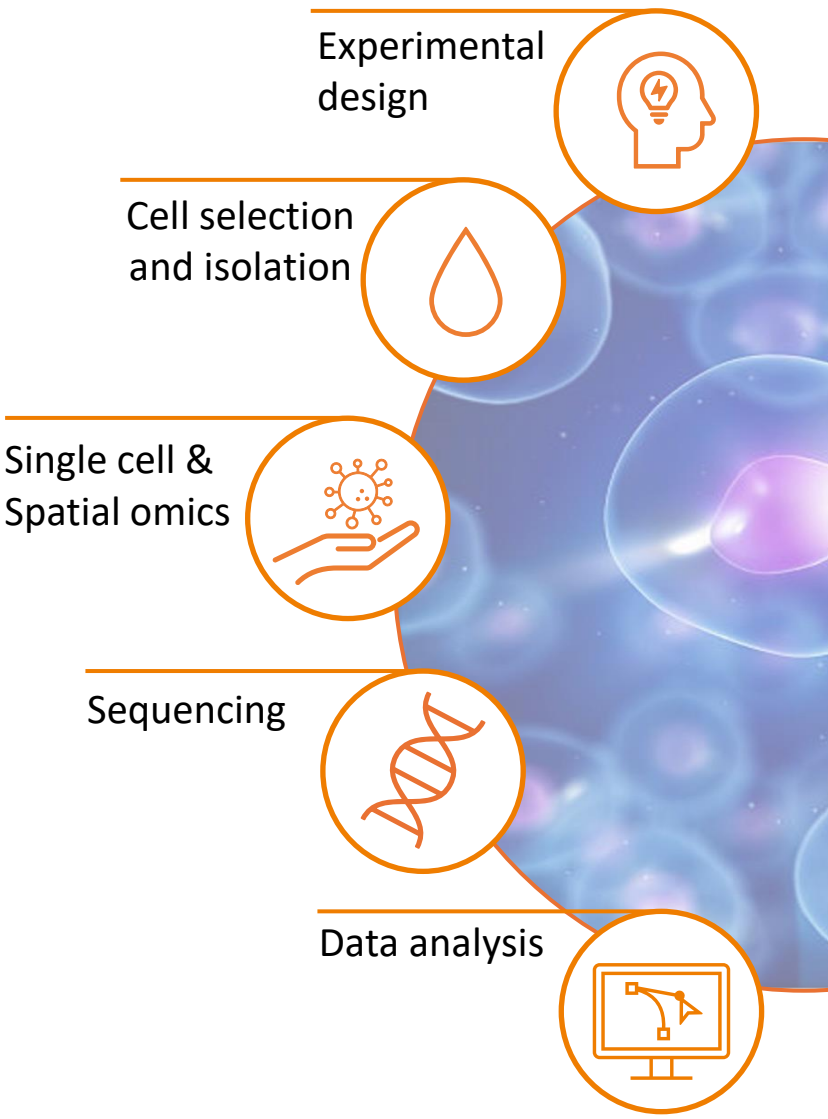
institut Curie

Single Cell and Spatial Omics technologies

The Institut Curie Single Cell Initiative:

- A team of Single Cell and Spatial Omics experts
- A broad portfolio of cutting-edge technologies
- An integrated pipeline from study conception to data interpretation

Single Cell Initiative

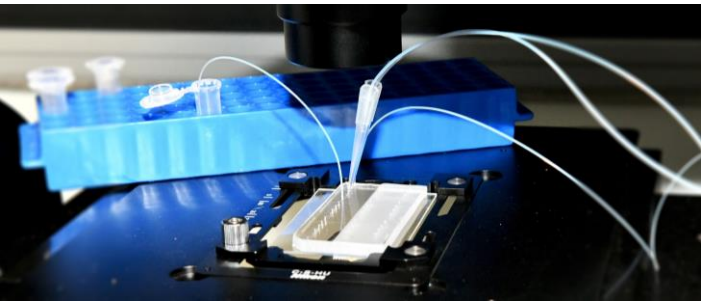


Single Cell Omics

Institut Curie is a world-wide leader in single cell omics applied to (cancer) cell biology and immunology.
Let us help you unleashing the full potential of your sample!

