

## **PhD fellowship in Biological Physics**

Our group is looking for a brilliant PhD candidate in Biological Physics. The group mainly focuses on understanding the fundamental bases of chromatin and gene regulation using physical modeling and computational approaches. This entails understanding chromosome organization and dynamics, and epigenomic regulation in normal and cancer cells. Our innovative research is conducted in close interaction with top-leader experimental and clinical partners.

The PhD student will develop a research activity on the modeling of chromosome folding and dynamics in eukaryotes. It will involve the development of original models coupling statistical and polymer physics, of efficient simulation schemes, and of statistical tools to analyze experimental data. The project will be realized in close collaboration with experimental biology groups working on various systems and species (human, drosophila, worms, yeast, etc.). The student will also have the opportunity to perform by him/herself experiments.

The candidate will integrate the laboratory LBMC ('Biology and Modeling of the Cell' lab, ENS Lyon, France) that aims to characterize the molecular bases underlying the organization and functioning of cellular processes in normal and pathological conditions. The laboratory develops genetic and quantitative analyses of biological systems, systems biology and modeling approaches. It is based at Ecole Normale Supérieure de Lyon, a French top-leading research and educational institute.

We are looking for a creative and highly motivated candidate with a background in statistical or polymer physics, in computer science or in computational biology. Advanced skills in programming is required and a previous interdisciplinary experience in connection with biological issues would be a plus.

To apply, please send your CV, a motivation letter, and the names of two references to Daniel Jost at [daniel.jost@ens-lyon.fr](mailto:daniel.jost@ens-lyon.fr)