

Faculty of Mathematics and Natural Sciences

# PhD position: Immune cell-tissue interaction (f/m/x)

## **Uhlirova Lab/Institute for Genetics/CECAD**



The Uhlirova lab (www.uni-koeln.de/inter-fak/cecad/hlirova/) explores how stress-inducible signaling pathways control gene expression and influence tissue homeostasis and longevity. To tackle these questions, we combine the power of functional genetics in Drosophila and mouse models with cutting-edge molecular and cell biology, multi-omics approaches, advanced microscopy, and bioinformatics. We are looking for a highly motivated and curious PhD candidate (f/m/x) to join our dynamic team. You will have the opportunity to drive your own project, contribute to collaborative research, and develop skills at the interface of genetics, molecular biology, and systems-level analysis.

#### YOUR TASKS

- » Unravel the factors and networks that control immune cell tissue residency and niche organization using the *Drosophila melanogaster* model
- » Map and dissect the microanatomy of immune cell niches
- » Explain how immune cells adapt and change during development, homeostasis, and disease
- » Investigate how immune cell microenvironments are established, maintained, and dynamically remodeled
- » Leverage single-cell technologies and advanced imaging to uncover the cellular and molecular heterogeneity of immune cells and their niches

#### YOUR PROFILE

- » Completed Master's Degree or equivalent in Biology/ Biochemistry/Biophysics or related areas of Life Sciences
- » Strong background in genetics, molecular and cell biology is essential
- » Proven ability to carry out an independent scientific project and unwavering commitment to high-quality research
- » Motivation, curiosity and creativity, and a strong ability to solve problems through critical analytical thinking
- » Hands-on experience in working with multicellular organisms, preferably Drosophila and/or mouse
- » Excellent communication skills, fluency in spoken and written English
- » Strong collaborative and teamwork attitude

### DESIRABLE:

- » Experience in multi-omics research projects and data analysis
- » Experience in quantitative image analysis and attention to detail
- » Strong organizational and thorough documentation skills

#### **WE OFFER**

- » An interactive and supportive research environment
- » A diverse working environment with equal opportunities
- » Support in balancing work and family life
- » Extensive advanced training opportunities
- » Occupational health management offers
- » Flexible working time models

The University of Cologne promotes equal opportunities and diversity. Women will be considered preferentially in accordance with the Equal Opportunities Act of North Rhine–Westphalia (Landesgleichstellungsgesetz – LGG NRW). We also expressly welcome applications from all suitable candidates regardless of their gender, nationality, ethnic and social origin, religion, disability, age, sexual orientation and identity.

The position is available from 1 March 2026 on a part-time basis (25,89 hours per week). The position is to be filled for three years until 28 February 2029. If the applicant meets the relevant wage requirements and personal qualifications, the salary is based on remuneration group 13 TV-L of the pay scale for the German public sector.

Please apply online at <a href="https://jobportal.uni-koeln.de">https://jobportal.uni-koeln.de</a> with proof of the required qualifications (without a photo) and the following documents:

- » A cover letter describing your motivation to join our research group and information on your career achievements (1 page max.)
- » Academic Curriculum Vitae, including your publication list and contact information for three references
- » Copies of your degree and qualification certificates
  The reference number is Wiss2510-08. The application deadline is 15 December 2005.

For further inquiries, please contact Professor M. Uhlirova (uhlirova-jobs@uni-koeln.de) and take a look at our FAQs

