

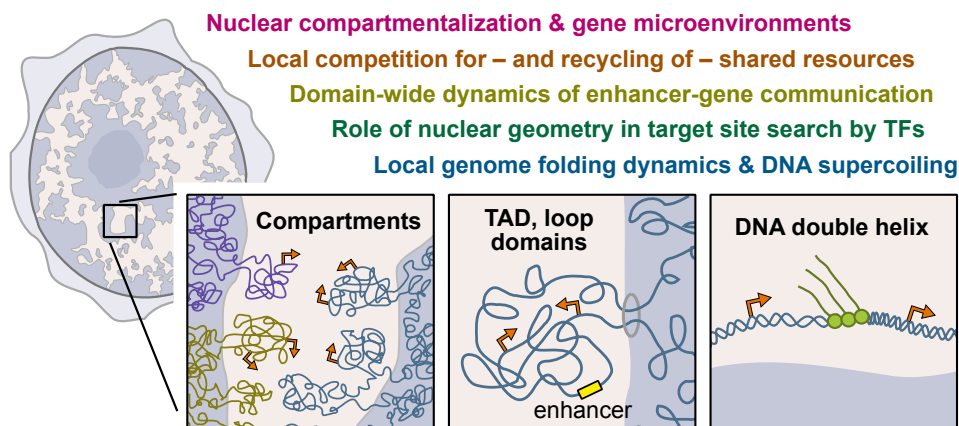
Postdoctoral position Imaging 4D Genome Dynamics and Gene Regulation Institut Curie (Paris, France)



We are looking for talented and motivated postdocs to join the research group "**Genome Functions in Space and Time**", headed by Antoine Coulon and funded by an **ERC Starting Grant** — more info: www.coulonlab.org.

Our group combines experimental and computational approaches, at the interface between **biology, physics and computer science**, to study how the spatial organization and dynamics of the mammalian genome in the nuclear space relates to the regulation of its expression.

Recent advances in the field of genome conformation have revealed distinct levels of organization. But how these structures exist and behave in four dimensions in individual nuclei remains poorly understood, as well as their causal relationship with transcriptional processes. Building upon our expertise in **real-time single-molecule microscopy** (RNA, protein) to follow the activity of individual gene in 4D, computational methods for the **analysis of spatio-temporal datasets**, and **physical modeling** of dynamics nuclear processes, the fellows will be offered to study timely topics:



Profile

Candidates should have a **strong interest for interdisciplinary research**, a proven track record, and preferably a good knowledge of the literature, open questions and challenges in 3D genome organization. We welcome applications from candidates with divers backgrounds.

Skills of interest include – but are not limited to:

- **bench work:** chromosome conformation capture, transcription, chromatin biology, ...
- **microscopy:** live-cell imaging, single-molecule tracking, super-resolution methods, ...
- **modeling/simulation:** theoretical biophysics (soft matter, polymer), computer science, applied mathematics.

The institute is very international – speaking French is NOT a requirement.

Offer

Financial support is provided for **3 years**, or more if necessary.

We will encourage and support the fellows to apply for independent funding (EMBO, Marie Skłodowska-Curie fellowships, national funding agencies...).

Application

Please send:

- your CV
- a statement describing your research interests
- contact details of 3 references

to Antoine Coulon by email at recruitment@coulonlab.org

More info: www.coulonlab.org

The Institute

Institut Curie is an internationally renowned institution for cancer research. It combines a center for basic research and hospitals for applied and translational research. It is located in central Paris, close to the Sorbonne and the Pantheon, within a stimulating academic environment, with institutions including ENS (École Normale Supérieure), ESPCI, Institut Poincaré, Collège de France, ...

Our group belongs to two research units: the **Nuclear Dynamics** unit, working on nuclear organization, chromatin dynamics, epigenetics, and the **Physical Chemistry** unit, working on diverse topics at the physics-biology interface.