

Bachmair Lab

Master's Position

Introduction / Summary

The group of Andreas Bachmair investigates posttranslational modifications in the model plant *Arabidopsis thaliana*. One focus is the role of small ubiquitin-related modifier protein SUMO, which can be added to substrates and is important for responses to extreme environmental conditions. Mutants in sumoylation shall be characterized. Additional information can be found in the references below, and on the Bachmair lab web site.

About the position / the research project

Experimental approaches planned for the work:

- Investigation of protein turnover triggered by SUMO chains in normal plants versus mutants with defects in so-called SUMO-targeted ubiquitin ligases via proteome analysis, to identify potential substrates of this degradation pathway.
- Investigation of the role of sumoylation, and of SUMO-targeted protein turnover, in plant resilience towards heat, salt and other environmental insults.

Recent publications of the research group

Nehlin L. *et al.*, 2026, <https://doi.org/10.1111/nph.71581>.

Stael S. *et al.*, 2025, DOI: 10.1016/j.devcel.2025.02.010. PMID: 40068803.

Tomanov K. *et al.*, 2023, DOI: 10.1007/978-1-0716-2784-8_7. PMID: 36413312.

Candidates

Successful candidates should

- hold a (B. Sc.) degree in Molecular Biology, Biochemistry or a related field
- have experience with standard molecular biology techniques
- have interest in plant sciences

Application

- Please provide a CV, information on progress in the Master module and a statement of interest
- Send application to: andreas.bachmair@univie.ac.at
- By **October 25, 2026**
- Starting date can be November 2026 or later

Contact

Univ.-Prof. i.R. Dr. Andreas Bachmair – andreas.bachmair@univie.ac.at

Max Perutz Labs, University of Vienna Rm. 5110, Dr. Bohr Gasse 9, A-1030 Wien

<https://www.maxperutzlabs.ac.at/research/research-groups/bachmair>

About the Max Perutz Labs

The Max Perutz Labs are a research institute established by the University of Vienna and the Medical University of Vienna to provide an environment for excellent, internationally recognized research and education in the field of Molecular Biology. Dedicated to a mechanistic understanding of fundamental biomedical processes, scientists at the Max Perutz Labs aim to link breakthroughs in basic research to advances in human health. The Max Perutz Labs are located at the [Vienna BioCenter](#), one of Europe's hotspots for Life Sciences, and host around 40 research groups, involving approximately 450 scientists and staff from more than 50 nations.

www.maxperutzlabs.ac.at