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Marie Skłodowska-Curie Actions

*Developing talents,
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Postdoctoral Fellowships



CALL FOR APPLICATIONS 2025 – FELLOWS

Supervisor	Julien Mozziconacci
Supervisor page	https://biophysique.mnhn.fr/fr/annuaire/julien-mozziconacci-9031
Host Institution	Muséum national d'Histoire naturelle (MNHN) https://www.mnhn.fr/en/scientific-research
Research Lab	Structure and Instability of Genomes https://biophysique.mnhn.fr/en
Research Team	Repeated DNA, Chromatin, Evolution https://biophysique.mnhn.fr/en/arche-9044

Project Title

Dynamic control of epigenetic marks in live cells

Project Description

This project employs novel synthetic genomics techniques to investigate the dynamic interplay between epigenetic modifications, chromosomal organization, and gene expression. By specifically modulating the levels of histone trimethylation at distinct DNA repeat sequences, we will analyze its effects using imaging, Hi-C, ChIP-seq, and RNA-seq to unravel how these perturbations influence 3D chromatin structure, transcriptional activity, and genome stability.

Keywords

epigenetics, synthetic genomics, DNA repeats

Description of the Host Research Lab

Research in the “Structure and Instability of Genomes” laboratory focuses on nucleic acids, their structures, dynamics and interactions with different cellular partners. Our studies aim to characterize, at the molecular level, the cellular functions associated with nucleic acids, in particular the molecular mechanisms of genomic instability, involved in various pathological and evolutionary processes. As part of these studies, we are developing new genome-selective strategies for the study or artificial control of these functions.

To submit your application, please send an email with the required documents to
msca-pf@sorbonne-universite.fr