

TeamPrigge

Neuromodulatory Networks



Join us !

Are you interested in studying noradrenergic circuit dysfunctions in a neuromelanin mouse model?

Join us for a PostDoc!

Join our research team to explore the vulnerabilities of catecholaminergic circuits in Parkinson's disease (PD) using our transgenic neuromelanin mouse model, tg-hTyr. This innovative model manifests early cognitive impairments similar to human PD. We will set out to uncover the mechanisms by which neuromelanin accumulation triggers circuit changes in Locus Coeruleus sub-network and contribute to cognitive deficits.

The selected candidate will utilize this model to pinpoint early neuronal circuit dysfunctions using in vitro electrophysiology and establish functional biomarkers in vivo. The role involves monitoring alteration in circuits, tracking neuronal activity through advanced electrophysiology methodologies such as acute slice electrophysiology, and in vivo silicon probes.

This opportunity is part of the ASAP (Aligning Science Against Parkinson) initiative and supported by The Michael J. Fox Foundation. The network encourages collaborative research and contributes to the Open Science Community.

Our lab is part of the vibrant Leibniz Institute for Neurobiology in Magdeburg, focusing on neuromodulatory networks and cognitive flexibility. We value innovative approaches and support unconventional ideas that enhance our understanding at the circuit or behavioral level.

The institute is renowned for its learning and memory research with a strong push for clinical applications. We maintain robust collaborations with local institutions, providing a rich, multidisciplinary environment.

Magdeburg is a historic university city, offering a high quality of life and proximity to Berlin, Hamburg, and Leipzig.

Join us in this challenging and rewarding role, where your work will have a lasting impact on the understanding and treatment of PD.

Ideally, we are looking for someone with one or more of these skills:

- Patch-Clamp electrophysiology in acute slices
- Viral injections and optical implants in mice
- Mouse behavior with opto- and chemogenetic intervention
- Data analysis in Matlab, Python or R as well as knowledge in imaging processing

Please send a motivational letter, CV, three publications and contacts for recon to: **prigge.matthias@gmail.com**

