



## Post-doctoral position – repetitive DNA in somatic tissue homeostasis I2BC, Paris-Saclay, France

### Project:

Our [team](#) is interested in the role that non-genic, repetitive DNA sequences play in the maintenance of cellular homeostasis in somatic tissues. More specifically, an ERC-funded project will illuminate the modes of regulation and the impact of transposable elements (TEs) in the soma. TEs are omnipresent, self-propagating DNA sequences. Their expression and/or mobility are implicated in normal development, aging and pathologic conditions, such as cancer or neurodegenerative diseases.

Our primary model system is the *Drosophila* midgut, a self-renewing tissue maintained by a population of adult intestinal stem cells. We combine diverse techniques, such as *Drosophila* genetics, CRISPR/Cas9 genome/epigenome editing, microscopy, physiological assays, molecular biology and genomics (including short- and long-read sequencing).

### Position:

Post-doctoral funding is available for up to 3 years. Starting date is flexible (from June 2023).

### Requirements:

- Enthusiastic, curiosity-driven researchers are encouraged to apply
- You should hold (or expect to obtain) a PhD in cell biology, developmental biology or genomics
- Collaborative spirit and good level of spoken and written English are required
- Experience in at least one of the following areas is desired: *Drosophila* handling and genetics, NGS wet-lab/data analysis, transposable elements, light microscopy

### Environment:

You will join a young, ATIP-Avenir-labeled and ERC Starting Grant-funded team, with permanent staff assisting in the implementation of the project. We are located in the Institute for Integrative Biology of the Cell ([I2BC](#)) in Gif-sur-Yvette, within a large CNRS/University Paris-Saclay science campus, in the south suburbs of Paris. The I2BC and the campus offer direct access to excellent facilities, training options, as well as support for international researchers ([more info](#)). The campus is conveniently connected to Paris, with its great scientific community and cultural life.

### Contact:

For additional information, please email [katarzyna.siudeja@i2bc.paris-saclay.fr](mailto:katarzyna.siudeja@i2bc.paris-saclay.fr)

To apply, send your CV, cover letter and contact details of 2 referees in a single pdf file.

Please apply before May 31, 2023. However, note that applications will be reviewed as received.

Candidates are encouraged to apply as soon as possible.

### Key publications:

- Van den Beek M, Rubanova N, Siudeja K. *Experimental Approaches to Study Somatic Transposition in Drosophila Using Whole-Genome DNA Sequencing*. *Methods Mol Biol.* 2023;2607:311-327.
- Siudeja K, van den Beek M, Riddiford N, (...), Bardin AJ. *Unravelling the features of somatic transposition in the Drosophila intestine*. *The EMBO Journal.* 26 févr 2021;n/a(n/a):e106388.
- Riddiford N, Siudeja K, van den Beek M, (...), Bardin AJ. *Evolution and genomic signatures of spontaneous somatic mutation in Drosophila intestinal stem cells*. *Genome Res.* 24 juin 2021;gr.268441.120.
- Siudeja K, Nassari S, Gervais L, (...), Bardin AJ. *Frequent Somatic Mutation in Adult Intestinal Stem Cells Drives Neoplasia and Genetic Mosaicism during Aging*. *Cell Stem Cell.* 3 déc 2015;17(6):663-74