



Zurich, April 2020

Advertisement for a PhD position in plant-microbe interactions

The research

Plant – microbe interactions in natural environments can be crucial for plant health and yield. These interactions can be beneficial in agricultural settings as well, but the results of inoculating plants with beneficial microbes have been mixed. Thus, we aim at better understanding how plants shape their interactions with beneficial and pathogenic organisms so we can boost interactions with the former and diminish the impact of the latter. Specifically, this position takes different approaches on identifying and characterizing plant transporter proteins crucial for plant-microbe interactions. The work includes characterizing *Arabidopsis thaliana* and *Brachypodium distachyon* lines deficient of these transporters. This work will involve molecular biology and biochemistry techniques, liquid chromatography-mass spectrometry, analysis of microbiomes, as well as imaging techniques.

The requirements

The candidate should have a Master's degree or equivalent in plant biology or a related area, and have experience with basic molecular biology and laboratory techniques (cloning, sterile work with plants and bacteria) as well as with plant biology techniques (transformation, genotyping, phenotyping, infection assays). Experience in biochemistry (expression in heterologous systems, Western blot and protein purification techniques), analytical chemistry (LCMS, GCMS), and programming (Python or R) is not required but a plus. You should bring a strong interest for science, be highly motivated, and willing to think outside of the box. You are communicative with excellent oral and written skills in English, you support your team members, and work independently. You are eager to learn new skills and are happy to work in a competitive environment.

The position

We are a young group, offering a dynamic scientific environment, close mentorship, and an exciting working atmosphere. Our group is affiliated with Prof. Dr. Cyril Zipfel at a leading institute in plant & microbe biology. The institutes' scientific community is closely collaborating, and providing access to innovative technologies and state-of-the-art infrastructure.

As a PhD student, you will be part of the Plant Science Center Graduate Program, and will thus have access to a wide variety of courses as well as networking events.

Contact

Send your CV, letter of interest and at least two references to info.schlaepfer@botinst.uzh.ch.
The position will remain open until filled.