

Post-doctoral position in Genome Biology at the I2BC

A fully funded **3-year post-doctoral position** is open in the "<u>Programmed Genome Rearrangements</u>" team at the <u>Department of Genome Biology</u> of the <u>Institute for Integrative Biology of the Cell (I2BC)</u> (Gif-sur-Yvette, France). Starting date: December 1st, 2021.

Description: The team studies the role of domesticated transposases and their interaction with double-strand break repair factors in developmentally programmed genome rearrangements, using the ciliate *Paramecium* as a powerful unicellular model.

The successful candidate will design and set up original experimental strategies to **characterize the complex machinery that catalyzes programmed DNA elimination**. He/she will investigate the molecular mechanisms involved in (i) tethering the complex to its chromatin targets and (ii) coupling DNA cleavage with NHEJ-mediated double-strand break repair throughout the process.

The team uses a combination of cutting-edge genomics and proteomics approaches, fluorescence microscopy and protein biochemistry, with the support of up-to-date next-generation sequencing, mass spectrometry and cell imaging facilities. They will provide all necessary support in *Paramecium* molecular/cellular biology and genomics. The team has established collaborations with structural biologists, which should provide a stimulating scientific environment for the selected candidate. The project is supported by grants from the *Fondation pour la Recherche Médicale* (FRM) and the *Agence Nationale de la Recherche* (ANR).

Salary will follow CNRS standards (gross salary: between 2743 and 3896 euros per month according to experience).

Qualification and experience. We are looking for a creative and highly motivated junior post-doctoral scientist with excellent experimental skills and strong background in chromosome and genome biology. Applicants should hold a PhD in Biochemistry, Molecular Genetics, Cell Biology or a closely related area. Research experience in biochemistry or molecular biology is required; technical expertise in protein biochemistry and/or fluorescence microscopy will be greatly appreciated. An ability to work independently, a proactive and collaborative personality and good communication skills in English (written and spoken) are also essential.

Location. The I2BC is a large research institute of the Paris-Saclay University located on the CNRS campus of Gif-sur-Yvette in the *Vallée de Chevreuse*, within a 45-min ride southwest from the center of Paris by train. The I2BC hosts 60 research teams representing a workforce of 700 researchers and staff. Research at I2BC covers a wide range of topics in genome biology, cell biology, microbiology, virology, biochemistry and structural biology. The hosting group is affiliated to the Department of Genome Biology.

Interested applicants should apply through the CNRS Portail Emploi website (https://bit.ly/3zEEwh7). Informal enquiries are welcome (mier@i2bc.paris-saclay.fr).