

**Group “Genetics, Epigenetics and Biology of Sarcomas” (Dir. Franck Tirode).
Cheney B building, 3rd floor, Centre Léon Bérard, 28 Rue Laennec, 69008 Lyon, France.**

Post-doctoral position in molecular biology of sarcomas

Description:

Sarcoma represents an aggressive heterogeneous group of rare malignancies, with variabilities in anatomic site, age, histology or prognosis. With an increasing number (over a hundred) of histological subtypes being described, they represent not only a diagnostic challenge for the pathologists but also a therapeutic conundrum for the oncologists. Our “Genetics, Epigenetics and Biology of Sarcomas” group activities aim at identifying new oncogenic alterations in sarcomas, at deeply investigating their functions and at possibly proposing specific therapeutic targets. For this purpose we are working together with our bio-pathology department to perform molecular investigations using RNA-sequencing on a very large collection of FFPE sarcoma samples. We already identified a number of novel tumour entities and are currently investigating some of the most recurrent genetic alterations. Part of the group is working on the characterisation of the chromatin remodelling process found altered by some specific sarcoma fusion genes. Of note, we are also engaged in the establishment of PDX models of sarcomas.

Our group is affiliated to the Cancer Research Centre of Lyon (CRCL – INSERM U1052 / CNRS 5286) and to the Centre Léon Bérard’s Department of Translational Research and Innovation. These affiliation allow us to have close collaborations with both researchers, clinicians and pathologists from the both centres. We benefit also from the CRCL/CLB’s numerous platforms, including FACS/cell sorting, imaging, NGS, bioinformatics, experimental pathology, ex-vivo and drug discovery platforms together with the animal facilities.

The proposed research project will focus on the functional impacts of a new recurrent oncogenic fusion gene identified by Next Generation Sequencing that destabilize epigenetics processes. This project will require expertise in cellular biology and molecular biology in the field of epigenetics. The missions of the successful candidate will be to establish cellular models, to investigate the role of the fusion gene and its relationship with epigenetics processes and to molecularly and phenotypically dissect the consequences of its expression/inhibition.

Requirements:

Applicants must have a PhD in biology or related field. Ideally, candidates should be first author on at least 2-3 publications, demonstrating their expertise. This position requires competences in cell biology and molecular biology techniques, including cell culture, si/shRNA inhibition, PCR, qRT-PCR, Western Blotting, co-Immunoprecipitation, ChIP, ChIP-seq, RNA-seq, flowcytometry, fluorescence microscopy or immunostaining. Prior work experience on transcription/epigenetic studies is a strong advantage. Furthermore, excellent oral and written communication skills in English are required as well as the ability to conduct independent scientific investigations.

Duration of this position is 18 months. Successful applicant should start before the end of 2018.

If interested, please submit cover letter, CV, and at least two reference letters, BEFORE September the 30th, to: franck.tirode@lyon.unicancer.fr