



## **Job announcement no. 79/2022**

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

### **Postdoctoral Position in Spatial Single-Cell Genomics**

in the Research Group Single Cell Analysis (SIGA) under the direction of Emmanuel Saliba, PhD.

The Saliba lab at HIRI is recruiting a postdoc to work on spatially resolved single-cell genomics in the context of infection biology. Infected tissues are made of a myriad of different cell types and have complex anatomies with apparent infection lesions surrounding the bacteria. Each lesion will progress differently during the infection course depending on whether it has been able to control the bacteria or foster a permissive microenvironment favoring bacterial regrowth and dissemination. Unfortunately, the cellular architecture of permissive lesions remains poorly known. Infected tissues are often deep in the body and are hardly accessible to live-cell imaging technologies. Fortunately, the recent emergence of single cell genomics, spatial transcriptomics and temporal single cell transcriptomics are well poised to unveil the complex host-pathogen crosstalk in native tissues. Saliba lab has been pioneering the development of single-cell genomics applied to dissect infection processes including scSLAM-seq and single-bacteria RNA-seq (see for example Erhard et al. *Nature* 2019; Imdahl et al. *Nature Microbiology* 2020). Saliba lab is also leading the effort in understanding the basis of COVID-19 pathogenicity (see for example Wendisch et al. *Cell* 2021). The proposed project will establish disruptive single-cell genomics to study chronic infectious diseases and their progression within deep tissues.

#### **Requirements**

- PhD or equivalent in biology, biochemistry, genomics, microbiology or a related field of the life sciences
- Strong background in Genomics and RNA biology
- Experience with next-generation sequencing methods, such as RNA-seq, or single-cell RNA-seq
- Experience with RNA-seq data analysis
- Strong written and spoken English language communication skills
- Highly motivated, organized, and independent

#### **Desired (non-essential) background**

- Background in molecular infection biology

#### **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 2 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 months
<b>Published:</b>	02.05.2022
<b>Closing date:</b>	29.05.2022

### How to apply

We look forward to receiving your complete application including a cover letter, CV without picture, and certificates. Please refrain from submitting a picture along with your application. You are welcome to provide us with reference names in your CV. Please send your application quoting the reference number **79/2022** 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 Emmanuel Saliba, email: [emmanuel.saliba@helmholtz-hiri.de](mailto:emmanuel.saliba@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 <http://www.helmholtz-hiri.de>