

Job advertisement no. 049/2025

The Junior Research Group “**Early Life Immunity**” (**ELIM**) led by Dr. Natalia Torow, at the Helmholtz Centre for Infection Research (HZI) in Braunschweig, is offering the position of a

PhD position (f/m/d)
Understanding CD4+ T cell responses in neonatal gut-associated lymphoid tissues

The Helmholtz Centre for Infection Research GmbH (HZI) is part of the Helmholtz Association of German Research Centres, the largest scientific organization in Germany. At HZI, researchers focus on developing strategies to improve the fight against infectious diseases. Their aim is to create new methods for prevention, diagnosis, and treatment of infectious compounds by studying both bacterial and viral pathogens and their interactions with the immune system, while also investigating new compounds with potential therapeutic effects.

The ELIM group investigates mechanisms underlying early-life immune development, with a particular focus on mucosal immunology in the neonatal intestine. The advertised PhD project will examine the initiation of CD4+ T cell responses in neonatal Peyer's patches under steady-state conditions and following oral vaccination. The candidate will utilize cutting-edge approaches, including single-cell genomics, next generation nanoparticle vaccines and sophisticated in vivo models, to decipher fundamental processes guiding immune cell maturation and responsiveness during early life.

Requirements:

- Master's degree or equivalent in life sciences or related fields
- Preferable training in (mucosal) immunology, dendritic cell (DC) or T cell biology
- Experience with in vivo models, bioinformatics skills, and proficiency in high-dimensional flow cytometry are advantageous
- Ability to work independently as well as collaboratively in a young and dynamic research team
- Good written and spoken English

We offer:

- Modern laboratories, incl. BSL3
- State-of-the-art analytical instrumentation (spectral analyzer, sorting facility, single cell genomics pipelines)
- Ample biological profiling platforms (*in vitro* and *in vivo*)
- A lively scientific community and a corporate culture of appreciation & promotion of equal opportunities
- 30 days of vacation, (24.12. & 31.12. are considered as completely free days)
- An annual additional payment (Weihnachtsgeld) analogue to § 20 TVöD
- Social security included
- [DO IT- PhD initiative](#)
- Welcome Office
- Buddy System for new doctoral researchers
- Family Office, Child Holiday Care
- One of the strongest research region in Europe
- Central location within Germany, various metropolitan areas (i.e. Berlin, Hamburg, Frankfurt, Hannover) and recreational areas (i.e. Harz, Lüneburg Heath, North Sea) can be reached very quickly and easily by Train – it is also close to the airport Hannover.

The successful candidate will be part of the [HZI International Graduate School for Infection Research \(GS-FIRE\)](#) which provides an innovative structured PhD programme within the field of Infection Research.

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 - Initial contract for 3 years
Salary:	alike TVöD E13 (65%)
Probation period:	6 months
Place of work:	Braunschweig
Published on:	23.04.2025
Closing date:	21.05.2025

For more details regarding the position, please contact Natalia Torow via e-mail: natalia.torow@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 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 049/2025**, 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!