



Dr. Nicolas DAVID

Postdoc position: Cell migration in the early embryo

Laboratory for Optics and Biosciences, Ecole Polytechnique

An ANR funded postdoc position is available in the research group "Cell migration and morphogenesis in the early embryo", in the Laboratory for Optics and Bioscience, at Ecole Polytechnique (Palaiseau, 25km from Paris, France).

PROJECT

We are generally interested in understanding of how the complex environment that cells experience in vivo (neighboring cells, extracellular matrix, chemical cues, mechanical constraints) influences their migration, and how it allows coordination of cell behavior, ensuring proper morphogenesis and development. We use the zebrafish gastrula as a model system offering high quality imaging, genetic tools and direct manipulation (transplants, explants, laser ablations, application/relief of mechanical constraints...). We mostly focus on migration of endodermal and mesodermal cells, with questions shifting from a developmental perspective (how do germ layers form) to a cell biology perspective (identification of new actin regulators controlling in vivo migration).

The position will be funded through an ANR Grant **for up to 24 months**. Ideal starting date would be around May 2018.

The objective is to characterize in vivo the function of new modulators of actin dynamics, and how they affect cell migrations. The project is however open to discussion as long as it is connected to the current topics of the laboratory.

EXPECTED PROFILE OF THE CANDIDATES

We seek a highly motivated candidate with interests in cell and developmental biology and a good working knowledge in live imaging. Previous experience with zebrafish is recommended but not mandatory. Ideally, the candidate should also be comfortable with quantitative approaches and basic knowledge in programming is a plus.

THE LAB

The Ecole Polytechnique is located on the 'plateau de Saclay', bound to be the largest French research area. The laboratory for Optics and Biosciences gathers cell biologists and experts in optics and live imaging. The team is fully equipped to work with zebrafish and has access to cutting edge imaging systems, some unique developed in the lab.

If you are interested, please **contact Nicolas David** (nicolas.david@polytechnique.edu) with a brief statement of your research interests, your CV and up to 3 recommendation contacts.