

Job announcement no. 120/2025

The Helmholtz Institute for RNA-based Infection Research (HIRI) is offering a

Postdoctoral position: “Bacterial immunity against RNA phages” (f/m/d)

in the research group *Molecular Principles of RNA Phages* under the direction of Jun. Prof. Jens Hör.

The Helmholtz Institute for RNA-based Infection Research (HIRI) is the first institution of its kind worldwide to combine ribonucleic acid (RNA) research with infection biology. Based on novel findings from our strong basic research program, our long-term goal is to develop innovative therapeutic approaches to better diagnose and treat human infections. HIRI is a site of the Braunschweig Helmholtz Centre for Infection Research (HZI) in cooperation with the Julius-Maximilians-Universität Würzburg (JMU) and is located on the Würzburg Medical Campus.

More information at www.helmholtz-hiri.de.

Phages are viruses that specifically infect bacteria. They are important sources of biotechnological tools and can further be used to combat bacterial infections, thus having the potential to help overcome the ongoing crisis of multidrug-resistant bacterial pathogens. Research in the Hör lab focuses on understanding the molecular mechanisms of phages with RNA genomes during infection, host takeover, and anti-phage defense. Bacteria use so-called defense systems to protect themselves against phage infection. Until recently, only three major classes of defense systems were known. Over the last five years, however, more than a hundred new defense systems have been discovered, many of which are the evolutionary origins of human innate immune systems. Despite these tremendous successes, little is known about how bacteria defend themselves against RNA phages.

Responsibilities:

The postdoctoral fellow will develop an unbiased, global approach to first identify new such systems and then study their molecular mechanisms in detail. In addition, scientific publications will be written and other research assistants will be supervised in their research. The postdoc will also be responsible for planning and implementing quality controls and method developments.

Requirements:

- Completed university degree in natural sciences with a PhD in biology, biochemistry, microbiology, biotechnology, or a related field
- Prior experience in phage biology, molecular biology, microbiology, and/or biochemistry
- Strong publication record given career stage
- Several years of experience in elucidating mechanistic processes in cells
- Experienced in culturing microorganisms
- Fundamental understanding of genomics
- Independent and able to work as part of an international team
- Strong written and spoken English language communication skills

We offer you:

- An attractive and varied job in a future-oriented research institute
- 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
- Option of an additional employer subsidy for the job ticket

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.

The position is held at the Helmholtz Centre for Infection Research GmbH (HZI) in Braunschweig. The place of employment is Würzburg.

Starting date:	February 1, 2026. The contract will initially run for two years. However, a longer-term commitment is aspired regardless of full- or part-time employment.
Salary:	E13 TVöD Bund
Working time:	39 hours per week
Place of work:	Würzburg
Probation period:	6 months
Published:	16.10.2025
Closing date:	13.11.2025

For further information please contact Jun. Prof. Jens Hör, phone +49 931-31-80042, jens.hoer@helmholtz-hiri.de
For more information about the HIRI look at www.helmholtz-hiri.de. More information at www.helmholtz-hiri.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 120/2025**, 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!