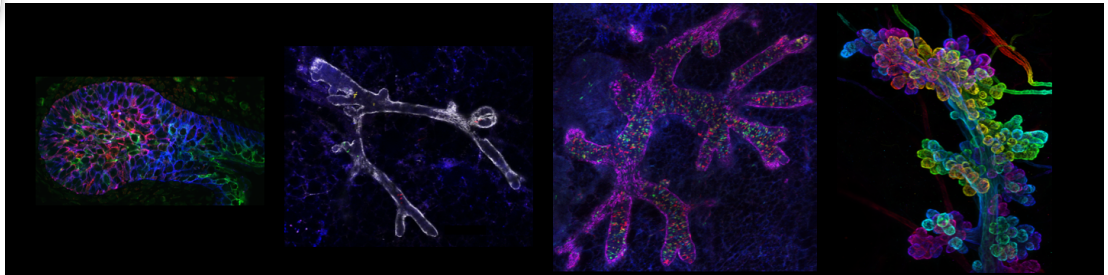




## Post-doc position in Stem Cell Biology



A post-doctoral position is available in the Group “Notch signalling in stem cells and cancer” directed by Dr. Silvia FRE in the Department of Genetics and Developmental Biology (UMR3215/U934) at Institut Curie in Paris, France.

<https://science.institut-curie.org/team-fre>

**Keywords:** Mammary tumours, mammary stem cells, tumour heterogeneity, lineage tracing, single cell analysis, tumour clonal evolution

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, single cell 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 (Lilja et al. Nat Cell Biol. 2018) 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 mouse work, Flow Cytometry, RNA/DNA extraction and library preparation for NGS, barcoding approaches, 3D organoid cultures, molecular biology and immunofluorescence analyses, bioinformatics and statistics.

### Candidate requirements

- PhD or MD/PhD with at least one first author publication
- Enthusiastic and highly motivated researcher with strong interest in stem cell biology
- Ability to work independently, good team spirit
- Good communication skills, fluency in English
- Candidates with competence in bioinformatics analyses of single cell data as well as previous experience in mouse handling, developmental biology, molecular biology or 3D cultures 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](mailto:silvia.fre@curie.fr)

Please indicate «Postdoc application» in the subject line.