



UNIVERSITY
OF COLOGNE

Faculty of Mathematics and Natural Sciences

PhD position (f/m/x) in biological physics and systems biology

Institute for Biological Physics | Bollenbach Group



Photo: Thomas Jusek

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 Bollenbach Group at the Institute for Biological Physics investigates interactions in microbial systems, especially in the context of antibiotic resistance and polymicrobial consortia. The group combines concepts and techniques from physics with molecular and microbiology.

YOUR TASKS

- » Establish techniques to measure microbial community composition by plating colonies on chromogenic agar and using next-generation sequencing
- » Perform high-throughput co-culture assays with bacteria isolated from polymicrobial infections using laboratory automation
- » Test predictions of mathematical models on polymicrobial infection datasets (together with collaborators)
- » Computational analysis of experimental data and improvement of theoretical models

YOUR PROFILE

- » MSc degree in biological physics, quantitative biology or a related field
- » Strong interest in interdisciplinary research between physics and biology
- » Experience in programming, statistics or microbiology is an advantage, but not essential
- » Strong communication skills
- » Applicants should be highly motivated and able to work independently

WE OFFER

- » An interactive and supportive research environment
- » 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 01.11.2024 on a part-time basis (25,89 hours per week). The position is to be filled for a fixed term until 28.02.2027. 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 Wiss2407-22. The application deadline is 26.08.2024.

For further inquiries, please contact Professor Dr Tobias Bollenbach (t.bollenbach@uni-koeln.de).



HR EXCELLENCE IN RESEARCH