We are looking to support our rapidly growing team as soon as possible:

Doctoral Researcher / PhD Candidate in translational viral immunity (f/m/x)

Institute of Virology - Laboratory of Experimental Immunology

TV-L: 25 h/week (64,94%)

limited for 3 years according to the WissZeitVG within the framework of doctoral qualification

Your salary will be based on TV-L

Your tasks

- Contribute to research projects within the ERC Synergy Grant-funded consortium “CoEvolve”, investigating the co-evolution of viruses and human immune responses with a focus on influenza viruses and SARS-CoV-2
- Plan, perform, and analyze experimental studies under scientific supervision using state-of-the-art approaches in immunology, virology, and molecular biology
- Investigate antibody and B-cell repertoire dynamics and their interaction with evolving viral populations
- Establish, optimize, and apply high-throughput binding and neutralization assays for the characterization of viral variants and humoral immune responses
- Analyze and interpret experimental datasets in close collaboration with interdisciplinary consortium partners
- Contribute to data-driven studies of viral evolution, immune escape, and vaccination strategies
- Present research findings at project meetings, scientific conferences, and through scientific publications
- Collaborate within an interdisciplinary and international network of researchers across the CoEvolve consortium

Your future with us

We are one of the leading university hospitals in Germany and network research, teaching and health care at the highest level. That's why many things are a lot bigger for us: the spectrum of exciting development opportunities. The limitless openness with which specialists from all over the world work together here. Or our commitment as an employer to support all employees as best we can in reconciling their job with their goals and life situations.

This is the University Hospital of Cologne: Everything but ordinary.

Your future in detail

We are a dedicated translational research group focused on understanding the fundamentals of human immune responses to viral pathogens and on developing novel strategies for the prevention and treatment of infectious diseases. A major focus of our work is the investigation of humoral immune responses against rapidly evolving RNA viruses such as influenza viruses and SARS-CoV-2, as well as the development of innovative experimental and data-driven approaches to predict viral evolution.

- Actively participate in scientific discussions, training activities, and the continuous development of new experimental and analytical approaches

Your profile

- Excellent completed university degree (M.Sc. or equivalent) in biology, biomedicine, immunology, virology, bioinformatics, or a related life science discipline
- Strong interest in translational research at the interface of immunology, virology, and data-driven modeling
- Practical experience in molecular biology, immunology, or virology techniques (e.g. cell culture, ELISA, neutralization assays, flow cytometry, or sequencing technologies) is advantageous
- Interest in quantitative data analysis, statistical evaluation, or computational approaches for studying biological processes
- Independent, structured, and detail-oriented working style with high scientific standards
- High level of motivation to independently address complex scientific questions and develop innovative approaches
- Strong teamwork and communication skills, as well as enthusiasm for working in an interdisciplinary and international research environment
- Excellent English language skills, both written and spoken

Our offer

- Participation in a highly modern and internationally connected research project with strong scientific and societal relevance
- An excellent scientific environment within an interdisciplinary team
- Access to state-of-the-art technologies and laboratory infrastructure within the new “Translational Research for Infectious Diseases and Oncology (TRIO)” research center
- Close scientific supervision and support for your professional and personal development
- Opportunities to participate in national and international conferences and to publish scientific findings
- Challenging and diverse responsibilities with a high degree of independence and creative freedom
- For further information, please visit www.klein-lab.de

The PhD project is part of the “CoEvolve” research consortium, funded by the European Union through an ERC Synergy Grant. The goal of the project is to better understand and predict the co-evolution of viruses and human immune responses in order to improve future vaccines and therapeutic strategies. A central question of the project is how viruses evade immune responses and how the human immune system simultaneously adapts to newly emerging viral variants.

Your work will directly contribute to a deeper understanding of virus–immune system interactions and support the long-term development of improved strategies for predicting viral evolution and designing more effective vaccines.

Applications from female candidates are expressly welcome and will be given priority in the event of equal suitability, competence and professional performance. People with disabilities are welcome to apply and will be

treated preferentially in the event of equal suitability and qualification.

Contact

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Geschäftsbereich Personal
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Application deadline: 12 July 2026

Job-ID: movirng1

apply now

We look forward to receiving your application and getting to know you!