



Join Us in Exploring the Mysteries of the Brain!

Position: PhD Student in Neuroscience (Two-Photon Imaging)

Location: University of Freiburg, Germany

Are you ready to embark on a thrilling journey into the intricate world of neuroscience? Do you possess a relentless curiosity, thrive in collaborative environments, and have the motivation to tackle complex challenges in experimental and computational neuroscience? If so, we invite you to be a part of our pioneering team at the Optophysiology Lab, nestled within the picturesque University of Freiburg.

About Us: At the Optophysiology Lab, led by Prof. Dr. Ilka Diester, we are dedicated to unraveling the enigmatic mechanisms of the cortical circuits that underlie flexible motor behavior. Located in the state-of-the-art IMBIT research building, our dynamic and international research group is at the forefront of cognitive motor control research. We employ cutting-edge techniques such as optogenetics, multielectrode array recordings, and two-photon imaging in trained rodents to advance our understanding of the brain.

Your Exciting Project: As a PhD student with us, your journey will revolve around cognitive motor control in mice within the captivating realm of virtual reality. You will employ two-photon calcium imaging and groundbreaking holographic optogenetic stimulation to decode the secrets hidden within neuronal activity. Your role will encompass a diverse spectrum of techniques, spanning from the observation of animal behavior to the meticulous analysis of neural population data.

What We Seek:

- Diverse backgrounds ranging from neuroscience, psychology, computer science and engineering are welcome to apply.
- Ideal candidates will possess prior experience in rodent behavior, electrophysiology, or two-photon imaging.
- Proficiency in programming and data analysis (e.g., Python/Matlab) is crucial.
- Above all, we seek individuals passionate about delving into the intricate analysis of neural activity during behavior, and who are eager to acquire new skills and techniques.

Why Choose Us:

- You will become part of the Optophysiology Group at the prestigious University of Freiburg.
- Initially, a 1.5-year contract (65% E13) awaits, with the possibility of extension.
- Join a vibrant, international research community committed to fostering interdisciplinary collaborations.





- Be at the forefront of cognitive motor control research, harnessing the power of optogenetics, advanced recordings, and imaging techniques.
- Freiburg, with its rich history dating back to 1457, boasts one of Germany's top research universities.
- Our lab is conveniently located near the Engineering campus and within walking distance of the charming old city center.
- Freiburg, Germany's sunniest city, is a gateway to the Black Forest, the crossroads of France, Switzerland, and Germany, and is well-connected by train and plane (Basel airport).
- Enjoy a multicultural city with a vibrant student community, offering abundant cultural and recreational activities, from hiking and climbing to skiing.

How to Apply: If you are ready to embark on this exciting journey with us, send your application including a CV, a brief statement of interest, and contact details for two references to **ilka.diester@biologie.uni-freiburg.de**.

Join us in unlocking the secrets of the brain while living in the heart of Europe!