We are looking to support our rapidly growing team starting February 1, 2026:

Postdoctoral Researcher (f/m/x) – Multi-Omics & Drug Discovery

Department I of Internal Medicine, Division of Infectious Diseases

TV-L: 38,5 h/week (100%)

limited for 3 years according to WissZeitVG (Third-party funded project) with option for extension

Your salary will be based on TV-L

Your tasks

- Performance of state-of-the-art antibiotic drug discovery studies targeting *Mycobacterium tuberculosis* (*Mtb*) using an automated screening pipeline
- Development and optimization of these screening pipelines for *Mtb* fitness and resistance phenotyping
- Integration of transcriptomic, proteomic and phenotypic datasets for predictive modelling of *Mtb* resistance evolution
- Coordination of robotic instrumentation for large-scale liquid handling workflows
- Close collaboration with bioinformatics and microbiology teams within the CRC1310
- Performance of barcoding and recombineering-based strain engineering
- Presentation of the data within meetings as well as national and international congresses
- Publication of the results in high-impact journals

Your profile

- You hold a PhD in Microbiology, Biotechnology, Systems Biology or related field
- Experience in high-throughput screening, automation or robotics platforms

Your future with us

We are one of the leading university hospitals in Germany and network research, teaching and health care at the highest level. That's why many things are a lot bigger for us: the spectrum of exciting development opportunities. The limitless openness with which specialists from all over the world work together here. Or our commitment as an employer to support all employees as best we can in reconciling their job with their goals and life situations.

This is the University Hospital of Cologne: Everything but ordinary.

Your future in detail

The Translational Research Unit – Infectious Diseases (TRU-ID) within the Division for Clinical Infectious Diseases conducts research aimed at improving our immunological understanding of infectious diseases. Our ultimate goal is to develop innovative therapies for serious bacterial infections like tuberculosis. With the support of our close network of partners at the University of Cologne, as well as our national and international collaborators, we are working to advance these innovative therapeutic concepts towards clinical application. Our studies are funded by the German

- Knowledge of data handling, scripting (R/Python), or bioinformatics pipelines is desirable
- Experience in laboratory work with *Mtb* (BSL3) is beneficial but not required
- Independent and structured work style, enthusiasm for interdisciplinary collaboration
- Excellent English communication skills, both spoken and written

Our offer

- **Everything but ordinary:** You can expect a secure job in a challenging, innovative environment – including company pension schemes and regular working hours without business trips.
- **Work-life balance:** Whether full-time or part-time, with or without children – with numerous support options, we will find the right path together.
- **Team spirit in R(h)ine culture:** You will be warmly welcomed by an interdisciplinary team that values mutual respect and helpfulness.
- **Strong perspectives:** We offer extensive training opportunities – so you can continuously grow and set new goals.

Centre for Infection Research (DZIF), the Federal Ministry of Education and Research (BMBF), the German Research Foundation (DFG) and the European Union, among others.

As part of the DFG's Collaborative Research Centre 1310 (Predictability in Evolution), your project will focus on implementing robotics-based, high-throughput screening workflows and integrating multi-omics data to study the evolutionary dynamics of *Mtb* antibiotic resistance. You will therefore take advantage of state-of-the-art equipment (e.g. a Beckman Echo/Access liquid handler workstation and an Agilent Cytation 10 confocal plate imager/reader) in BSL2 and BSL3 laboratories located at the Center for Molecular Medicine Cologne (CMMC) and the Translational Research in Oncology and Infectious Diseases (TRIO) building.

Applications from female candidates are expressly welcome and will be given priority in the event of equal suitability, competence and professional performance. People with disabilities are welcome to apply and will be treated preferentially in the event of equal suitability and qualification. The position is suitable for staffing with part-time employees.

Contact

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Geschäftsbereich Personal
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Uniklinik Köln Karriere

Application deadline: 18.01.2026

Job-ID: ujlc60ex

apply now

We look forward to receiving your application and getting to know you!