

**Post-doctoral position in the “Immunity and Cancer” Inserm Unit U932  
at Institut Curie – Paris, France**

**February 2024**

The department of Immunology headed by Ana-Maria Lennon-Duménil is actively looking for a Post-doc motivated to work on an ambitious project in translational Immunology.

Institut Curie (<http://www.institut-curie.org>) is one of the most renowned European institutions for cancer research with a strong interdisciplinary tradition. It is located in the center of Paris, in a culturally and scientifically rich environment. This position is open in the team of Tumor Immunobiology of Dr Emanuela Romano, medical director of the Center for Cancer Immunotherapy embedded in the “Immunity and Cancer” INSERM Unit 932 (<https://science.institut-curie.org/research/integrated-biology/u932-immunity-and-cancer/>; <https://institut-curie.org/personne/emanuela-romano>). The candidate will benefit from the high-level scientific environment of our Research Institute, as well as of state-of-the-art technological platforms (imaging, proteomics, genomics, flow cytometry, bioinformatics, biostatistics, sequencing facilities, etc...). Our center includes research teams in the fields of basic and translational immunology, working in a very collaborative and international environment. The selected candidate will work in close collaboration with biologists and bioinformaticians under the supervision of Dr Emanuela Romano. The open position is in line with recent developments at the interface between Immunology and Bioinformatics.

**Job description:**

The successful candidate will be involved in immunology projects in close collaboration with biologists, bioinformaticians, and medical doctors with the aim of better understanding cell networks associated with immunotherapy outcome in breast and ovarian cancers. Treatment combinations with anti-PD-(L)1 antibodies have significantly increased the response rates for several patients with solid tumors. Despite these advances, the contribution of distinct tumor microenvironments to immunotherapy response remains largely unknown. We hypothesize that by tracing the adaptation of breast cancer to (chemo)-immune checkpoint blockade through deep characterization of the tumor, immune, and stromal microenvironment (TISME) using human samples, obtained prior and on-treatment in the course of academic clinical trials, we will address this clinical need.

**Profile:**

The candidate holds a PhD in Immunology with a solid background in Immunology, cell Biology, and Biostatistics. Good knowledge in approaches such as **cell culture, *in vitro* experiments using primary human immune cells, flow cytometry and single-cell RNAseq**

**analysis** are required. Knowledge of multivariate statistics is not mandatory but would be valuable.

**Mission:**

The candidate will generate and analyze the data obtained from **cell culture, *in vitro* experiments using primary human immune cells, flow cytometry and single-cell RNAseq from tissue samples derived from either cancer patients or normal donors**. The candidate will master the literature related to the project/s and follow the developments in his/her domain of interest. The candidate is expected to have a teamwork spirit and good communication skills, be autonomous and open to new experimental approaches.

**Knowledge**

- Experience in management and manipulation of human samples
- Experience in cell culture and *in vitro* experiments
- Knowledge in statistics
- Basic experience in the use of bioinformatics tools for single cell RNAseq analysis and differential gene analysis (ex: R)
- Experience in tissue imaging (ex: multiplex IHC, IF) is appreciated by not mandatory
- Fluent written and spoken English is mandatory.

**Position:**

The position is open and funded for 18 months with possible extension. If you are interested, please, send your CV, a cover along with 2 letters of reference to Dr Emanuela Romano ([emanuela.romano@curie.fr](mailto:emanuela.romano@curie.fr))