Postdoc position is immediately available to study mechanisms of autophagy and programmed cell death during plant innate immunity in the group of Prof. Daniel Hofius, SLU Uppsala, Sweden.

**Project:** Programmed cell death associated with the pathogen triggered hypersensitive response (HR) is a hallmark of plant innate immunity. Many key factors of the HR have been identified but the molecular mechanisms and pathways of cell death execution remain obscure. Autophagy, a conserved vesicular degradation pathway, has recently been shown to contribute to hypersensitive cell death and disease resistance (Hofius et al. Cell 2009; Hofius et al. Cell Death Diff. 2011). We now aim to identify and characterize novel factors required for vesicular trafficking and autophagy during programmed cell death and innate immune responses. To attain this objective, we will primarily use genetic, biochemical, and cell biological approaches and explore previously isolated Arabidopsis mutants altered in immunity associated cell death responses.

Research environment: The successful applicant will work in the newly established research group of Prof. Daniel Hofius at the Department of Plant Biology and Forest Genetics, SLU, Uppsala. The department offers a creative and stimulating international environment, and is one of six departments that will make up the new cluster 'Uppsala BioCenter' at SLU. The research group and the department contribute to internationally recognized basic and applied science in plant biology; for more information visit the web page at http://lcpu.se/?page\_id=691 and http://www.vbsg.slu.se.

**Qualifications:** We are looking for a highly motivated candidate with a PhD degree in molecular biology, molecular genetics, biochemistry or equivalent. The applicant must document a solid background in plant genetic and molecular biology approaches and have at least first-authored one or co-authored two publications in internationally renowned journals. Experience with cell biology, protein chemistry and/or plant immunity is an advantage, but not a formal requirement. The applicant must be fluent in written as well as spoken English. Applications should be sent as single pdf file to daniel.hofius@slu.se no later than **December 16, 2011**, but the deadline may be extended until the position is filled. The selection is based on the written application, CV, publication record, personal references, and an interview.

**Form of employment:** One-year position, with possibility for prolongation at least one year.

**Starting date:** The position is immediately available.

For information please contact **Prof. Daniel Hofius**, Molecular Plant-Pest/Disease Interactions, Department of Plant Biology and Forest Genetics, Uppsala BioCenter, SLU, PO Box 7080, SE-750 07 Uppsala, Sweden. Tel.: +46-(0)18-673275, Mail: daniel.hofius@slu.se.