



UNIVERSITY
OF COLOGNE

Faculty of Mathematics and Natural Sciences

PhD in plant-microbe interactions (f/m/x)

Institute for Plant Sciences / CEPLAS



Foto: Fabian Stürtz

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 offered position is part of the newly established DFG Research Unit MadFungi (<https://portal.uni-koeln.de/en/uni-versitaet/aktuell/press-releases/single-news/new-dfg-research-unit-investigates-how-fungi-adapt-to-host-plants>), which will investigate the mechanisms of niche adaptation of plant-colonizing fungi. The successful applicant will join the project "Molecular mechanisms of niche competition by biotrophic smut fungi" at the Doeblemann lab. The project aims to elucidate the mechanistic basis of *Ustilago*-induced suppression of secondary pathogen infection as a mechanism of fungal niche competition in barley.

YOUR TASKS

- » Characterize direct interactions of *Ustilago hordei* with fungal pathogens and commensal bacteria of barley
- » Investigate the role of effector proteins in the microbial competition of plant-colonizing smut fungi
- » Study barley transcriptional programs that shape niche adaptation during fungal co-infections
- » Collaborate with project partners working on mechanisms of fungal competition in barley interactions

YOUR PROFILE

- » MSc in biology or comparable and documented skills in molecular plant-microbe interactions
- » Experience in fungal genetics, fluorescence microscopy and analysis of transcriptome data is desirable
- » Excellent English skills, both written and spoken
- » Fascination for molecular plant – microbe interaction

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 December 2024 on a part-time basis (25,89 hours per week). The position is to be filled for a fixed term of up to 3 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.

Please apply online with proof of the required qualifications without a photo under: <https://jobportal.uni-koeln.de>. The reference number is Wiss2409-09. The application deadline is 4 October 2024. For further inquiries, please contact Professor Dr Gunther Doeblemann (g.doeblemann@uni-koeln.de).



HR EXCELLENCE IN RESEARCH