

Job announcement No. 147/2024

The department **Bacterial Infection Ecology** led by Dr. Martin T. Jahn, at the Helmholtz Centre for Infection Research (HZI), is offering the position as

Doctoral Researcher (f/m/d)

As a member of the Helmholtz Association, the Helmholtz Centre for Infection Research, based in Braunschweig, conducts top-level research in the field of infectious diseases. Our scientists develop novel methods and strategies to fight infectious diseases faster and more effectively. Our common goal is to develop novel approaches for the prevention, diagnosis and treatment of infectious diseases. Our research focuses on bacterial and viral pathogens, their interaction with the human immune system and new effective substances and vaccines.

The Research Unit:

The Jahn Lab, located at the Helmholtz Centre for Infection Research (HZI) in Braunschweig, is at the forefront of microbiome research, focusing on the spatial structure of our microbiota and its impact on health. We are a growing, dynamic team that offers opportunities for new members to set their mark and to shape the labs culture and development.

With our technology-driven approaches to mapping the microbiota, we aim to unlock how our microbial communities promote health and defend against disease. Under the leadership of Dr. Martin Jahn (website: <https://martinjahn.co.uk>), the unit values collaboration and creativity, encouraging team members to contribute their unique perspectives. The open nature of the lab allows members to actively participate in the shaping of cutting-edge projects.

Mission: The mission of the Jahn lab is to pioneer research on the spatial ecology of microbiota and its interactions with the mammalian host, contributing to the HZI's broader focus on understanding and combating infectious diseases. By investigating how the structure of the gut microbiota influences health, pathogen resistance, and inflammation, we aim to make significant strides toward the development of microbiome-based therapies.

The PhD project, "Mapping the Spatial Ecology of Gut Infection," aims to investigate how the spatial organisation of gut microbiota influences infection outcomes. Towards this goal, the successful candidate will use and further develop cutting-edge imaging techniques, with an initial focus on the pathogen *Salmonella enterica*. Within this framework, the work offers flexibility to incorporate the skills and interests of the successful candidate.

Qualifications:

- Master's degree or equivalent in Biotechnology, Life Sciences, or related fields
- Experience in microbiology, incl. molecular biology and fluorescence microscopy techniques
- Strong interest in combining wet lab & computational approaches, with a technical affinity such as towards automation, imaging, and AI
- Basic coding skills in R and/or Python
- Excellent English communication skills (written and spoken)
- Ability to work independently and as part of a team
- Proactive and collaborative attitude, with organizational skills, and creative thinking

Advantageous but not essential for this position:

- Experience in animal experimentation (e.g., FELASA standards, or comparable)
- Experience in human and/or animal cell culture
- anaerobic culture of bacteria
- Previous work at biosafety level 2

Disabled persons are given preference in the case of equal professional qualifications. The HZI aims for professional equality between women and men. The position is suitable for part-time work.

We offer:

- Modern laboratories, including S3 unit
- State-of-the-art analytical instrumentation
- Ample biological profiling platforms (*in vitro* and *in vivo*)
- A lively scientific community
- 30 days vacation, (24.12. & 31.12. are considered as completely free days)
- An annual additional payment (Weihnachtsgeld) analogue to § 20 TVöD
- Social security included
- Flexible working hours and workplace design
- DO IT- PhD initiative <https://www.helmholtz-hzi.de/de/karriere/do-it-doktorandeninitiative>
- A corporate culture of appreciation and promotion of equal opportunities
- Welcome Office
- Buddy System for new doctoral researchers
- Family Office, Child Holiday Care

The successful candidate will be integrated in the HZI International Graduate School for Infection Research (GS-FIRE) which provides an innovative structured PhD programme within the field of Infection Research <https://www.helmholtz-hzi.de/de/karriere/graduierenschule/curriculum/>.

Starting date:	Early 2025 - initial contract for 3 years
Salary:	alike TVöD (Bund) E13 (65%)
Place of work:	Braunschweig
Probation period:	6 months
Published on:	21.10.2024
Closing date:	17.11.2024

For more details regarding the position, please contact Dr. Martin Jahn, email: martint.jahn@helmholtz-hzi.de.

Further information about the institute can be found on our website: <https://www.helmholtz-hzi.de/en>

How to apply:

When sending us your application documents, **please confirm** that you have read our privacy policy and that you agree to the processing of your personal data. Please use the text module in our [privacy](#)

[policy](#) for this purpose. **Without these declarations we cannot consider or process your application** and will immediately delete any application documents already received after the application deadline.

Please include a cover letter, resume, (employment) references, certificates, and (if available) work samples or reference projects with your application materials. Please refrain from sending a photo.

Please send your complete application, quoting the **reference number 147/2024**, to the Helmholtz Centre for Infection Research GmbH, Human Resources Department, Inhoffenstr. 7, 38124 Braunschweig, Germany or by [e-mail](#). If you send your application in electronic form, please provide a **summary in one single (1) pdf document**.

We look forward to receiving your application!