

Ph.D. student position in plant cell and molecular biology

A funded Ph.D. student position is available at the Chair of Plant Systems Biology at the Life Sciences campus of the Technische Universität München in Freising-Weihenstephan.

- Protein & lipid dynamics in the regulation of polar growth of plant cells

We seek a highly motivated Ph.D. student to strengthen our interactive and collaborative team and Chair. The project will be associated with the newly established group of Philipp Denninger and integrates live-cell imaging, developmental and molecular biology approaches to understand the molecular mechanisms of polar growth in plant cells. The focus of the project is to investigate the regulation of cellular signalling by protein kinases and RhoGTPases in the plant model organism *Arabidopsis thaliana*. The ideal applicant shows a strong interest in cell biology and has a background in plant biology, biochemistry, or is experienced in microscopy.

The Chair of Plant Systems Biology has expertise in a broad spectrum of molecular, cell biological, biochemical and genetic techniques, as well as confocal microscopy. Therefore, the laboratory has access to all techniques and equipment required to perform state-of-the-art plant research. The group also has strong ties with the LMU Munich, the University of Regensburg and the Helmholtz Zentrum München through the SFB924.

Please send a letter of motivation and CV to: philipp.denninger@wzw.tum.de

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

Further information

Website of the Chair: <http://sysbiol.wzw.tum.de/index.php?id=2&L=1>

Website of the SFB924: <http://sfb924.wzw.tum.de/index.php?id=3>

Selected recent publications

Philipp Denninger, Anna Reichelt, Vanessa A.F. Schmidt, Dietmar G. Mehlhorn, Lisa Y. Asseck, Claire E. Stanley, Nana F. Keinath, Lan-Felix Evers, Christopher Grefen, Guido Grossmann (2019) Distinct Rop-GEFs Successively Drive Polarization and Outgrowth of Root Hairs. *Current Biology*. doi: 10.1016/j.cub.2019.04.059.

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

Barbosa ICR, Zourelidou M, Willige BC, Weller B, Schwechheimer C (2014). "D6 PROTEIN KINASE activates auxin transport-dependent growth and PIN-FORMED phosphorylation at the plasma membrane." *Developmental Cell* 29(6):674-685.