



2 postdoctoral researchers (f/m/x) in Ascomycete infection biology

Institute of Plant Sciences

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 Evolutionary Microbiology group aims to gain fundamental insights into understand how fungal pathogens cause disease in their plant hosts. To this end, we study the mechanisms of pathogenicity and virulence and how such mechanisms evolved and continue to evolve. This research is performed in the context of the plant as a "holobiont", i.e. an assemblage of host plants and their immune systems, but also of many other species that live in or around the plant and contribute in some way to its functioning.

We invite candidates to apply for one of the following projects:

- 1) Bioinformatic analysis of Ascomycete vascular wilt pathogens
- 2) Quantitative genetics and Ascomycete evolution and adaptation to the environment

YOUR TASKS

Project 1)

- » Identify and analyse genes that underpin infection of vascular wilt pathogens on their plant hosts based on comparative genomics
- » Identify leads for functional analysis that can be followed up by wet-lab experiments

Project 2)

- » Identify and analyse genomic elements that mediate the evolution of pathogenicity on a diversity of plant hosts
- » Perform experimental evolution experiments and address the role of candidate elements in fungal aggressiveness

YOUR PROFILE

- » PhD in bioinformatics, microbiology, molecular biology, plant science or related discipline
- » For project 1: Proven bioinformatic expertise on Ascomycete vascular wilt pathogens, including publication record
- » For project 2: Proven wet-lab expertise on Ascomycete genetics, evolution and adaptation in the context of host and environmental adaptation, including publication record
- » Unwavering commitment to high-quality research

- » Drive, curiosity and creativity as well as a strong ability to solve problems through critical analytical thinking
- » Excellent communication skills, fluency in English and the ability to collaborate effectively in an international and multidisciplinary team

WE OFFER

- » The opportunity to work in an interactive and international research group with state-of-the-art facilities
- » A diverse working environment with equal opportunities
- » Support in balancing work and family life
- » Flexible working time models
- » Extensive advanced training opportunities
- » Occupational health management offers

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 positions are available from 01 September 2024 on a full-time basis (39,83 hours per week). The contracts are to be filled for a fixed term for 2 Years. If the applicant meets the relevant wage requirements and personal qualifications, the salary will be 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 Wiss2407-03. The application deadline is 21 July 2024.