



Research Engineer Position

New mechanisms of nucleotide excision DNA repair coupled with transcription activation in human cells

A **30-month research engineer position** funded by the Fondation ARC is open from **November 2017** to work in the group Genome Transcriptional Regulation headed by Dr. Julie Sorina at the Institute for Integrative Biology of the Cell (I2BC), Integrative Biology and Molecular Genetic Unit (SBIGeM) on the Saclay campus of the CEA (Paris region, France).

The research engineer will be in charge of the part of the on-going project on the **new mechanisms of nucleotide excision DNA repair coupled with transcription activation in human cells** as a model system. The project is based on our recent discovery of a novel Mediator role in transcription-coupled DNA repair. We aim to develop new concepts of the functional interplay between transcription and DNA repair, of fundamental processes, and function of which lead to various human diseases including cancer.

The successful candidate will have a PhD in molecular biology with a solid background knowledge in genetic and functional genomics. A prior experience in human cell biology is strongly required. We are seeking for highly motivated candidate interested in deciphering how transcription and DNA repair are coordinated in human cell on the genomic scale. A previous experience in CHIP-seq approaches will be appreciated.

Interested candidate should contact Dr. Julie Sorina at julie.sorina@cea.fr and send a Curriculum Vitae, including past research experience and publication record, as well as a letter detailing their motivation and interest in our work. Application should also provide the name and contact details for two or three references and recommendation letters.

Websites: http://ibi.ec.ccea.fr/drf/ibi.ec/Page/eric/bigem/lg/reg_la_ion-ran_crip_ionnelle-genome_a_p and <http://i2bc.paris-saclay.fr/pip.php?article395>.

Selected references of the group:

- Echenné T., Nojima E., Barralet M.-B., Aliberti O., Boichiero C., Peireiro N., Corn D., Redeker V., Krause L., Nicola P., Werner M., & Sorina J. (2016) Functional interplay between Mediator and TFIIB in preinitiation complex assembly in relation to promoter architecture. *Genes & Dev.* 30, 2119-2132.
- Ebbole F., Wada-Demaei S., Echenné T., Aliberti O., Neil H., Boichiero C., Neer M.-C., Volland H., Corn D., Redeker V., Werner M., & Sorina J. (2015) Mediator independent orchestra multiple steps of preinitiation complex assembly *in vivo*. *Nucleic Acids Res.* 43(19), 9214-9231.
- Ebbole F., Cibotto C., Echenné T., Neil H., Aliberti O., Werner M. & Sorina J. (2013) Mediator link transcription and DNA repair by facilitating Rad2/XPG recruitment. *Genes & Dev.* 27, 2549-2562.
- Carriere et al. (2012) Genomic binding of Pol III transcription machinery and relationship with TFIIS transcription factor distribution in mouse embryonic stem cells. *Nucleic Acids Res.* 40, 270-283.
- Sorina, J. et al. (2011) Direct RNA polymerase II Mediator interaction required for transcription *in vivo*. *Science* 331, 1451-1454.