PhD position in behavioral, cellular and molecular neurogenetics of sensory systems University of Fribourg, Switzerland

I am looking for a highly motivated PhD student with interest in behavioral, cellular neurogenetics and functional imaging to join our Drosophila research group at the Department of Biology at the University of Fribourg, Switzerland.

Our laboratory is interested in fundamental aspects of how sensory information is perceived and processed in the corresponding executing neuronal network controlling behavior. We use the powerful genetic tools available in the fruit fly Drosophila melanogaster to assess the visual and gustatory system in the larval stage.

We have recently identified neurons of the visual circuit by combining light microscopy, serial EM reconstruction and high-resolution behavioral analysis. The goal of ongoing projects is to fully dissect the visual circuit by implementing physiological techniques (electrophysiological recordings and activity recording using genetically encoded calcium sensors) and exploring the corresponding behavioral impact.

- Applicants must hold a Masters degree in a relevant field (e.g. Neurophysiology, Neurobiology, Neuroscience, Systems Neurobiology or Neurogenetics), which is recognized by the University of Fribourg.
- Previous experience with neurophysiology, functional imaging or behavioral biology is a must; previous experience in molecular biology, fruit fly research, bioinformatics, behavioral biology or genetics is appreciated.
- The position is funded at an international highly competitive level, according to the SNF guidelines.

Please send your CV and letter of motivation via email to simon.sprecher@gmail.com or simon.sprecher@unifr.ch. Reference letters from 2-3 referees should be sent to the same address. Further information can be obtained from Dr. Simon Sprecher.
PhD position in molecular and genetic basis of learning and forgetting, University of Fribourg, Switzerland

I am looking for highly motivated PhD students with interest in neurobiology, neurogenetics and behavioral biology to join our research group at the Department of Biology of the University of Fribourg, Switzerland.

The project is aimed to understand the genetic and molecular mechanisms of how forgetting is regulated. While the molecular basis of learning has been well studied, only little is known of how memory maintenance and forgetting function on a cellular, molecular and biochemical basis. We apply state of the art molecular and genetic techniques, Drosophila genetic methods, and imaging of neurons, circuit components and synapses. The project will make use of state-of-the-art behavioral neurogenetic tools, but also require CRISPR/Cas9 mediated genome editing in order to study gene function with a high-precision in a cell-specific fashion.

- Applicants must hold a masters degree in neurobiology, molecular biology, genetics or related scientific fields.
- Previous experience in molecular biology, behavioral biology, microscopy, neurobiology or genetics is highly desirable.
- Previous exposure to programming, image analysis, optics and microscopy etc. is appreciated.
- The position is funded at an international highly competitive level, according to the SNF guidelines.

Please send your CV and letter of motivation via email to simon.sprecher@gmail.com or simon.sprecher@unifr.ch. Reference letters from 2-3 referees should be sent to the same address. Further information can be obtained from Dr. Simon Sprecher.