Chair of Root-Soil Interaction
TUM School of Life Sciences
Technische Universität München

Opportunities for Talents

Join Us to Decode the Plant "Water-Saving Code":

A Frontier Program Integrating Molecular Biology and High-Throughput Phenotyping

Research Focus:

Precision stomatal regulation for Water-Use-Efficient crops

Background:

Fresh water is becoming the most limiting resource for global food production. Huge success has been achieved in this domain, but the translation of the current knowledge into practice is still slow. One bottleneck has been: generating high WUE crops always come up with trade-offs in growth. Our laboratory deciphers genetic and molecular mechanisms that allow plants to maximize WUE without sacrificing biomass or yield. We are now recruiting a highly motivated **Master student** who are passionate about plant stress biology, molecular cloning or physiological phenotyping to push the following lines forward:

Research Directions

- Tissue-specific abscisic acid (ABA) signaling and their contribution to WUE

  Approaches: molecular cloning, confocal microscopy, thermal imaging, and gas exchange analysis will be employed to conduct this direction.

- Thermal imaging-driven mutants and genes identification
  Approaches: thermal imaging and molecular cloning.

Who we are looking for:

- Enthusiasm for either molecular bench-work and/or plant phenotyping platforms.
- Background in life sciences, plant biology, biotechnology, related fields.
- Responsible mindset and team spirit.

Application procedure:

- Applications should contact binman.liu@tum.de by 31.07.2026.

For more detailed information on the projects, please visit
https://www.mls.ls.tum.de/rsi/research/working-group-dr-yang/