



UNIVERSITY  
OF COLOGNE

Faculty of Mathematics and Natural Sciences



## PhD position on Fungal Effector Biology (f/m/x)

**CEPLAS | Institute for Plant Sciences / Terrestrial Microbiology Lab**

We are one of the largest and oldest universities in Europe and one of the most important employers in our region. Our broad range of subjects, the dynamic development of our main research areas and our central location in Cologne make us attractive for students and researchers from around the world. We offer a wide range of career opportunities in science, technology, and administration.

The Terrestrial Microbiology lab is affiliated with the institute for Plant Sciences and the Cluster of Excellence on Plant Sciences (CEPLAS) at the University of Cologne. We study molecular mechanisms of plant-microbe interactions with a focus on biotrophic fungal pathogens, in particular smut fungi. The successful candidate will conduct a doctoral project on the functional characterization of fungal transactivating effectors (TAEs). We invite highly motivated candidates with expertise in molecular plant pathology, microbial genetics, or plant immunity to apply for this position.

### YOUR TASKS

- » Elucidate the biological and molecular functions of fungal transactivating effectors (TAEs)
- » Study the function of novel TAEs in other maize leaf pathogens by using the *Ustilago maydis* pathosystem
- » Investigate how TAEs modulate the expression of host genes
- » Study the evolutionary adaptation of TAEs in fungal plant pathogens

### YOUR PROFILE

- » MSc degree in Biology or a related field, with documented expertise in molecular plant-microbe interactions
- » Experience in fungal genetics, fluorescence imaging, and transcriptome data analysis
- » Excellent English skills, both written and spoken
- » Strong interest in molecular plant-microbe interactions

### WE OFFER

- » State-of-the-art laboratories and an excellent research infrastructure
- » A diverse working environment with equal opportunities
- » Support in balancing work and family life
- » Extensive advanced training opportunities
- » Occupational health management offers
- » Flexible working time models
- » Opportunity to work remotely

The University of Cologne promotes equal opportunities and diversity. Women will be considered preferentially in accordance with the Equal Opportunities Act of North Rhine-Westphalia (Landesgleichstellungsgesetz – LGG NRW). We also expressly welcome applications from all suitable candidates regardless of their gender, nationality, ethnic and social origin, religion, disability, age, sexual orientation and identity.

The position is available from 1 February 2026 on a part-time basis (25,89 hours per week). The position is to be filled for a fixed term of 36 months. 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.

Please apply online with proof of the required qualifications without a photo under: <https://jobportal.uni-koeln.de>.

The reference number is Wiss2510-02.

The application deadline is 30.10.2025.

For further inquiries, please contact Professor Dr Gunther Döhlemann ([g.doehlemann@uni-koeln.de](mailto:g.doehlemann@uni-koeln.de)) and take a look at our [FAQs](#).