

Postdoctoral Research Position

Replication-transcription interference and genomic instability

The laboratory “Maintenance of Genome Integrity during DNA Replication”, offers a 24 month postdoctoral position funded by the Labex EpiGenMed (<http://www.epigenmed.fr/>). This group, led by Philippe Pasero, is located at the Institute of Human Genetics in Montpellier, France (www.igh.cnrs.fr).

The laboratory “Maintenance of Genome Integrity during DNA Replication” investigates the cellular responses to replication stress in budding yeast and in human cells, using a combination of single-molecule (DNA combing, DNA fiber spreading) and genome-wide (ChIP-seq, RNA-seq, DRIP-seq) approaches. We are particularly interested in the mechanisms by which transcription interferes with DNA replication, with a focus on DNA-RNA hybrids (R-loops) and collisions between DNA and RNA polymerases. We also investigate the genetic and epigenetic mechanisms that operate at stalled replication forks to prevent genomic instability, including structural mechanisms involving cohesin, condensin and the MRX/MRN complex. These studies are conducted in parallel in budding yeast and in human cells. Our group is part of the Laboratory of Excellence EpiGenMed and of the SIRIC (comprehensive cancer center) Montpellier Cancer.

The Institute of Human Genetics (www.igh.cnrs.fr) is a very dynamic research institute located in the University and Hospital area in Montpellier. It hosts 21 research group working on various aspects of the structure and function of eukaryotic genomes. It is fully equipped with state-of-the-art scientific equipment such as NGS, proteomics and super-resolution microscopy. The IGH generates an excellent scientific environment for high quality and intensive scientific life. Group meetings, external and internal seminars in the Institute are in English. Montpellier is one of the most lively and concentrated areas for research in France.

We are seeking highly motivated and skilled researchers with broad and extensive experience within one or more of the following areas: DNA replication, transcription, molecular biology, yeast molecular genetics, genomics and bioinformatics.

The position is available immediately. Applications should be send no later than end of April, including motivation letter, CV, summary of research experience and contacts for references to: philippe.pasero@igh.cnrs.fr