

2 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 two post-doctoral researchers eager to gain and share expertise in the broadly conceived field of **behavioural neuroscience, neurogenetics, connectomics, neurophysiology, comparative experimental psychology, or computational neuroscience.** Specifically:

- 1) one position is for a postdoctoral researcher in **experimental Drosophila neuroscience** (with the focus on neuronatamy and functional imaging) in the Jovanic team at the Paris-Saclay Institute of Neuroscience in Paris-Saclay, France
- 2) The second position is for a postdoctoral researcher in **computational neuroscience** in the Nawrot team at the University of Cologne, Germany

Team members will benefit from interactions and collaborations with the participating research groups res (**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)) and 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 <u>tihana.jovanic@cnrs.fr</u>, <u>Bertram.Gerber@lin-magdeburg.de</u>, <u>BrianHSmith@asu.edu</u> and <u>mnawrot@uni-koeln.de</u>. Screening interviews will be held online with all team PIs, followed by on site interviews with the respective PI.

Start date: May 2022