PhD fellowship on the multiscale analysis of the chromatin architecture

Institute of Genetics and Development of Rennes, France
AND
Butenandt Institute, Ludwig Maximilians University Munich, Germany

Job description

One PhD position is available for a collaborative project between the teams of Dr. Sébastien Huet at the Institute of Genetics and Development of Rennes and Dr. Gyula Timinszky at the Butenandt Institute, Ludwig Maximilians University Munich. The position is funded for 3 years, with a gross salary of 1650€ per month.

The successful applicant will be involved in an interdisciplinary project focusing on the multiscale analysis of the chromatin structure. Inside the nucleus of eukaryotic cells, the chromatin displays a complex and dynamic architecture which regulates different cellular processes accessing the DNA double helix such as transcription or DNA repair. The first objective of this project is the development of new methodologies based on fluorescence microscopy methods to characterize quantitatively the different structural scales of the chromatin and their dynamics. Once these tools functional, we will use them to study the role of the poly-ADP-ribosylation signaling pathway in the control of the chromatin architecture. This signaling pathway has been shown to play a key regulatory role in different mechanisms such as DNA repair and transcription.

Qualifications

The candidate should hold either a master degree in physics with a strong experience in fluorescence microscopy and / or in soft matter, or a master degree in cellular and molecular biology with a proven practical experience in fluorescence microscopy. The candidate should also show a strong interest for questions related to cell biophysics.

Contact

Applications should include a CV, a motivation letter and contact details for at least two referees. They should be sent to Dr Sébastien Huet (email: sebastien.huet@univ-rennes1.fr). The application deadline is June 5th.