

# **Doctoral student (m/f/d) position on molecular mechanisms underlying symbioses between plants and arbuscular mycorrhiza fungi**

The MPI of Molecular Plant Physiology in Potsdam is looking for a **PhD student (m/f/d)** in the group „Root Biology and Mycorrhiza” of Prof. Dr. Caroline Gutjahr.

The position is available immediately and awarded as part of the TRR356 ‘Genetic diversity shaping biotic interactions of plants’ a collaborative consortium with the LMU and TU Munich and the University of Tübingen.

## **Background:**

The project aims at understanding the role of karrikin signalling, a plant hormone signaling pathway, in the development of a plant-fungal symbiosis called arbuscular mycorrhiza, in which plants and fungi exchange nutrients. Interestingly, the impact of this pathway on the symbiosis differs among plant species, and we want to understand the molecular basis for this phenomenon. The project will focus on the mechanistic function of one protein in symbiosis. The work will involve handling of plants and fungi and have a focus on protein biochemical methods as well as a number of molecular biology and microscopy techniques.

## **What we expect:**

- An MSc or equivalent degree in Biology, Biochemistry or a related subject, preferably with a specialization in plant biochemistry or plant molecular biology
- Some prior experience in one or more of the following aspects:
  - Handling of proteins
  - Molecular biology techniques
  - Confocal microscopy
  - Handling of plants and/or fungi
  - Statistical and/or bioinformatics data evaluation methods
- Very good command of English (oral and written)
- Curiosity, a strong motivation to excel in science, and a ‘can-do’ attitude
- A collaborative mind-set and good communication skills
- Efficiency and good organizational skills
- A positive attitude towards interacting with colleagues from different backgrounds and cultures

The project is not suitable for persons with a background in ecology, agronomy or agricultural sciences, except if this background includes a strong training in protein biochemistry or molecular biology.

## **What we offer:**

- Doctoral student position for three years (plus one), paid according to German public service pay scale (65% E13 TVöD Bund).
- Competent mentoring and additional training events and courses

- A stimulating environment in a dynamic, international team of cooperative and motivated scientists
- Access to the infrastructure of one of the leading plant science institutes
- Working in the beautiful town of Potsdam and near by the exciting urban area of Berlin

### **How to apply:**

Please upload your application by 15th November 2023 [here](#).

Please DO NOT apply by email.

However, screening of applications may start already before that date.

Please include these documents into your application:

- CV
- Contact information of minimum 2 referees
- Motivation letter explaining why you are interested in the project, in joining the group and why you are the right person to make progress in the field

For further information please contact Caroline Gutjahr. If you want to know more about the institute or the group, please have a look on the MPI-MP [homepage](#).