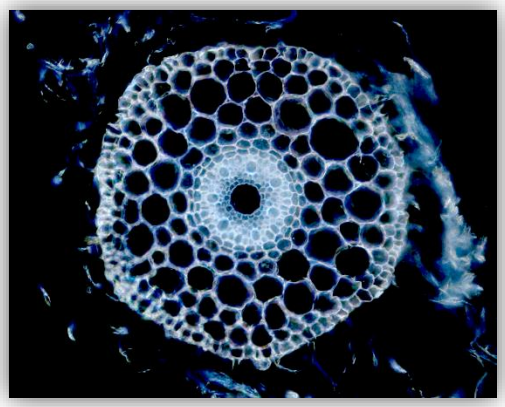
Master thesis

Gravitropism – a root trait to better cope with drought?

Project description:

Gravitropism is an important mechanism for roots to determine their growth direction. However, the molecular mechanism has not been unravelled yet. In our project, we characterise a barley mutant with hypergravitropic roots, both on phenotypic as well as molecular level to better understand how gravity is sensed and the signal is transmitted. Enhanced gravitropism of roots could be beneficient for drought conditions, therefore we also aim to analyse the ability of the mutant to deal with drought stress.



What you will learn:

Cloning techniques, *in situ* RNA hybridisation, staining techniques and microscopy, localisation of proteins by fluorescent tags

Candidate profile:

We are looking for a highly motivated, passionate student who has a strong interest in plant molecular biology. Applicants should have hands on experience in molecular biology as, for example, documented by successfully passing the courses Molecular Crop Science I and II.

Location:
As part of Professor Frank Hochholdinger´s group, you will work in the Friedrich-Ebert-Allee 144, 53113 Bonn (https://www.hochholdinger-lab.uni-bonn.de/).

Application:
For more information about the project, please contact Dr. Gwendolyn Kirschner (email: gkirschn@uni-bonn.de).