



2 PhD positions in 3D Chromatin organization & Biophysics

Do you want to enjoy science by challenging interdisciplinary projects in the field of Chromatin Biology & Epigenetics? Two PhD positions are now available in the research team headed by Prof. Alessio Zippo at the Department of CIBIO, University of Trento. We are seeking highly motivated and enthusiastic candidates, willing to challenge innovative projects aiming to address the role of chromatin architecture in pathological conditions.

#1 Dissecting the biophysical properties of chromatin in genetic diseases

The herein program aims to define the role of chromatin-associated condensates in determining the nuclear mechanical properties and their impacts on nuclear architecture in Kabuki Syndrome. The successful candidate will be involved in an interdisciplinary project with research being conducted at the crossroad between computational science, biophysics and molecular biology. As candidate, you should have a vivid interest in understanding the principle governing genome organization by addressing the underlying biophysical properties of chromatin.

#2 Computational Epigenetics in cancer cell reprogramming

This project focus on the development of innovative strategies for solving 3D chromatin organization and its heterogeneity at single cell level. The PhD student will perform integrative data analysis to translate the alterations of the chromatin structure into the genomic functions of cancer cells. By taking advantage of multiple sources from NGS and imaging datasets, He/She will have the opportunity to develop and implements computational methods to define the organization of chromatin compartments and their contribution to cancer cell plasticity.

How to Apply

Qualified and interested candidates should submit their application including CV, a motivation letter describing how her/his background would best fit this position, and the contact information of at least two referees. Please send all documents to Prof. Alessio Zippo (alessio.zippo@unitn.it). This position is available starting from November 2021.