

## PostDoc Position in single cell OMICS applied to immune-oncology

*We are looking for a motivated Postdoctoral researcher to work at the forefront of single cell and oncology research in a stimulating environment interfacing academic and private sectors. The candidate will bridge the gap between fundamental research in the field of cancer biology and market-oriented development of single cell OMICS by working between the Cancer Research Center of Lyon (CRCL) at the Centre Léon Bérard and Cellenion SASU.*

The Centre Léon Bérard (CLB), associated to the CRCL and based in Lyon, France, is 100% dedicated to oncology. It has 3 missions: care, research and teaching with the sole idea in mind of innovation in the service of patients. The CAUX's team aims to identify mechanisms involved in immune subversion by cancer cells to develop therapeutic strategies based on the reactivation of immune-surveillance, the team is also involved in the identification of biomarkers of response to immunotherapies (IT).

Cellenion, part of the CELLINK group, is a fast-growing French biotechnology company based nearby the CLB. Cellenion developed cellenONE, a device allowing high throughput sorting, isolation and dispensing of single cells combined with picoliter dispensing. This open platform is compatible with a wide range of OMICS protocols to bring single cell analyses to the next level and revolutionising tomorrow's Precision Medicine. ([www.cellenion.com](http://www.cellenion.com))

### **Project:**

It is well known in mice that some myeloid cells are key in the establishment of an effective anti-tumor immune response, and more particularly during immune checkpoint therapies. The aim of the present project is to understand in human, the role of those cells in breast, melanoma and lung cancer and to identify new biomarkers of response to IT by scRNAseq approaches. The candidate will work both in wet and dry part of the lab. He will have to set up fluorescent immune cell sorting strategies using the cellenONE technology, develop molecular tools for scRNAseq and explore transcriptomic data from tumor infiltrating myeloid cells. This project will benefit from access to tumors samples from the CLB and blood from healthy volunteers. The candidate will thus be in charge to analyze cells from patients enrolled in clinical trials treated with immunotherapies. This project will be done within the academic research team of Dr. Christophe CAUX of the Cancer Research Center of Lyon (CRCL), Centre Léon Bérard (CLB) under the supervision of Dr. Jenny VALLADEAU-GUILEMOND and within the Cellenion company under the supervision of Dr. François MONJARET.

### **Skills and Qualifications:**

- PhD related to (cancer) immunology and/or molecular biology
- Demonstrated interest in Oncology and immune-oncology
- Proven expertise in transcriptomics or other omics
- Developed knowledge in immunofluorescence and flow cytometry
- Excellent organizational and time management skills
- Experience in working with deadlines and being involved in multiple projects
- Ability to be inventive and to present novel ideas in method development, data analysis and interpretation.
- Proactive, flexible, and problem-solving attitude
- Excellent skills in spoken and written English
- Proven capabilities to work autonomously and collaboratively in a team
- High motivation, flexibility as well as creative thinking will be key to access this position

**Team and location:** The Cancer Research Center of Lyon in Centre Léon Bérard ([www.crcl.fr](http://www.crcl.fr)) and Cellenion ([www.cellenion.com](http://www.cellenion.com)), both based in Lyon, FRANCE

**Publications :** Hubert M. *et al.* Science Immunology, 2020 ; Hubert M. *et al.* Cancers, 2019; Balan S. *et al.*, J Immunol., 2015; Laks *et al.*, Cell, 2019.

**Application notes :** High quality and sensitivity 3' scRNA-seq libraries in nanoliter volume

**Funding:** The present fellowship is for 3 years, fully funded for 2 years by Region Auvergne-Rhône-Alpes. The candidate, with full support of both CLB and Cellenion will have to seek funding for the third year.

**Salary:** 32k€ gross salary

*Cellenion and the CRCL believes that everyone has the ability to make an impact, and we are proud to be equal opportunity employers committed to providing dynamic and enjoyable working environments.*

Candidates should send a *curriculum vitae* with a publication list, a short summary of research achievements and mastered techniques in English, and the names and email addresses of at least two references to [jenny.valladeau@lyon.unicancer.fr](mailto:jenny.valladeau@lyon.unicancer.fr) before end of December 2020.