

PhD student position: Transcriptional regulation of plant-fungal symbiosis

To elucidate the molecular role of a transcriptional regulator in arbuscular mycorrhiza development

The position is available from 1st of January 2019 in the lab of Caroline Gutjahr at the Weihenstephan Campus of the Technical University in Freising, close to Munich. The position (income level German 65% TVL E13) is available for up to 4 years given suitability of the candidate, which will be examined during the first year.

In the Gutjahr lab we are interested in understanding the molecular mechanisms of arbuscular mycorrhiza development and function, using a combination of molecular, genetic, cell biological and biochemical methods. The project will be conducted mainly with the model legume *Lotus japonicus*. Our lab is equipped with state-of-the-art instrumentation for molecular, biochemical and cell biological research and we offer a dynamic, international and friendly research ambiance. The graduate student will be part of the collaborative research centre for plant science SFB924: <http://sfb924.wzw.tum.de/index.php?id=3>. In addition, there are multiple opportunities for scientific disciplinary and interdisciplinary interaction at the Weihenstephan Campus and core facilities for next generation sequencing, proteomics, metabolomics and high-end confocal imaging are available.

For more information visit our lab webpage: <http://genetik.wzw.tum.de/index.php?id=6>

The aim of the project is to investigate the role of a transcription factor in building an arbuscule containing cell - a plant root cell, which hosts a tree-shaped fungal structure called arbuscule.

We are looking for a strongly motivated and scientifically excellent candidate with team-spirit who should be intellectually independent, experimentally accurate and have excellent writing and communication skills in English. You should have a solid background in at least one of the following disciplines: molecular biology and genetics, cell biology and/or biochemistry. Some experience in working with plants is a strong plus.

We are thriving to increase the number of women in the lab and female candidates are strongly encouraged to apply. However, selection will be based on skills and excellence.

Please send your application including your CV, your list of publications (if any), the names of two referees and a motivation letter stating why you are interested in the topic, why you would like to join the Gutjahr lab and why you would be the right candidate to make progress in the field by email to: [caroline.gutjahr\[at\]tum.de](mailto:caroline.gutjahr[at]tum.de)

Review of applications will start at the 31th of October 2018 but applications will be accepted until a suitable candidate has been identified.

For further information on the research topic please have a look at the following articles:

Pimprakar P, Gutjahr C (2018) Transcriptional regulation of arbuscular mycorrhiza development. *Plant Cell Physiology*, 59: 673-679.

Pimprakar P, Carbonnel S, Paries M, Katzer K, Klingl V, Bohmer MJ, Karl L, Floss DS, Harrison MJ, Parniske M, Gutjahr C (2016) A CCaMK-CYCLOPS-DELLA complex activates transcription of *RAM1* to regulate arbuscule branching. *Current Biology* 26: 987-998.