

Job advertisement no. 148/2024

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

Postdoc (m/f/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.

About the Research Unit: The Bacterial Infection Ecology Laboratory, 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 map microbiota, we aim to unlock how our microbial communities promote health and defend against disease.

Mission: Our mission 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 gut microbiota influences health, pathogen resistance, and inflammation, we aim to make significant strides toward the development of microbiome-based therapies.

Unit Size and Management: The Laboratory is an innovative research group, currently in a growth phase. 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.

Project: How exactly do gut microbiota manipulate their mammalian host?

We are hiring a highly motivated postdoctoral immunologist to carry out innovative research on host-microbe interactions with a vision for clinical applications. As a core member of the Bacterial Infection Ecology Laboratory, you will rigorously screen and then validate in vivo the effects of the human gut microbiota on mammalian cells using a combination of bioinformatics and cell assays. By characterising how microbiota influence host responses, this position offers a unique opportunity to pave the way for symbiont-mediated immune modulation in the context of inflammation and infection. Embedded in the core infrastructure of the Helmholtz Centre for Infection Research (HZI), this position offers resources and collaborative support. If you are passionate about advancing microbiome research and working towards meaningful therapies, we encourage you to apply.

Responsibilities:

- Advancing our research on host-microbes
- Independently conducting research tasks in our department
- Investigating the influence of human microbiota on mammalian cells using a combination of bioinformatics and cell assays, and subsequently validating them in vivo
- Preparing and presenting research results
- Supervising and providing collaborative support to research associates

Requirements:

- Successfully completed university or master's degree in natural or life sciences with a focus on immunology, microbiology and/or biotechnology with a doctorate
- Practical experience in molecular biology research, particularly in techniques such as heterologous expression of proteins and analysis of samples with fluorescence microscopes
- In-depth knowledge of microbiology, including experience in the cultivation and handling of microorganisms
- Knowledge in the field of cell culture and immunology
- Experience in working with laboratory animals (e.g. according to FELASA standard or comparable)
- Basic knowledge of programming with R and/or Python, good knowledge of MS Office
- Very good written and spoken English

We offer you:

- An attractive and varied job in a future-oriented research institute with an international environment at the Science Campus South in Braunschweig
- A state-of-the-art infrastructure and the latest technologies
- Flexible working hours, part-time models
- A corporate culture of appreciation and promotion of equal opportunities
- Extensive training and continuing education opportunities to develop professional knowledge and personal skills
- A family office to support family and career as well as childcare offers
- Interesting additional public service benefits
- Subsidising a job ticket for public transport

People with severe disabilities and equivalent professional qualifications who are suitable for the position are given preference. In order to protect your rights, we ask you to provide us with a clearly recognizable reference to the existence of a degree of severe disability in your cover letter or resume.

The HZI is actively committed to equality, diversity and integration. For this reason, the HZI pursues the goal of professional equality between women and men. The position is suitable for part-time work.

Starting date:	As soon as possible. The contract will initially run for 2 years.
Salary:	E13 TVöD Bund
Working time:	39 hours per week
Place of work:	Braunschweig
Probation period:	6 months
Published:	06.11.2024
Closing date:	28.11.2024

For further information please contact Dr. Martin Jahn, email: martint.jahn@helmholtz-hzi.de.

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 148/2024**, 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!