access to state of the art molecular, biochemical, proteomic and genomic facilities to perform the research. The candidate will also have opportunities to collaborate with international groups and co-supervise Bachelor, Masters and/or PhD students.

The successful candidate should hold a PhD in molecular biology, biotechnology, biochemistry or a related discipline, with a proven track record in plant molecular biology. The PhD degree must have been obtained less than 6 years ago. Highly suitable candidates that will likely obtain their PhD degree early 2024 may also apply. Experience with *Arabidopsis thaliana* as a model organism is strongly preferred, but additional experience with other plant model systems or commercially relevant species is also desirable. Experience with plant stress signalling, organelle biology (including mitochondria, chloroplasts, nucleus or ER), next generation sequencing analysis, bioinformatics, fluorescence microscopy, mass-spectrometry and protein work are seen as positive assets. The candidate must be able to communicate and write fluently in English, with a proven track record in independent writing of scientific texts, e.g. publications and grant applications.

The full-time position is supported by a fellowship funded by a private foundation for two years. The successful candidate will be eligible for a Swedish residency permit and health care offered for the duration of the fellowship (subject to Swedish legislation). The starting date is preferably as soon as possible, but must be in the first half of 2024. Please contact olivier.van_aken@biol.lu.se to apply or obtain more information. Applications should include a cover letter (1 page max) outlining research interests and suitability for the position, a CV and contact information for three references. The position will be open until the 15th of January 2024, or until a suitable candidate is found.