POST-DOCTORAL POSITION AVAILABLE AT THE CENTER FOR DEVELOPMENTAL BIOLOGY, TOULOUSE, FRANCE

UNDERSTANDING THE ROLE OF CELL CYCLE IN CELL FATE DECISION USING SINGLE CELL LIVE IMAGING

A two years post-doctoral position funded by IDEX (University of Toulouse) is available starting fall-winter 2014 at the Center for Developmental biology in the Neurodevelopmental group headed by Fabienne Pituello (http://www-cbd.ups-tlse.fr/).

The specific goal of the project is to implement molecular analyses with advanced techniques in time-lapse imaging to elucidate how changes in cell cycle kinetics switch a proliferating neural progenitor into a differentiating neuron. We recently set up a novel high resolution time-lapse imaging technique that allows measuring the duration of each phase of the cell cycle of lineage-traced individual neural progenitors within the developing vertebrate nervous system. This innovative time-lapse imaging combined with multi-scale molecular approaches will allow testing new hypothesis to elucidate how cell cycle dynamics integrate into molecular networks orchestrating cell fate decision during neurogenesis.

The project will be performed in close collaboration with Bernard Ducommun and Valérie Lobjois (ITAV, Toulouse, www.itav.fr/) who will bring their multidisciplinary expertise in the field of 3D cell imaging and processing. They closely collaborates within the ITAV institute with mathematicians and IT experts who contribute to the development of the essential tools required for numerical treatment of microscope acquisitions and mathematical modelling.

Candidates with a solid background in live imaging and in quantitative time lapse analyses will have additional expertise in developmental or cell biology.

Please send full CV including research interests and the name of 2-3 referees by email to Fabienne Pituello (fabienne.pituello@univ-tlse3.fr).