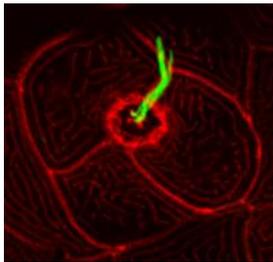




POSTDOC POSITION in NICE, FRANCE: Endocytic trafficking in Zebrafish development

A postdoc position is available immediately in the lab of Maximilian Fürthauer at the Valrose Institute for Biology in Nice/France. Our work at the interface between cellular and developmental biology uses Zebrafish and *Drosophila* to understand how membrane trafficking contributes to the regulation of cell signalling in animal development (<http://ibv.unice.fr/EN/equipe/furthauer.php>).

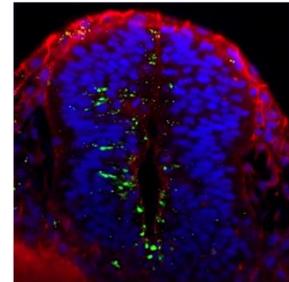
Endocytic trafficking and Zebrafish ciliogenesis



Cilia are highly specialized membrane domains that protrude into the extracellular space and play a major role in intercellular communication. After being long time neglected, it has recently emerged that cilia are essential for both embryonic development and adult homeostasis by allowing cells to communicate with their environment by chemosensation, mechanosensation and the creation of fluid flows. We have uncovered surprising new implications of the endo-lysosomal system in the biogenesis and function of different ciliated organs in the Zebrafish.

Endocytic regulation of Delta/Notch signalling in the Zebrafish nervous system

We have previously developed an imaging approach to visualize *in vivo* the intracellular transport of endogenous Delta ligand and Notch receptor molecules in asymmetrically dividing *Drosophila* sensory organ precursor cells. This 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). Currently we are analysing the mechanisms that govern Delta ligand transport in the Zebrafish nervous system to determine their importance for vertebrate neurogenesis.



Qualification & Experience

Candidates should be highly motivated to use the Zebrafish as a model system to study the contribution of membrane trafficking in the context of embryonic development. Expertise in cell biology will be considered highly beneficial. Experience with Zebrafish is advantageous but not required. The position is open immediately with financial support for an initial one year period beyond which the candidate will be helped in applying for competitive funding sources. The Institut de Biologie de Valrose is located in the heart of Nice and provides a dynamic research environment with an internationally recognized expertise in the cellular analysis of developmental processes.

Contact information

Candidates should send their CV, a description of their scientific achievements and the contacts of two referees to:

Maximilian FÜRTHAUER
furthauer@unice.fr

