Computational Biologist: Onco-immunology

The CISTAR Laboratory " **C**ancer **I**mmune **S**urveillance and **T**herapeutic t**AR**geting"
<u>Head</u>: Dr C. Caux, Cancer Research Center of Lyon (CRCL)

We are seeking a **Computational Biologist** to join C Caux's team (CRCL) to work on onco-immunological projects in close collaboration with the Gilles Thomas Bioinformatics Platform (Dr Alain Viari, CLB). General objectives of the team are to identify key immune surveillance and immune escape mechanisms induced by tumors, and to better understand the respective roles of immuno-regulatory receptors (immune checkpoints) of innate and adaptive immunity in the objective to develop new drugs and combinatorial therapeutic strategies.
Contract: **3 years** (yearly renewed)

Responsibilities:
The successful applicant will integrate a team of immunologists and work in close collaboration with the Gilles Thomas Bioinformatics Platform to develop and implement bioinformatics tools to study the role of various immune cells/pathways within the tumor microenvironment, to discover immunosurveillance mechanisms by comparing pre-tumoral versus tumoral stages, and to perform correlative studies between immune and clinical parameters. The main objectives of the applicant will be to: **1/** implement pipelines for the analysis of RNA-Seq data and perform the analysis of data sets generated by the team; **2/** validate existing statistical and bioinformatics approaches for the analysis of various -omics public datasets (cancer databases and immune databases) and implement a complete analysis solution (mixing existing and new tools); **3/** implement pipelines for the analysis of scRNA-Seq data publicly available and contribute to the analysis of data sets generated by the team.

The duties also include:
- Analysis of large datasets, script generation, development of new methods/tools for advanced analysis of datasets
- Define and handle the data management processes
- Support research project through consulting for NGS experimental design, assistance with papers, grant application and scientific meeting presentations
- Bibliographic watch on bioinformatics data and tools related to the team's research projects

Qualifications:
The successful candidate will have a solid background in bioinformatics, biostatistics, and bioanalysis (**PhD in Bioinformatics or Master + experience**), and the ability to work in a multidisciplinary research environment. The individual should be highly motivated and be able to work independently, while being able to communicate effectively. Knowledge of tumor immunobiology will be considered as an advantage.

Interested applicants should send a cover letter and their CV, including the contact information of two professional references, to Marie-Cécile MICHALLET (marie-cecile.michallet@lyon.unicancer.fr).

The closing date for applications is May 15th 2022.