

Job advertisement no. 15/2023

The institute for Experimental Virology, led by Prof. Thomas Pietschmann, at TWINCORE - Center for Experimental and Clinical Infection Research in Hanover, is seeking a

Postdoc for hepatitis C virus vaccine research (f/m/d)

to support our international and interdisciplinary team.

Hepatitis C virus (HCV) has infected ca. 58 million individuals worldwide. If untreated, it frequently causes severe liver diseases including liver cirrhosis and hepatocellular carcinoma. Although antiviral therapy is available, many infected people are not diagnosed or do not have access to treatment. Therefore, each year ~300.000 patients die due to chronic HCV infection and ~1.5 million people are newly infected. A prophylactic vaccine could prevent transmission and facilitate elimination of HCV disease burden.

We investigate the determinants of a protective HCV immune response and use this information to design optimized vaccine candidates (PMID: 35015104, 34990590, 33323394, 30439392).

We are part of national and international research networks with funding from the German Center for Infection Research, the cluster of excellence RESIST, the Helmholtz International Lab and the US American National Institute of Health.

The candidate will pursue structure-based hypotheses of HCV antigen-design aimed at the development of a highly immunogenic, stabilized pre-fusion conformation of the HCV envelope proteins. He_she will explore the efficacy of these approaches in vector-, protein and mRNA-based vaccination platforms. He_she will use state of the art *in vitro* models and cutting-edge humanized mouse models to quantify vaccine efficacy and to compare it with immune responses in patients with naturally clearing HCV infection.

Responsibilities:

- Design of HCV vaccine candidates (collaborating with structural biologists and bioinformaticians)
- Immunoprofiling of vaccine-induced immune response (main focus on B cell response and neutralizing antibodies) in relation to natural protective immunity in humans

Requirements:

- Completed university degree in life sciences or human/ veterinary medicine
- A PhD in virology, immunology or a related field of research
- Experience and willingness to conduct animal experiments and a correspondent certificate (FELASA B or equivalent)

Advantageous for this position:

- A FELASA C or equivalent certificate
- Knowledge of B-cell biology and analysis of B-cell repertoire
- Experience with evaluation of T-cell immune responses
- Competences in bioinformatics and next generation sequencing techniques
- Work experience with RNA viruses

We offer you:

- challenging and varied tasks in a dynamic and international research environment
- most modern workplace equipment
- additional services of the public service
- extensive further training opportunities
- flexible working hours
- Support for a better balance between work and private life through our family office

Severely handicapped persons with equivalent professional qualifications 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 position is suitable for part-time work. The HZI strives for professional equality between women and men.

Starting date:	As soon as possible. The contract will initially run for three years.
Salary:	E13 TVöD Bund
Working time:	39 hours per week
Place of work:	Hannover
Probation period:	6 months
Published:	16.02.2023
Closing date:	29.03.2023

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.

For further information please contact Prof. Thomas Pietschmann, director of the institute for experimental virology via email thomas.pietschmann@twincore.de

Please send your complete application, quoting the reference number **15/2023**, to the Helmholtz Centre for Infection Research GmbH, Human Resources Department, Inhoffenstr. 7, 38124 Braunschweig, Germany or by e-mail to JobsHZI@helmholtz-hzi.de. If you send your application in electronic form, please provide a **summary in one single (1) pdf document**.