

CRG Predoctoral fellowship in Systems Neuroscience

Programme: Systems Biology

Group: Sensory Systems and Behaviour

Ref.

1. Post Description

The research interest of our laboratory focuses on understanding how behavioural decisions emerge from the integration of sensory information. We are tackling this problem in the genetically manipulable olfactory system of the fruit fly *Drosophila melanogaster*. We aim at identifying and functionally characterizing the neuronal circuits underpinning navigation in odorant gradients (chemotaxis). Our laboratory employs a cross-disciplinary strategy that combines the power of fly Molecular Genetics, behavioural analysis and electrophysiology. In collaboration with the laboratory of Vivek Jayaraman (HHMI-Janelia Farm Research Campus), we are pioneering the application of patch-clamp recordings to the neurons of the larval olfactory system. Although our approach is mainly experimental, our long term goal is to integrate anatomical and physiological data into computational models that will help us clarify how the olfactory system functions as a whole.

2. Candidate requirements

The candidate should have a background in Biology, Chemistry, Medicine, Physics or Mathematics. She/he should be fluent in English and have an interactive personality. Research carried out in our lab is interdisciplinary and involves data quantification and computational modeling. Candidates are therefore expected to be comfortable with learning new experimental and computational techniques.

3. Conditions

- **Type of contract:** Ph.D. fellowship
- **Starting date:** October 2008

4. Application procedure

All applications must include:

- CV including your contact details.
- Names of two references (with e-mail addresses and phone numbers)
- Letter of motivation

Please submit your application to:

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