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# POST-DOCTORAL POSITION IN MAMMARY GLAND STEM CELLS AND BREAST CANCER

A two-year post-doctoral position is available starting February 2018, in the Group "Notch signalling in stem cells and tumours" headed by Dr. Silvia FRE in the "Genetics and Developmental Biology" Unit (UMR3215/U934) at Institut Curie in Paris, France.

Project Description

Our research is focused on the dissection of *in vivo* stem cell behaviour both during physiological tissue development and homeostasis as well as in tumours, combining clonal analysis by lineage tracing with time-lapse analysis of 3D organotypic cultures and intravital imaging, whole mount immunofluorescence, transcriptomics and mathematical modelling of clonal dynamics. Our approach relies on inducible genetic labelling approaches to mark and molecularly characterise tissue-specific stem cells. In the mammary gland, we have recently investigated the mechanisms underlying stem cell plasticity and directing lineage specification during embryonic development and the candidate will continue and expand these studies with the aim of identifying the cellular targets of oncogenic transformation in this tissue.

Techniques: the project will involve extensive mouse work, Flow Cytometry to sort distinct mammary cells, RNA/DNA extraction and amplification from small amounts of sorted cells prior to NGS as well as barcoding approaches, 3D organoid cultures, molecular biology and immunofluorescence analyses.

Candidate requirements

- PhD or MD/PhD with at least one first author publication
- Enthusiastic and highly motivated researcher with strong interest in stem cell and cancer biology
- Ability to work independently
- Good communication skills, fluency in English
- Candidates with previous experience in mouse handling, developmental biology, molecular biology, 3D cultures or competence in bioinformatics analysis of NGS will be prioritised.

Work environment

The candidate will benefit from the top-level scientific environment of Institut Curie, and of state-of-the-art technological platforms. The lab is located in the heart of Paris, in a building devoted to Developmental Biology within the Curie campus, providing interdisciplinary expertise and a very friendly and international environment.

To apply, please send: curriculum vitae, motivation letter and the names/contact information of 2/3 referees to silvia.fre@curie.fr

Please indicate «Postdoc application» in the subject line.