

# PhD in Fungal Effector Biology

Botanical Institute / CEPLAS

Foto: Thomas Josef

With approximately 50,000 students, the University of Cologne is one of the largest universities in Germany and ranks among the Excellence Universities. It employs over 600 professors and 7,000 academic and non-academic staff.

The Terrestrial Microbiology lab at the University of Cologne invites applications for two PhD students in fungal genetics / comparative genomics. The offered positions is part of a DFG-funded project on cell-type specific functions of fungal effector proteins. Major goal of the project is to uncover on the molecular level, how the maize pathogen *Ustilago maydis* induces tumor formation in maize leaves.

## YOUR TASKS

- » Identify tumor-inducing effector proteins. CRISPR/Cas9 mediated mutagenesis will be used to functionally analyze tumor-inducing *U. maydis* effectors
- » Study cell-type specific effects of tumor-inducing effectors using a cell biology approach
- » Identify the plant targets of tumor-inducing effector proteins
- » Understand the process of pathogen-induced tumor formation on the molecular level

## YOUR PROFILE

- » Fascination with fungal genetics, cell biology and molecular plant pathology
- » A MSc in Biology or comparable, demonstrated skills in fungal genetics and/ or molecular plant biology are mandatory
- » Excellent English skills, both written and spoken
- » Hands-on experience in confocal microscopy and sample preparation for fluorescence imaging is appreciated

## WE OFFER YOU

- » a diverse and fair working environment
- » support in reconciling work and family life
- » flexible working time models
- » extensive advanced training opportunities
- » occupational health management offers
- » local transport ticket at a discount for UoC employees

The position is available immediately on a part-time basis (50%). The position is available for three years. If the applicant meets the relevant wage requirements and personal qualifications, the salary is based on remuneration group 13 TV-L of the pay scale for the German public sector.

The University of Cologne promotes equal opportunities and diversity in its employment relations. Women are expressly encouraged to apply and given priority in accordance with the Equal Opportunities Act of North Rhine-Westphalia (Landesgleichstellungsgesetz – LGG NRW). We expressly welcome applications from individuals with severe disabilities or people of equivalent status. Severely disabled applicants of equal merit and qualifications will be given priority.

Please send your convincing application including brief statements on motivation, research interests, a CV, a list of publications, copies of certificates, and contact information for three referees by email (in one pdf-file) with the reference number Wiss1901-12 to Prof. Gunther Döhlemann ([g.doehlemann@uni-koeln.de](mailto:g.doehlemann@uni-koeln.de)).

The application deadline is the 17.02.2019.