

## 3 Postdoctoral positions

### Epigenetic control of cell fate in plants

Three postdoctoral positions are available to study epigenetic mechanisms regulating changes of cellular identity, in particular the transition to programmed cell death (PCD) in plants. The positions are funded by the "Knut and Alice Wallenberg Foundation" and are part of a joint research project involving the laboratories of Prof. Lars Hennig (coordinator), Dr. Peter Bozhkov, Prof. Daniel Hofius, Prof. Claudia Köhler, and Prof. Eva Sundberg at the Department of Plant Biology and Forest Genetics ([www.vbgs.slu.se](http://www.vbgs.slu.se)). The department offers a creative and stimulating international environment and is associated with the Uppsala BioCenter at the Swedish University of Agricultural Sciences (SLU) ([bioc.slu.se](http://bioc.slu.se)) and the Linnean Center for Plant Biology in Uppsala ([lcpu.se](http://lcpu.se)).

The position in the laboratory of **Prof. Lars Hennig** will be focused on chromatin biology in *Arabidopsis* using microscopy and epigenome profiling. Applicants should have a PhD degree in biochemistry, molecular biology or genetics, awarded not more than three years ago at the time of application. Documented experience in plant molecular biology, cytogenetics and chromatin-related techniques such as ChIP is desired. Training in genomics and bioinformatics is a merit. The applicant should also have adequate skills in the English language, and be able to easily communicate and discuss research results.

The project in the group of **Prof. Daniel Hofius** focuses on the epigenetic control of pathogen-induced cell death, and includes the analysis of immunity- and disease-related PCD systems in *Arabidopsis*, the identification and characterization of mutants, and application of epigenome profiling and next generation sequencing technologies. Applicants should have a PhD degree, a solid background in plant biology, molecular biology and genetics, and a proven track record in internationally peer-reviewed journals. Experience and skills in plant-pathogen interactions and forward genetic screens are highly valued but not a formal requirement. We are in particular seeking highly motivated candidates with strong interest in epigenetics.

The project in the group of **Prof. Eva Sundberg** focuses on evolutionary studies of autophagy, programmed cell death and the epigenetic control of these processes in specific cells of the moss model plant *Physcomitrella patens*. The project will apply transgenics, next generation sequencing, microscopy and epigenome profiling. Applicants should at the time of application have been awarded a PhD degree in plant developmental biology, molecular biology, or related topics, within the last three years. In addition, adequate skills in English, communication and scientific thinking is required, and experience in working with moss as a model system and with the laser capture technology are considered merits.

Uppsala, Sweden's fourth largest city, has two universities and with 35'000 students a very lively student atmosphere. Uppsala is a bustling cultural and commercial centre with numerous cafés, shops and an award-winning newly-built concert hall. The SLU campus is ideal for outdoor recreation, with football pitches, a beach volleyball court, a Frisbee golf course, paths and cycleways for jogging and gyms offering ample keep-fit opportunities. Stockholm, the Venice-of-the-North, can be reached by train in only 45 minutes. Stockholm international airport is also close by, 20 minutes by train from Uppsala, and has frequent connections to the rest of Europe as well as to other continents.

The project will start in **June 2013** and positions are available initially for 2 years with the possibility of extension.

Applications, including (1) CV with full publication list, (2) a description of research experiences, (3) a statement of scientific interests as well as (4) contact information of three referees should be submitted by e-mail as a single pdf file to [Lars.Hennig@slu.se](mailto:Lars.Hennig@slu.se), [Daniel.Hofius@slu.se](mailto:Daniel.Hofius@slu.se), or [Eva.Sundberg@slu.se](mailto:Eva.Sundberg@slu.se). Applications are reviewed immediately and considered until the positions have been filled.

*SLU is an international university, world class in life and environmental sciences. We are ranked among the Top 100 of ca 5,000 European universities. We have a strong research focus, but we also offer some of Sweden's most in-demand educations; veterinarian, forester, and landscape architect.*

*SLU has close to 3,000 employees and some 5,000 students. Annual turnover is SEK 2.7 billion, and activities are concentrated to the main campuses in Uppsala, Alnarp, Umeå and Skara.*

[www.slu.se](http://www.slu.se)

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