**PhD Position in Neuroscience at IMBIT (Intelligent Machine-Brain Interfacing Technology) about Prefrontal Flexibility**

**About the Position**
The Optophysiology Group at IMBIT, University of Freiburg, is seeking a motivated PhD student to join our research team. Funded by the German Research Foundation (DFG), this project investigates the neural underpinnings of prefrontal flexibility, focusing on how internal and external factors influence strategy choice in the rat prefrontal cortex.

Your role will involve:

- Behavioral experiments with rodents using a well-established task (see Schneider et al., 2024),
- Electrophysiological recordings using Neuropixels,
- Optogenetic modulation of neural circuits,
- Analysis of the acquired data.

This is a 65% TV-L position funded for three years, with the possibility of extension.

**Who We're Looking For**
If you are:

- Curious, enthusiastic, and enjoy collaborative work,
- Motivated to tackle challenging experimental projects,
- Interested in electrophysiology and optogenetics or have experience in these areas,
- Fascinated by neuronal communication and brain connectivity,
- Keen to explore the mechanisms of systemic behavior through innovative experiments,

we invite you to join our team!

**Your Profile**

- Experience with *in vivo* techniques (electrophysiology, optogenetics, rodent behavior) is a plus,
- Strong enthusiasm for understanding neuronal mechanisms,
- Willingness to learn and master new techniques,
- Skills in data analysis and programming (Python/Matlab) or willingness to acquire them.

**Why Join Us?**
You will join the Optophysiology Lab, led by Ilka Diester, within the state-of-the-art IMBIT research building. We are a dynamic, international team specializing in cognitive motor control and cutting-edge techniques, including optogenetics, multielectrode recordings, and imaging. The project is part of the research unit 5159 Prefrontal Flexibility, thereby immersing your work in a scientific network of established scientists while offering interactions with a peer group of early career researchers working in related topics.

We will offer conference opportunities, career development support, and direct supervision by the PI.

**Living in Freiburg**
The University of Freiburg is one of Germany's top research institutions. Freiburg, nestled in the Black Forest and near the Rhine Valley, offers a vibrant, multicultural atmosphere, excellent public transport, and numerous recreational opportunities like hiking, climbing, and skiing.

**How to Apply**
Please submit your application (CV, cover letter, and references) to ilka.diester@biologie.uni-freiburg.de by January 25, 2026.

We encourage applications from diverse backgrounds and underrepresented groups in science.

Join us at IMBIT and advance your research career in a supportive and innovative environment!

**Reference**


- You find more information about the group and its activities here: www.optophysiology.uni-freiburg.de/
- The Research unit 5159 is described here: https://www.for5159.de/
- The details of the behavioral setup can be found here: Schneider, Graef, & Diester (2024). FreiControl: A cost-efficient, open-source system for investigating individual strategies in decision-making of rodents. *Science Communications World Wide*. doi:10.57736/fb64-017c.