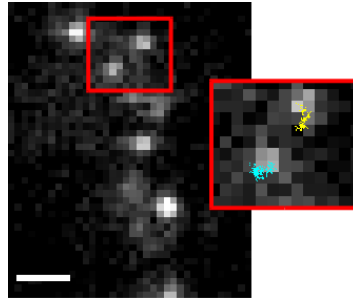
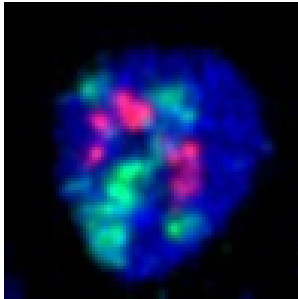


One post-doctoral position available in super-resolution fluorescence microscopy and cellular biophysics, Rennes, France



Job description

One post-doctoral position is available in the team "Dynamic of the Chromatin Architecture", headed by Dr. Sébastien Huet, for a period of 2 or 3 years starting early 2012. The team belongs to the Institut de Génétique et du Développement de Rennes (<http://igdr.univ-rennes1.fr/>), which hosts 140 people organized in 13 teams working on genetics, developmental biology, cell biology and biophysics. Researchers from the institute benefit from several core facilities including an advanced light microscopy service.

The team has been created in September 2010. The group is composed of a group leader who has a deep experience in fluorescence microscopy and cellular biophysics and a technician, specialized in cellular and molecular biology. The team is interested in the quantitative analysis of the dynamic architecture of the nucleus in the context of the regulation of gene expression. The chromatin fiber contained in the nucleus of eukaryotic interphase cells is characterized by a multi-scale architecture, which still remains only partially characterized. Yet, this complex organization probably plays a key role in the control of gene expression in particular by modulating the accessibility of chromatin to transcription factors or their protein partners. A better description of the dynamic chromatin architecture is then a necessary condition for a precise understanding of the role of the chromatin organization in transcription regulation. To study these questions, the team uses various approaches involving fluorescence microscopy, molecular biology and biophysics. In particular, the team aims at setting up a super-resolution system to image with unprecedented spatial resolution the chromatin folding in the interphase nucleus. The recruited post-doctoral fellow will be involved in the design and the building-up of the super-resolution microscope. Once the setup functional, he will use it to image the chromatin structure in resting and activated cells. To achieve this goal, the team benefits from funding from the French national research agency (ANR) and from the European Union for the next four years.

Qualifications

The applicant should have a PhD thesis and should not have spent more than 6 months in France during the last 12 months. A proven experience in the development of optical imaging setups is a prerequisite. Good knowledge in image processing will also be strongly appreciated.

Contact

Applications should include a CV with a publication list, a motivation letter and contact details for three professional referees. They should be sent to Dr Sébastien Huet (email: sebastien.huet@univ-rennes1.fr).