

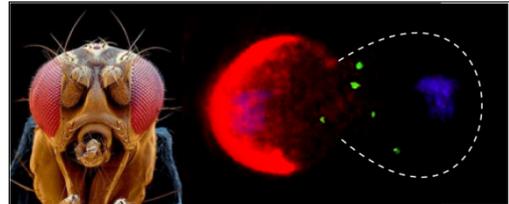
**PHD/POSTDOC POSITION AVAILABLE in NICE, FRANCE:
Endocytic trafficking and Delta/Notch signalling in the zebrafish spinal cord**

Research interests & project description

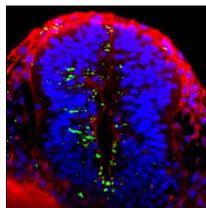


The newly established lab of Maximilian Fürthauer at the Institute of Developmental Biology and Cancer is recruiting at the PhD and Postdoc level. Our research at the interface between cellular and developmental biology uses Zebrafish and *Drosophila* to study the importance of cellular membrane dynamics for the control of cell signalling during animal development (<http://www.unice.fr/ibdc/equipe/equipe.php?id=46>).

We have previously pioneered a novel imaging approach that has allowed visualizing *in vivo* the intracellular transport of endogenous Delta ligand and Notch receptor



molecules in the context of the asymmetric divisions of fruitfly sensory organ precursor cells. The use of this technology enabled us to show that the directional movement of Delta/Notch-containing endosomes is important to bias developmental cell fate decisions (*Nature* 458, p.1051-55, *Traffic* 10, p.792-802). More recently we adapted this technique to the Zebrafish spinal cord, allowing us to image for the first time the intracellular trafficking of endogenous signalling molecules in a living, intact vertebrate embryo. The aim of the present project will be to identify the mechanisms that govern the endocytic transport of Delta ligand molecules and to study their importance for the development of the vertebrate central nervous system. In particular, this work will involve the use of original functional cell biological approaches in the physiological context of embryonic development.



Qualification & Experience

Candidates should be highly motivated to use and develop functional imaging assays to study intracellular transport processes in living embryos. Expertise in cell biology will be considered highly beneficial. Research experience with Zebrafish or *Drosophila* is advantageous but not required. Funding for up to three years is available through an HFSP Career Development Award. The Institute of Developmental Biology and Cancer is located in the heart of Nice and provides a highly dynamic research environment with an internationally recognized expertise for the cellular analysis of developmental processes.

Contact information

Candidates should send their CV, a description of their research interests and scientific achievements and the contact information of two referees to:

Maximilian FÜRTHAUER
furthauer@unice.fr

