

Post-doctoral position

Centre de Biologie Intégrative (CBI) Toulouse

Chromatin dynamics in response to mechano-sensing and gene expression

Global chromatin properties control cellular plasticity, heterogeneity and phenotypes in response to changes in cellular external conditions or perturbations. Our goal is to decipher the mechanisms linking nuclear architecture, macromolecular assemblies and switches in the control of transcriptional programs combining high throughput functional analyses with novel *in vivo* imaging. The project's objectives are to analyze how environmental cues, in particular mechanical stress, impact chromatin fiber dynamics, 3D genome organization and gene expression programs.

This interdisciplinary research program will integrate innovative live cell imaging, genome wide molecular biology approaches and cellular manipulation. The project involves collaborations with colleagues in Genomics and in Physics (polymer modeling).

The MCD unit of the CBI (www.cbi-toulouse.fr, www.mcd.cbi-toulouse.fr) is a world leading institution in the fields of chromosome and RNA biology, cell dynamics and mechanics, stem and developmental biology, genetics and cancer biology (currently 29 groups). It is an excellent international environment to perform multidisciplinary research supported by a state-of-the-art technological facilities. The CBI is located on the University Paul Sabatier Science campus in beautiful Toulouse, France, with easy public transport access to town and other institutes.

Previous expertise in microscopy and molecular biology are necessary. The successful applicant must have, or be in the process of completing, a doctorate in a relevant research area and a primary research paper in a peer-reviewed journal. Funding will initially be provided for 12 months, the postdoctoral fellow is expected to apply to external fellowship opportunities.

Applicants should send their CV, a motivation letter (2 pages max each) and contact information of two references to Kerstin.bystricky@univ-tlse3.fr

Call open March – June 2023. The CBI promotes inclusiveness, equality, collegiality.