

## Research Associate/Postdoc (m/f/d) – Institute of Physiology

### Focus on neurobiology/method development at the Otto von Guericke University in Magdeburg

The research group „Neurophysiology and Optogenetics“ Institute of Physiology, Medical Faculty, Otto von Guericke University Magdeburg is looking for a research assistant/postdoc (m/f/d) with a strong interest in neurobiological/technical questions and the development of new methods.

#### Our question:

The presentation of sensory stimuli is a major challenge in the study of sensory input processing. The question of how a stimulus is presented is almost as important as the question of which stimulus is presented. Odors pose a particular challenge, since they are airborne, perceived at very low concentrations, and different species have different sensory ranges. Reliable research on odor perception, which is not only important for hormonal and metabolic processes but also for neurodegenerative diseases, therefore requires a reliable technique for stimulus presentation that is comparable between individual laboratories.

Within the framework of the DFG-funded research group FOR 5424 Modulation in Olfaction (<http://www.modolfor.de/>), a standardized odor application device (olfactometer) will be developed that will be used in both FOR rodent and insect laboratories. The construction of the device will be based on a recently published design of a precise and modular olfactometer (Ackels et al. 2021). Together with the research assistant/postdoc (m/f/d), we will evaluate the specific needs of all participating laboratories concerning their existing setups to develop olfactometer hardware combined with professional, standardized and version-controlled control software.

#### Our methods:

Through the development of standard operating procedures (SOPs) in cooperation with selected pilot laboratories (rodents: Rothermel, insect: Strube-Bloss) we aim to achieve maximum reliability and usability in an interactive process within the entire research group. Through lab rotations, we will not only ensure continuous software and hardware support, but the Z project will also act as an anchor point within the research group, ensuring fast and productive feedback for future developments. Furthermore, following development and successful launch of this modular olfactometer, we will make the design and the SOPs freely available, further increasing the international visibility of the research associate/postdoc (m/f/d).

#### Your profile:

You have completed your studies or doctorate in biology, biochemistry, technology or related disciplines. You have a background in neuroscience and the ability to work in a multidisciplinary team. The willingness to travel between the partner laboratories (Magdeburg, Bielefeld, Cologne, Bonn, Regensburg, Jena, Würzburg, Constance, London) is required.

#### Our offer:

We are looking for a motivated person who would like to join our DFG-funded team. We offer an open working atmosphere in which we mutually benefit from each other's experiences without restricting individual creativity. Our working group is embedded in the neurobiological orientation of the Institute of Physiology, Medical Faculty, Otto von Guericke University, which has a number of international cooperation partners and thus offers a stimulating environment for a postdoc in the field of neurosciences (stays abroad are also possible).

The position is associated with the DFG-funded FOR 5424. The start-up funding is 3 years, an extension is possible. Intensive supervision is offered by the FOR and the graduate program of the Magdeburg CBBS (see also [gp.cbbs.eu](http://gp.cbbs.eu)).

**Remuneration:** Pay group E13 according to the collective agreement for the public sector in the federal states awaits you.

**Occupation:** The position is to be filled immediately, full-time (100%), and for a limited period.

If you have any questions, please do not hesitate to contact us by e-mail: Prof. Dr. M. Rothermel ([markus.rothermel@med.ovgu.de](mailto:markus.rothermel@med.ovgu.de)) and Dr. D. Brunert ([daniela.brunert@med.ovgu.de](mailto:daniela.brunert@med.ovgu.de)).

Please apply via email: [markus.rothermel@med.ovgu.de](mailto:markus.rothermel@med.ovgu.de)  
and include final certificates, short summary of the final thesis, curriculum vitae, and 2 potential references.