

Two postdoc positions

Plant cell biology & Plant proteomics

Two postdoc positions are available at the Chairs of Plant Systems Biology and the Chair of Proteomics and Bioanalytics at the Life Sciences campus of the Technical University of Munich.

- Cell biology of polarity control of AGC kinases *in plants* (Prof. Dr. Claus Schwechheimer)
- Plant proteomics (Prof. Dr. Bernhard Kuster)

We are seeking two highly motivated postdocs to strengthen our very interactive and collaborative teams. The specific projects integrate cell biological studies with molecular biology and genetics to understand the molecular determinants of protein polarity in plant cells (Schwechheimer) and to apply plant proteomics for an improved understanding of plant development, growth and disease (Kuster). The Schwechheimer laboratory has expertise in a broad range of molecular, cell biological, biochemical and genetic techniques as exemplified in our previous publications. The Kuster laboratory is a leading laboratory in proteomics research and has a wide number of collaborations to apply proteomics to understand growth and disease in human, animals and plants. Both laboratories are members of the highly interactive plant science network SFB924 "Molecular mechanisms regulating yield and yield stability in plants."

Please send a letter of motivation and a CV to:

claus.schwechheimer@wzw.tum.de (cell biology position)

kuster@wzw.tum.de (plant proteomics position)

The positions are available immediately and will remain open until filled.

Further information

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

Website of the Kuster Chair: <http://proteomics.wzw.tum.de/>

Website of the SFB924: <http://sfb924.wzw.tum.de/>

Selected recent publications

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

Activation and Polarity Control of PIN-FORMED Auxin Transporters by Phosphorylation. Barbosa ICR, Hammes UZ, **Schwechheimer C**. *Trends Plant Sci*. 2018 Jun;23(6):523-538.

Dynamic PIN-FORMED auxin efflux carrier phosphorylation at the plasma membrane controls auxin efflux-dependent growth. Weller B, Zourelidou M, Frank L, Barbosa IC, Fastner A, Richter S, Jürgens G, Hammes UZ, **Schwechheimer C**. *Proc Natl Acad Sci U S A*. 2017 Jan 31;114(5):E887-E896.

Rebuilding core abscisic acid signaling pathways of Arabidopsis in yeast. Ruschhaupt M, Mergner J, Mucha S, Papacek M, Doch I, Tischer SV, Hemmler D, Chiasson D, Edel KH, Kudla J, Schmitt-Kopplin P, **Kuster B**, Grill E. *EMBO J*. 2019 Aug 1:e101859

The target landscape of clinical kinase drugs. Klaeger S....**Kuster B**. *Science*. 2017 Dec 1;358(6367).

Arabidopsis SH3P2 is an ubiquitin-binding protein that functions together with ESCRT-I and the deubiquitylating enzyme AMSH3. Nagel MK, ...**Kuster B**, Bednarek SY, Isono E. *Proc Natl Acad Sci U S A*. 2017 Aug 22;114(34):E7197-E7204.