



## 2 Postdoctoral Researchers (f/m/x) in Plant Metabolism and Immunity

### Institute for 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 new research initiative 'Immunometabolism in Health and Disease', financed by the Federal State of North Rhine-Westphalia, is a highly interdisciplinary project in which molecular, cellular and biochemical data from plant and animal systems will be produced to advance the understanding of cellular metabolic programmes underpinning immune responses. This is expected to lead to the first integrated map of immunometabolism in plants and animals, including rational targets for therapeutic intervention.

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

- 1) Investigation and identification of host-derived molecules that play regulatory roles on microbiomes
- 2) Interference of the fungal root microbiota with TIR-mediated plant immunometabolism

#### YOUR TASKS

Project 1)

- » Identify and functionally analyse infochemicals (signalling molecules and metabolites) that underpin host-microbiota interactions in healthy and diseased hosts
- » Study host- and microbe-derived metabolite signals that drive metabolic interdependence in host-microbe interactions and the evolution of these interdependencies

Project 2)

- » Characterize novel nucleotide-based molecules
- » Identify new active metabolites affecting fungal accommodation

Detailed information about both projects can be found under:  
<https://ag-zuccaro.botanik.uni-koeln.de/ihead>

#### YOUR PROFILE

- » PhD in microbiology, molecular biology, plant science, biochemistry or related discipline
- » Proven expertise in plant metabolism, immunity and/or molecular biology, including publication record
- » Experience with *A. thaliana* knockout mutants and functional genomics or fungal genetics

- » Proficiency in data analysis and modelling techniques is an advantage
- » 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 with a multi-disciplinary 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
- » Extensive advanced training opportunities
- » Occupational health management offers
- » Flexible working time models

The University of Cologne is committed to equal opportunities and diversity. Women are especially encouraged to apply and will be considered preferentially in accordance with the Equal Opportunities Act of North Rhine-Westphalia (Landesgleichstellungsgesetz – LGG NRW). We also expressly welcome applications from people with disabilities / special needs or of equal status.

The positions are available immediately on a full-time basis (39,83 hours per week). They are to be filled for a fixed term until 31.10.2026. 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 send your application with proof of the required qualifications without a photo online to:  
<https://jobportal.uni-koeln.de>. The reference number is Wiss2402-16. The application deadline is 21.03.2024. For further inquiries, please contact Margaret Kox ([mkoxl@uni-koeln.de](mailto:mkoxl@uni-koeln.de)).