



LIN LEIBNIZ INSTITUTE
FOR NEUROBIOLOGY
MAGDEBURG



PhD and postdoc positions in *Drosophila* circuit and behavioural neuroscience

International collaborative project

We look for young scientists keen to investigate the mechanisms and computational principles of complex forms of predictive learning. You will join a focused transatlantic team of scientists studying these questions in **an interdisciplinary and highly collaborative** manner. Together we will seek to determine the range of complex forms of predictive learning, including reward expectation, that animals with simpler brains are capable of (fruit flies *Drosophila melanogaster* and their larvae), map these faculties onto newly discovered circuit motifs, and model the computational capabilities of these circuit motifs.

The team is funded through the Collaborative Research in Computational Neuroscience (CRCNS) program jointly through the National Science Foundation (USA), the Department of Energy (USA), the Agence Nationale de la Recherche (France) and the Federal Ministry of Research (Germany). The team is looking for PhD students and a post-doctoral researcher eager to gain and share expertise in the broadly conceived field of **behavioural neuroscience, neurogenetics, connectomics, neurophysiology, comparative experimental psychology, or computational neuroscience**.

Team members will conduct their research locally embedded in the research groups of **BH Smith** (Arizona State University, USA), **T Jovanic** (Paris-Saclay Institute of Neuroscience, France), **B Gerber** (Leibniz Institute of Neurobiology Magdeburg, Germany), or **M Nawrot** (University of Cologne, Germany). PIs have a track record of collaboration and have established means and funds to secure a cooperative, integrated set of research projects on "*Encoding reward expectation in Drosophila*". Team members in any lab will have the opportunity to spend time in other labs to learn new concepts and techniques.

Please address your application, including in a single pdf of motivation letter (2 pages max), academic CV, publication list and the names and addresses of 2 reviewers to tihana.jovanic@cnr.fr, Bertram.Gerber@lin-magdeburg.de, BrianHSmith@asu.edu and mnewrot@uni-koeln.de. Screening interviews will be held online with all team PIs, followed by on site interviews with the respective PI.

Start date: January 2022