



EBERHARD KARLS
UNIVERSITÄT
TÜBINGEN



CSC-Tübingen PhD Scholarship Program

2026/2027 application round: prospective PhD positions at the University of Tübingen

Faculty:	Faculty of Science
Institute / Section / Subject:	Center for Plant Molecular Biology / Plant Development
Supervising Professor(s):	dr. Margot Smit
About the Supervisor(s):	Independent Junior Group Leader who's lab focuses on researching the molecular mechanisms that control the timing and arrest of cell development in plants. Margot obtained her PhD from Wageningen University in the Netherlands studying the establishment of vascular cell identity in plant embryos. After a Postdoc at Stanford University where she studied stomatal development, she started her group at the ZMBP at the end of 2023. Since 2024 her group is supported by an Emmy Noether Fellowship from the DFG. In the group, lab members mainly use embryonic stomatal development to study what slows down their patterning and maturation. https://uni-tuebingen.de/fakultaeten/mathematisch-naturwissenschaftliche-fakultaet/fachbereiche/zentren/zentrum-fuer-molekularbiologie-der-pflanzen/research/research-groups/smit/
Specification/Project title:	Vascular cell maturation potential during plant embryogenesis
Topic Description:	In our recent work we find that embryonic stomatal cells are prevented from becoming mature during plant embryogenesis, only reaching maturity upon germination. Our lab looks at the complex cell states that arise when cells get stuck and the molecular mechanisms that underly this developmental block. You will expand this to vascular cells, testing which phloem and xylem cell maturation processes can be induced during embryogenesis. Can these cell types become functional? Does the embryonic block use the same regulators as those from the stomatal lineage? You will use genetic approaches and microscopy to characterize and manipulate embryonic cell states.
Intended Degree:	PhD
Type of the PhD Study:	Full-time (complete doctoral studies at the University of Tübingen)
Required Degrees and Qualifications:	MSc in Biology, Biochemistry or Plant Biology. Experience with Molecular Biology required. Experience with Plant Development, Genetics, Confocal Microscopy, Arabidopsis thaliana are each a pro.
Language Requirements:	English C1 or equivalent.
Notes:	Near-fluent English communication and writing skills are required within the first year. Must work well in a team environment. Needs to be able to work independently in a goal-oriented manner.