

# Postdoctoral Position in Homologous Recombination (M/F)



## The hosting structure

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### Institut Curie Research Center

Institut Curie is a major player in the research and fight against cancer. It consists of a Hospital group and a Research Center of more than 1000 employees with a strong international representativeness.

The objective of the Research Center is to develop basic research and to use the knowledge produced to improve the diagnosis, prognosis, and therapeutics of cancers as part of the continuum between basic research and innovation serving the patient.

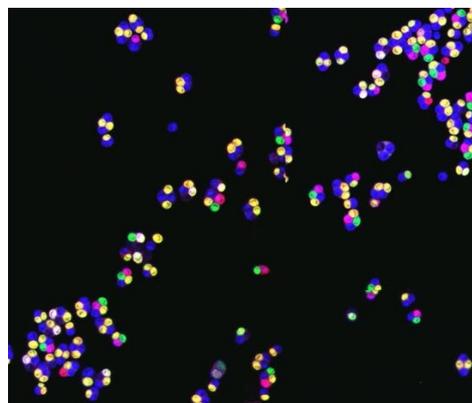
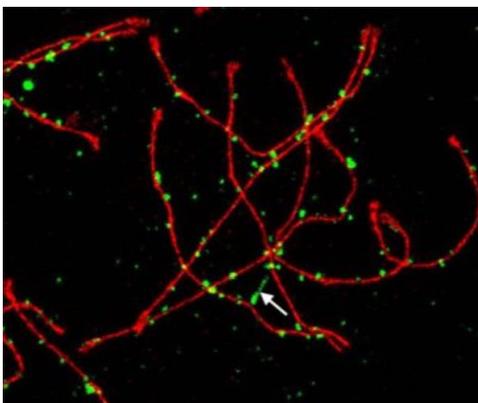
## Context

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### Laboratory

*The successful applicant will join the team of Valérie Borde, a dynamic research group within a network of six teams working on genome dynamics at the Dynamics of Genetic Information department at the Curie Institute. This is a highly vibrant research center, offering an international and multidisciplinary research environment in central Paris, and offers access to state-of-the-art facilities.*

*Our research work aims at dissecting the molecular mechanisms at play during the repair of DNA double-strand breaks during meiosis and somatic growth. We combine cutting-edge genomics, proteomics and molecular biology technologies using mainly budding yeast as a model system (<https://institut-curie.org/team/borde>).*



### Recent publications:

1. [Pyatnitskaya, A.](#), ... [Borde, V.\\*](#) (2022) The Zip4 protein directly couples meiotic crossover formation to synaptonemal complex assembly. **Genes and Development** 36, 53-69.
2. [Dai, J.†](#), [Sanchez, A.†](#), ... [Borde, V.\\*](#), [Charbonnier, J.-B.\\*](#) (2021) Molecular basis of the dual role of the Mlh1-Mlh3 endonuclease in MMR and crossover formation in meiosis. **Proc Natl Acad Sci U S A.** 118, e2022704118.
3. [Vernekar, D.V.](#), ... [Borde, V.](#) (2021) The Pif1 helicase is actively inhibited during meiotic recombination which restrains gene conversion tract length. **Nucleic Acids Research** 49, 4522-4533.
4. [Sanchez, A.](#), ... [Borde, V.](#) (2020) Exo1 recruits Cdc5 polo kinase to MutLgamma to ensure efficient meiotic crossover formation. **Proc Natl Acad Sci U S A.** 117, 30577-30588.

### The project

*The project will be focused on the mechanism and control of DNA synthesis during the repair of DSBs by homologous recombination. The postdoctoral fellow will use innovative proteomics and single molecule sequencing approaches.*

## Candidate Profile

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### Training and Skills required

- Training: We invite applications from applicants with a strong interest in DNA repair and chromosome biology, ideally (but not mandatory) with a mixed background in molecular biology and genomic analyses.
- Scientific skills: Candidates holding, or shortly expecting to be awarded, a PhD degree in related fields are encouraged to apply.
- Professional experience desirable: Candidates holding, or shortly expecting to be awarded, a PhD degree in related fields are encouraged to apply. Applicants should have at least one publication as first author.
- Language skills: Candidates should be fluent in English, which is the language used in the lab.

### Abilities

- Highly self-motivated
- Rigorous
- Creativity, ability to work independently and to collaborate with others

*All our opportunities are open to people with disabilities*

## Contract information

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**Type of contract:** *Fixed-term contract.*

**Starting date:** *position available immediately*

**Duration:** *one year, renewable*

**Working time:** *full time*

**Remuneration:** according to the current grids

**Benefits:** Collective catering, reimbursement of transportation fees up to 70%, supplementary health insurance

**Location of the position:** *Paris*

**Reference:**

## Contact

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Please send your CV, letter of motivation and 2 references, to Dr. Valérie Borde ([valerie.borde@curie.fr](mailto:valerie.borde@curie.fr))

Publication date: 10/02/2022

Deadline for application: until filled

***Institut Curie is an inclusive, equal opportunity employer  
and is dedicated to the highest standards of research integrity.***