

PhD position in molecular plant-microbial interactions

A PhD position funded by the Karlsruhe Institute of Technology is available from March 2020 in the group of Prof. Dr. Natalia Requena at the Department of Molecular Phytopathology, Botanical Institute, Karlsruhe Institute of Technology for a period of three years.

Your project

The project will deal with the analysis of molecular mechanisms of communication between arbuscular mycorrhizal fungi and their host plants. Arbuscular mycorrhizal (AM) fungi form a mutualistic symbiosis with plant roots in which both partners provide nutrients to the other. To the success of the symbiosis, AM fungi and plants exchange molecular signals that serve to establish and maintain the symbiosis. AM fungi produce effector proteins that are able to manipulate the plant cell program. Your project will aim to unravel the mechanisms and plant targets of fungal effectors. (Please visit our homepage for more infos: <https://www.iab.kit.edu/heisenberg/>)

Your profile

You should have a master degree in Biology with a strong background in molecular biology of plants and a deep interest in plant-microbial interactions. Previous experience with plants and/or mycorrhizae is an advantage, as well as in bioinformatics. Proficiency in English both orally and written is a must. We expect you to develop critical thinking and critical reading abilities during your PhD.

Where we are and what we offer

We are located in the recently renewed Biology tower of KIT right in the city centre and have modern molecular laboratories and plant facilities perfectly equipped for this project. The Faculty of Biology and chemical Sciences at Karlsruhe Institute of Technology offers a broad coverage of organismal and molecular biology, including three fungal and four plant groups. The city is located in a green environment and offers an excellent quality of life with many cultural and outdoor possibilities. We offer a 3-year PhD position in an exciting international environment with a salary according to local agreements for PhD students.

Start of employment

The position is available immediately and will remain open until filled. The application should consist of a single PDF-file including letter of describing yourself, your research interests and motivation of why you want to do a PhD, and why you are suitable for the position, Curriculum Vitae, research experience and interests, the names and contact details of two referees, and full contact details of the applicant.