Post-doctoral position on transposable elements, genome organization and genome instability
St Louis Hospital, Paris

Applications are invited for a **FRM funded post-doctoral position** in the lab of Emmanuelle Fabre and Pascale Lesage "Genome Biology: From Mobile DNA to Chromosome Dynamics (https://gencelldis.fr/fabre-lesage-team/" at the Research Institute of the Saint-Louis Hospital in Paris. **The position is available from June 2023 (open until filled) for 2 years renewable on new grant up to 3 years**.

Large genome rearrangements often involve transposable elements and are observed both in the adaptation of cells to new environments and in **aging and cancer**. For a chromosomal translocation to occur, the concomitant formation of a double-strand break and the spatial proximity of the damaged sequences in the nucleus are important parameters. Strikingly, **how the activity of transposable elements and their position in nuclear space drive aging and cancer is poorly understood**.

We are seeking for **a talented and highly motivated post-doc** to address these questions. We combine state-of-the-art sequencing and live microscopy approaches with molecular biology techniques, **using budding yeast as an experimental system**. The candidate will benefit from a dynamic scientific environment and from the interface with clinical research at St. Louis Hospital, one of the leading centers for leukemia research.

Qualifications

A PhD in biological sciences with demonstrated experience in molecular and cellular biology technique is mandatory. Proven experience in carrying out projects from conception to completion as well as strong organizational, teamwork and communication skills are required. CV and publications will be competitive for international postdoctoral fellowships. Candidates with prior experience in yeast biology and genome-wide experimental skills will be appreciated.

Application details

Applications including a CV, names and contact information for three references, and a cover letter summarizing current and future research interests should be submitted to emmanuelle-g.fabre@inserm.fr and pascale.lesage@inserm.fr.

Recent publications from the host lab linked to the project

Bridier-Nahmias, A. *et al.* ***Science.*** (2015). PMID: 25931562
Herbert, S. *et al*. ***EMBO J.*** 36, (2017). PMID: 2869424
Asif-Laidin, A. *et al.* ***EMBO J***. (2020). PMID: 32677087
Garcia Fernandez, F. *et al*. ***J. Cell Sci.*** (2021). PMID: 33622771
Bonnet et al. ***PLoS Genet***. 2021. PMID: 34723966
Garcia Fernandez, F. *et al*. ***eLife*** (2022). PMID: 36125964
Nguyen P Q, *et al.* ***Nature comm.*** (2023). PMID: 36977686
Some recent reviews
Sultana, T. *et al.* ***Nat. Rev. Genet.*** (2017). PMID: 28286338
Zimmer, C. & Fabre, E. ***Curr. Genet.*** 65, (2019). PMID: 29947969
Bonnet, A. & Lesage, P. ***Curr. Genet.*** (2021). PMID: 33590295
García Fernández & Fabre, E. ***Genes*** *(Basel).* (2022). PMID: 35205260