

High-throughput laboratory evolution to study antimicrobial resistance

Postdoc position

The “Microbial Pangenomes Lab” at Twincore/MHH (Hannover, Germany) is looking to hire a postdoc to study antimicrobial resistance (AMR) using high-throughput laboratory evolution and genomics. Potential research topics include the influence of genetic background on the evolution of AMR, dynamics of horizontal gene transfer in microbial communities, and resistance to sequence-based therapeutics.

We offer:

- the opportunity to work on interesting biological questions on a pressing societal problem
- great working conditions in an [affordable city](#)
- mentoring and opportunities to develop new skills such as computational biology

Requirements:

- a PhD in the broad areas of molecular biology, microbiology or evolutionary biology
- demonstrable experience in molecular biology, microbial culturing, microbial genomics
- fluent English speaking and writing skills (German is not required)

Optional requirements:

- performed research in the area of antimicrobial resistance
- prior experience with computational biology
- prior experience with high-throughput liquid handling platforms

The contract is initially for two years with the possibility of a further extension. Candidates should apply following this link: https://mhh.hr4you.org/job/view/686/postdoc-f-d-m?page_lang=en. Informal inquiries are possible by sending an email to galardini.marco@mh-hannover.de.

The institute: Twincore is a joint venture between Hannover Medical School (MHH) and the Helmholtz Centre for Infection Research (HZI). At Twincore medical personnel and basic research scientists from various disciplines conduct infection research side by side. The institute focus is on translational research, *i.e.* the interface between basic research and clinical development. Internationality is another key feature of the institute: almost half the scientists working at Twincore are from abroad. Read more about the institute here: <https://www.twincore.de/en/about-twincore/>.

The lab: The “Microbial Pangenomes Lab” has been established in October 2020 as part of the Molecular Bacteriology department. The lab is lead by Marco Galardini and its main research focus are bacterial pangenomes, the influence of genetic variation on phenotypes and the evolution of antimicrobial resistance. The lab has funding for the next 5 years from the RESIST excellence cluster (<https://www.resist-cluster.de/en/>), with the potential for an additional 5-year extension pending a successful review.