Post-doctoral position in molecular biology of sarcomas

18 months fixed-term contract, full time. Starting date: As soon as possible

Background and Research environment:

CRCL is a research structure created in January 2011, which currently comprises of 24 research teams gathering around 500 people -including 150 researchers-, fully dedicated to cancer research. CRCL is affiliated with the University of Lyon1, the French medical and scientific research bodies (INSERM and CNRS) and the Léon Bérard Comprehensive Cancer Centre as well as with the Hospices Civils de Lyon. A major aim of CRCL is to facilitate the transfer of knowledge gained from basic research to clinical application in oncology, as well as to develop world-class teaching and training. The "Genetics, epigenetics and biology of sarcoma" team led by Franck Tirode is dedicated to the investigation of sarcoma specific fusion genes that (may) deregulate epigenetics mechanisms.

Description of the project:

The project of the successful candidate, funded by the French National Cancer Institute (INCa) for 18 months, will aim at characterizing novel fusion genes in small round cell sarcoma with a particular focus on the chromatin remodeling deficiencies often observed in these rare sarcoma types. The project should explore in depth their DNA binding capacities (ChIP-seq), transcriptional deregulations (RNAseq), and interacting proteins (Mass spectrometry - IP). The project may also requires performing CRISPR-mediated inhibition and drug screenings.

Key Skills, Experience and Qualifications:

Applicants must have a PhD in biology or related field. Candidates should have demonstrated success in previous research by being first author on multiple high impact publications, preferably related to transcription/epigenetic studies. This position requires expertise in cell biology and molecular biology techniques, including PCR, qRT-PCR, Western Blotting, co-Immunoprecipitation, ChIP-seq, RNA-seq, flowcytometry, CRIPSR, cell culture, fluorescence microscopy or immunostaining. A certificate in animal certificate would be an advantage. Excellent oral and written communication skills in English and French are required. Strong motivation, autonomy and ability to quickly and effectively adapt to the project will be essential.

Application including a curriculum vitae and a cover letter stating research interests and qualifications, as well as recommendation letters and references should be sent to Dr. Franck Tirode: franck.tirode@lyon.unicancer.fr. Application deadline: 13th June 2021

Selected publications:

1. Karanian, M., et al. (2020) SRF fusions other than with RELA expand the molecular definition of SRF-fused perivascular tumors. Am J Surg Pathol, 44(12):1725-1735.
2. Brahmi, M., et al. (2020) Molecular classification of endometrial stromal sarcomas using RNA sequencing defines nosological and prognostic subgroups with different natural history. Cancers, 12(9), 2604.
3. Karanian, M., et al. (2020) SRF-FOXO1 and SRF-NCOA1 fusion genes delineate a distinctive subset of well differentiated rhabdomyoblastic tumor. Am J Surg Pathol. 44(5), 607-616.