



GEORG-AUGUST-UNIVERSITÄT  
GÖTTINGEN

The Department of Plant Cell Biology at the Schwann-Schleiden Research Center for Molecular Cell Biology, University of Göttingen offers a

## PhD position in Plant-Microbe Interaction Biology / Fungal effector biology

The position is DFG-funded and available for three years (EG 13 TV-L (50%) on the German pay scale; the appointment level reflecting qualifications and experience). We are looking to fill the position at the earliest possible date.

The department headed by Prof. Volker Lipka is interested in the molecular analysis of plant microbe interactions. The proposed research will focus on the interaction of vascular fungal pathogens of the genus *Verticillium* with the model plant *Arabidopsis*. In preliminary work we found *Verticillium* isolate-specific establishment of symptomless interactions or induction of two distinct developmental reprogramming patterns (Reusche *et al.*, Plant Cell 2012; Reusche *et al.*, Env & Exp Bot, 2014). In order to identify and understand the biological role(s) and mode(s) of action of lineage-specific *Verticillium* effector molecules that trigger plant symptom development, comparative genome and transcriptome analyses were initiated. These analyses allowed the identification of fungal effector candidate genes.

The PhD candidate will

- characterise fungal *ko* mutants that were already generated in regard to their virulence.
- characterise the properties and subcellular behavior of these effector candidate proteins.
- identify and characterize the plant targets of these effector candidate proteins.

The project will involve pathogen infection experiments, genetic analyses, next generation sequencing, molecular cloning, plant and fungal transformations, biochemical techniques for characterization of proteins, and cell biological methods such as confocal laser scanning microscopy.

Applicants should be highly motivated and show a strong interest in plant biology. They should also have basic experience in fungal and/or plant molecular biology or cell biology.

Our lab is located within the Schwann-Schleiden Research Center for Molecular Cell Biology at the North Campus of Göttingen University and is equipped with state-of-the art equipment and growth chamber facilities.

The University of Göttingen is an equal opportunities employer and places particular emphasis on fostering career opportunities for female scientists and scholars. Qualified women are therefore strongly encouraged to apply. Disabled persons with equivalent aptitude for the position will be favored.

Please send your formal application with the usual documents, quoting reference number **VL2-2015** by e-mail to [Anja.Auspurg@biologie.uni-goettingen.de](mailto:Anja.Auspurg@biologie.uni-goettingen.de) or by post to **z.Hd. Anja Auspurg, Georg-August-University Göttingen, Schwann-Schleiden Research Center for Molecular Cell Biology, Department of Plant Cell Biology, Julia-Lermontowa-Weg 3, D-37077 Goettingen. The closing date is 15 October 2015.**

Informal enquiries about the position are encouraged via [vlipka@gwdg.de](mailto:vlipka@gwdg.de) (website <http://www.uni-goettingen.de/de/33181.html>).

We request that you send us copies of your application documents, as no returns will be made. We will destroy the documents after a holding period of five months. Application documents will only be returned to you if you provide a self-addressed adequately stamped envelope.

