

Job advertisement no. 166/2024

The research group Nanoscale Infection Biology (NIBI) led by Dr. Christian Sieben at the Helmholtz Centre for Infection Research (HZI), is offering a position as

Postdoctoral 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.

About our group: Research in our group aims to understand how viruses use and alter cellular structures for cell entry and assembly, how they exploit and control plasma membrane signaling and if these mechanisms can be used to inhibit virus infection. The HZI is a multidisciplinary research center devoted to understand and combat infectious diseases.

About the project: Viruses are nanoscale entities. The cellular plasma membrane represents the first obstacle viruses need to overcome to initiate infection. Our group recently developed an inverted infection assay (Broich, bioRxiv, 2024) that can be used to investigate virus-cell interaction at the nanoscale. The project is part of a larger European consortium with the aim to identify virus-interacting cellular factors, investigate their role in infection and target them with small molecules and antibodies. Our group at HZI will focus on studying receptor organization, virus-receptor signaling and virus entry. We will use super-resolution single-molecule microscopy in combination with single-virus tracking to get mechanistic insights into the first minutes of the infection process.

Responsibilities:

- Scientific work as part of an interdisciplinary project in a larger European team
- Development and optimization of our infection platform for ventral infection of epithelial cells
- Research in the field of virus-cell biology using advanced live cell imaging in laboratories up to BSL3

Requirements:

- Completed scientific university degree in biology, natural sciences or related discipline
- Ability to work in a multidisciplinary and international team
- Experiences with independent planning of experimental methods
- Experience of working in an S2 laboratory
- Good written and spoken English skills
- Good knowledge of methods in cell biology and microscopy

Advantageous for this position:

- Doctorate/PhD in the field of cell biology, virology or comparable
- Experimental knowledge in virology
- Expertise in advanced microscopy techniques (super-resolution, single-molecule imaging)
- Expertise in custom computational data analysis, programming

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 as well as home office
- 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
- Possible subsidy of 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 two years. A long-term employment is desired, regardless of whether it is part-time or full-time.
Salary:	E13 TVöD Bund
Working time:	39 hours per week
Place of work:	Braunschweig
Probation period:	6 months
Published:	09.12.2024
Closing date:	31.12.2024

For further information please contact Christian Sieben, phone 0531 6181 2950, email: christian.sieben@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 motivation letter, resume, two contacts who can provide references and certificates. Please refrain from sending a photo.

Please send your complete application, quoting the **reference number 166/2024**, 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!