



## Post-doctoral position on transposable elements, genome instability and 3D genome organization, in Paris

We are looking for a highly motivated and talented Postdoctoral Research Scientist to investigate the mechanisms that govern genomic instability induced by transposable elements in the context of 3D genome organization. The successful candidate will play a major role in the design and conduct of the research project and be trained in related techniques.

The post-doctoral position will be funded by FRM in the laboratory 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 St Louis Hospital, in University Paris Cité.

Our team's projects aim to better understand the processes that govern the three-dimensional structure and integrity of the genome. We are particularly interested in the role of transposable elements in genomic plasticity and the mechanisms that regulate the repair of DNA damage in the context of the spatial organization of chromosomes. We combine state-of-the-art sequencing and live microscopy approaches with molecular biology techniques, using the budding yeast and its Ty1 transposable element as models.

### Qualifications

The candidate will have a PhD in biological or biochemical sciences with demonstrated expertise in genetics, molecular and cellular biology and genome-wide techniques. He/She will have proven capacities in carrying out projects from conception to completion as well as strong organizational, teamwork and communication skills. Prior experience in yeast biology and knowledge of bioinformatics analyses of high-throughput sequencing or imaging data will be an asset. An outstanding academic track record is essential and at least one first author publication is expected.

### Application details

The position is available from **October 2022** (open until filled) for two years renewable on new grant up to three years. A contract will be established according to the French Labor Code. It includes a full social security scheme (sickness, maternity benefits, pension contribution ...). Salary will be based on experience.

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](mailto:emmanuelle-g.fabre@inserm.fr) and [pascale.lesage@inserm.fr](mailto:pascale.lesage@inserm.fr).

### Recent publications from the host lab linked to the project:

Bridier-Nahmias, A. *et al. Science*. 348, 585–588 (2015) DOI: 10.1126/science.1259114.  
Herbert, S. *et al. EMBO J*. 36, 2595-2608 (2017). DOI: 10.15252/embj.201695842.  
Asif-Laidin, A. *et al. EMBO J*. 39, 1–17 (2020). DOI:10.15252/embj.2019104337.  
Garcia Fernandez, F. *et al. J. Cell Sci.* jcs.258500 (2021). DOI: 10.1242/jcs.258500.  
Garcia Fernandez, F. *et al. bioRxiv* 4031, 2022.02.03.478935 (2022), in press at *eLife*.  
Nguyen P Q, *et al. bioRxiv* 2022.03.07.483246 (2022), under revision.

### Some recent reviews

Sultana, T. *et al. Nat. Rev. Genet.* 18, 292–308 (2017).  
Zimmer, C. & Fabre, E. *Curr. Genet.* 65, (2019).  
Bonnet, A. & Lesage, P. *Curr. Genet.* 67, 347–357 (2021).  
García Fernández & Fabre, E. *Genes (Basel)*. (2022)