Post-doc position in polymer modeling of chromosome organization

Our group is looking for a post-doctoral fellow to be funded for up to two years. 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 post-doctoral fellow will develop an activity on the modeling of chromosome folding and dynamics in humans. It will involve the development of original models coupling polymers and active processes, of efficient simulation schemes, and of statistical tools to analyze experimental data issued from chromosome conformation capture and microscopy techniques. The project will be realized in close collaboration with the experimental biology groups of Kerstin Bystricky (LBME, Toulouse, France) and Tom Sexton (IGBMC, Strasbourg, France).

The candidate will integrate the laboratory TIMC-IMAG that gathers scientists and clinicians towards the use of computer science and computational biology for understanding and controlling normal and pathological processes in biology and healthcare. It is based in Grenoble, one of the biggest student and academic cities in France, and located nearby the French Alps.

We are looking for a creative and highly motivated candidate. Strong background in numerical simulations and polymer modeling is required. 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@univ-grenoble-alpes.fr

Daniel Jost