

Ph.D. or postdoc position

Plant cell biology

A funded Ph.D. student or postdoc position is available at the Chair of Plant Systems Biology at the School of Life Sciences of the Technical University of Munich.

Auxin transport regulation by protein phosphorylation

We are seeking a highly motivated Ph.D. student or postdoc to strengthen our very interactive and collaborative team. The specific project examines the role of phosphor-regulation essential for the regulation of polar auxin transport and other polarity-requiring developmental processes. The project will integrate cell biological approaches with protein biochemistry and proteomics to understand the molecular determinants of PIN auxin transporter regulation. The laboratory has expertise in a broad range of molecular, cell biological, biochemical and genetic techniques as exemplified in our previous publications. The Chair of Plant Systems Biology has direct access to modern cell biological and biochemical analyses, proteomics etc. and possesses all techniques and equipment required for state-of-the-art plant research. The laboratory also has strong ties with the LMU Munich, the University of Regensburg and the Helmholtz Zentrum München through the SFB924 and is embedded in the national DFG-funded MadLand consortium.

Please send a letter of motivation and a CV to: claus.schwechheimer@wzw.tum.de

The position is available immediately and will remain open until filled.

Further information

Website of the Chair: <https://sysbiol.wzw.tum.de>

Website of MadLand: <http://madland.science>

Selected recent publications

Mergner J, Frejno M, ... Grill E, Schneitz K, Schwechheimer C, Kuster B. (2020) Mass-spectrometry-based draft of the Arabidopsis proteome. *Nature*. 2020 Mar;579(7799):409-414.

Marhava P, Bassukas AEL, Zourelidou M, Kolb M, Moret B, Fastner A, Schulze WX, Cattaneo P, Hammes UZ, Claus Schwechheimer*, Christian S Hardtke* (2018) A molecular rheostat adjusts auxin flux to promote root protophloem differentiation. *Nature* 558(7709):297-300. *Corresponding authors.

Weller B, Zourelidou M, Frank L, Barbosa IC, Fastner A, Richter S, Jürgens G, Hammes UZ, Claus Schwechheimer (2017) Dynamic PIN-FORMED auxin efflux carrier phosphorylation at the plasma membrane controls auxin efflux-dependent growth. *Proc Natl Acad Sci USA* 114(5):E887-E896