



## Job announcement no. 5/2022

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

### Postdoc “RNA biology of *Fusobacterium nucleatum*” (f/m/d)

for the research group “RNA Biology of Bacterial Infections” of Professor Jörg Vogel.

The Vogel lab strives to chart the diversity of noncoding RNA functions and RNA-binding proteins in major bacterial pathogens and in the hundreds of different bacteria that make up the human microbiome. We develop new RNA deep sequencing-based techniques to capture the RNA world of any microbe, ideally at the single cell level. We want to understand how and why bacteria use noncoding RNA as a regulator during infection and exploit this knowledge to target pathogens and edit the microbiota with precision.

*Fusobacterium nucleatum*, long known as a constituent of the oral microflora, has recently garnered renewed attention for its association with several different human cancers including breast and colorectal cancers. The growing interest in this emerging cancer-associated bacterium contrasts with a paucity of knowledge about its basic gene expression features and physiological responses. As fusobacteria lack all established small RNA-associated proteins (such as CsrA, Hfq, or ProQ), post-transcriptional networks in these bacteria are also unknown. In recent work, we have generated high-resolution global RNA maps for five clinically relevant fusobacterial strains and discovered an unexpectedly large number of small regulatory RNAs (Ponath F et al. 2021 Nature Microbiology). In addition, we have developed new genetic tools and identified a candidate of novel small RNA-binding protein.

#### Responsibilities

We now seek a postdoctoral scientist interested in the functional characterization of the small RNAs of these fascinating yet understudied bacteria. Using RNA-centric approaches, we want to delineate the regulatory networks and molecular mechanisms that enable *F. nucleatum* to adapt to different environments in the human body.

#### Requirements

- PhD or equivalent in biology or microbiology
- A strong background in RNA biology
- Experiences in protein-RNA and RNA-RNA interaction studies
- Highly motivated and independent
- Trained to work in multidisciplinary environments
- Strong written and spoken English language communication skills

#### Requirements (non-essential)

- Hands-on experience in handling microorganisms
- Background in host-microbe interactions

#### We offer

We offer state-of-the-art infrastructure and cutting-edge technologies to promote scientific progress and interdisciplinary collaboration. We focus on a close integration of research and management and strive for excellence inside and outside the laboratory. Promoting equal opportunities and competencies for our employees and



celebrating diversity are a matter of course for us. To ensure a good work-life balance, we have created a family-friendly atmosphere with flexible working hours and part-time models, a parent-child room and regular social activities.

Employment is through the Helmholtz Centre for Infection Research (Helmholtz-Zentrum für Infektionsforschung GmbH / HZI) in Braunschweig. The place of work is Würzburg. The position is suitable for part-time work. The HZI strives for professional equality between women and men. Therefore, women are especially encouraged to apply. 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.

<b>Starting date:</b>	As soon as possible. The contract will initially run for two years. However, a longer-term commitment is aspired regardless of full- or part-time.
<b>Salary:</b>	E 13 TVöD Bund
<b>Working time:</b>	39 hours per week
<b>Place of work:</b>	Würzburg
<b>Probation period:</b>	6 month
<b>Published:</b>	22.12.2021
<b>Closing date:</b>	18.01.2022

### How to apply

We look forward to receiving your complete application including a cover letter, CV without picture, certificates, and reference projects. Please provide us with reference names in your CV. Please send your application quoting the reference number **5/2022** to the Helmholtz Centre for Infection Research GmbH, Human Resources Department, Inhoffenstr. 7, 38124 Braunschweig, Germany or by email to [JobsHIRI@helmholtz-hzi.de](mailto:JobsHIRI@helmholtz-hzi.de). If you send your application in electronic form, please provide a **summary in one single (1) pdf document**.

For further information please contact Dr. Tobias Kerrinnes, phone 0931 31 83639, email: [tobias.kerrinnes@helmholtz-hiri.de](mailto:tobias.kerrinnes@helmholtz-hiri.de).

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.

### About the HIRI

The Helmholtz Institute for RNA-based Infection Research (HIRI) is the first institution 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 joint venture of the Helmholtz Center for Infection Research (HZI) in Braunschweig and the Julius Maximilians University of Würzburg (JMU) and is located on the Würzburg Medical Campus. More information at [www.helmholtz-hiri.de](http://www.helmholtz-hiri.de).