Postdoctoral position

to study the contribution of chromatin to the repair of replication fork damage

Applications are invited for an ATIP/Avenir funded postdoctoral position in the laboratory of Dr. Beatrice Rondinelli at the Genome Integrity and Cancers Unit (UMR 9019, www.gustaveroussy.fr/en/umr-9019) at Gustave Roussy Institute, located just outside of Paris city centre.

Lab interests. The response to replication fork (RF) damage in human cells is fundamental to repair DNA lesions that are encountered during genome duplication, ultimately maintaining genome stability. We unravelled the contribution of several chromatin components in this process, that act by stabilizing damaged RFs and timely activating DNA repair pathways. We also showed that some cancer-associated alterations in genes encoding for chromatin components impact the response of cancer cells to RF damage, genome stability and ultimately their survival. These works identify chromatin function at damaged RFs as a key cellular process to study and target to hinder the survival of cancer cells.

The project. A comprehensive understanding of the chromatin players and pathways that stabilize and repair damaged RFs in human cells is missing and requires further investigation. By undertaking unbiased proteomic and high throughput imaging approaches, we aim at identifying and characterizing new chromatin players that contribute to this process. Ultimately, we aim at better dissecting chromatin-dependent pathways of genome stability maintenance and cell survival at damaged RFs.

What we offer. The host Genome Integrity and Cancers Unit boasts a stimulating environment and dedicated equipment for research in the DNA repair and replication fields. Gustave Roussy Institute, the Leading Cancer Centre in Europe is the first oncology hospital outside the United States and focuses on the study of cancer biology and treatment. It offers access to state-of-the-art facilities including cell imaging, genomic, animal house and bioinformatics support. Initial funding is offered for a 24-months contract; during this time, the successful candidate will be encouraged to apply for external French and international fellowships.

What we expect. We invite applications from highly self-motivated and dynamic individuals, able to work independently while being good team players. The candidate is expected to have a PhD in biology and a solid background in cellular and molecular biology. A work experience in the chromatin organization or the DNA damage response will be appreciated. The candidate must be proficient in English.

Interested in the position? Please send your application package in a single PDF file to beatrice.rondinelli@u-paris.fr. This should include a motivation letter outlining your main contributions and research interests, your CV and the contacts of 2-3 referees. Expected start date is September 2022, applications will be considered as they are received and until a candidate is selected.