





PhD-Student (m/f/d): The Neural Basis of Tick Sensory Processing

Location: Institute for Neuro and Sensory Physiology, University Medical Center Göttingen (UMG), Göttingen, Germany

Start Date: March 2025 or until the position is filled

Duration: 3 years, with remuneration in accordance with TV-L 13 (65%)

Supervisor: Dr. Carola Städele (carola.staedele@med.uni-goettingen.de)

Timeline: Apply by January 7th, 2025 via our application portal



Apply now

About the Position

Are you fascinated by the intricate workings of the nervous system and driven by curiosity about how sensory information shapes behavior? Join the pioneering research team of Dr. Carola Städele to explore the neural basis of sensory processing in ticks. This project will tackle an exciting and urgent challenge: understanding how ticks, as major disease vectors, process sensory information underlying behaviors like host-seeking and feeding.

Ticks, especially the castor bean tick *Ixodes ricinus*, are responsible for transmitting severe diseases, including Lyme disease and tickborne encephalitis. Yet, the neuronal mechanisms underlying their sensory systems remain largely unknown. This PhD position offers you the opportunity to make a meaningful impact by uncovering the neural pathways and circuits that govern tick sensory processing, contributing to both fundamental neuroscience and public health research.

Your Key Responsibilities

Developing a high-resolution 3D atlas of the *Ixodes ricinus* brain, mapping sensory projections (olfactory and gustatory pathways), and decoding olfactory circuits through advanced imaging and neuroanatomical techniques.

What We're Looking For

We are seeking a passionate, dedicated individual with:

- A Master's degree (or equivalent) in Life Sciences (e.g., biology, chemistry, physics or a related field).
- Preferably, experience with immunohistochemistry, confocal microscopy, or neuroanatomical methods.
- A strong interest in sensory neurobiology and advanced imaging techniques.
- Good written and spoken English (B2 level or higher)
- The ability to work collaboratively in an international team.
- A proactive, problem-solving mindset, coupled with flexibility and enthusiasm for cutting-edge research.

How to Apply

If you're excited to join this innovative research effort, please submit the following documents:

- A motivation letter explaining why you are an excellent fit for the position.
- Your CV.
- · Academic transcripts.
- Contact details for **2-3 referees** who can provide a recommendation.

<u>Applications will be reviewed on a rolling basis but should not be</u> <u>submitted later than January 7th, 2025.</u>

Why Join Us?

The Institute for Neuro and Sensory Physiology at UMG offers an inspiring research environment with access to advanced facilities and a vibrant international community of scientists. By joining Dr. Städele's lab, you will not only receive expert mentorship but also gain exposure to interdisciplinary collaborations that will enrich your research experience.

This project is not just an opportunity to develop ground-breaking scientific insights - it's a chance to contribute to tackling critical global health challenges.

What We Offer:

- Structured PhD training through the Göttingen Graduate School for Neurosciences, Biophysics, and Molecular Biosciences (GAUSS/GGNB)
- Access to state-of-the-art imaging and research facilities.
- A collaborative and interdisciplinary research environment with opportunities to work on translational projects.
- Competitive salary and funding for conference participation and training.
- Wide range of interesting benefits as an UMG employee.
- A unique opportunity to live and work in Göttingen, a historic university town with a vibrant research community.