Single cell phenotyping

- Flow conventional cytometry
- Flow spectral cytometry
- Flow imaging cytometry

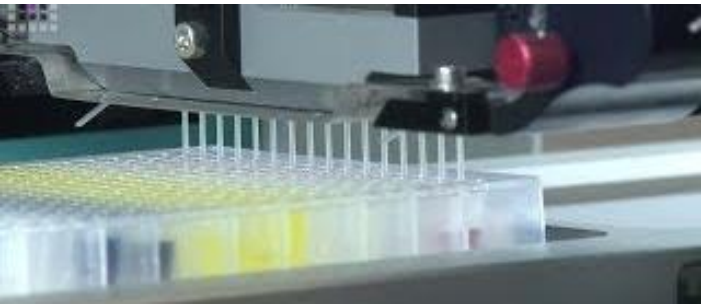


Single cell sorting/isolation

- Flow conventional cell sorting
- Flow spectral cell sorting
- Chromium controller iX
- CellenOne
- In-house microfluidics

Single cell Genomics

- 3' gene expression
- 5' gene expression with immune repertoire profiling
- Full length RNA sequencing (ex: isoforms)
- Single cell DNA sequencing (scCNV)



Single cell Epigenomics

- Chromatin accessibility (scATAC-seq)
- scATAC-seq + scRNA-seq
- Histone modifications (scChIP-seq / scCUT&Tag)

Single Cell Spatial Omics

Institut Curie proposes innovative commercial and home-made solutions to unveil the spatial dimension of your samples.
Make spatial multiomics a reality by combining two technologies on the same sample!

Spatial Proteomics

- Immunochemistry
- Multiplexed immunofluorescence (Rarecyte Orion)

Sequencing-based Spatial Transcriptomics

- Visium (10X Genomics)
- Visium High Definition (10X Genomics)

Imaging-based Spatial Transcriptomics

- Xenium (10X Genomics)
- In-house FISH

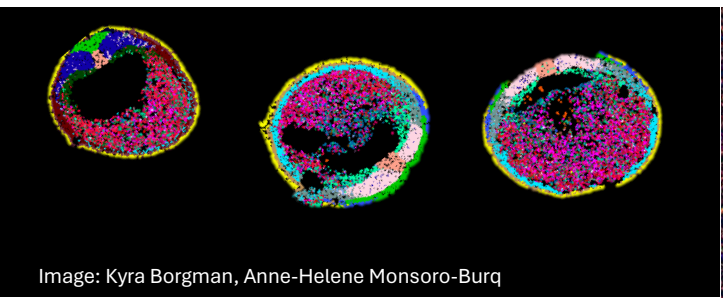


Image: Kyra Borgman, Anne-Helene Monsoro-Burq

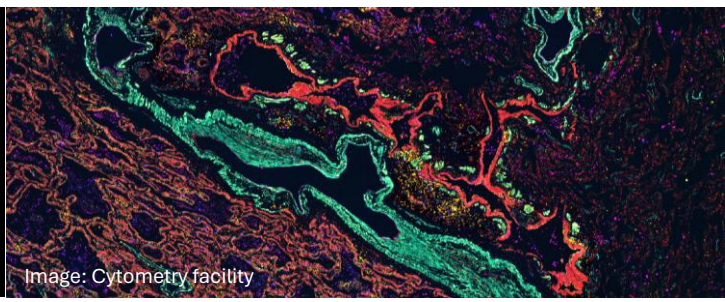


Image: Cytometry facility

Four core facilities, one pipeline, one contact

Cytometry
Coralie Guérin
Cell sorting & Phenotyping, Imaging-based spatial proteomics and transcriptomics

Custom Single Cell Omics
Céline Vallot & Leila Perié
Microfluidics & in plate custom solutions

ICGex/NGS
Sylvain Baulande
10X Genomics solutions, library preparation, sequencing

Bioinformatics
Nicolas Servant
Data QC, automated pipelines and analysis

For whom?

We are open to **internal** and **external** teams, both **academic** and **industrial**. Industrial partnerships are managed through our Technology Transfer Office.

Types of services

We operate through **fee-for-service** for standard applications, or **R&D collaborations** for more complex or long-term projects.

Input Material

For single cell applications, we request dissociated cells/nuclei as input material.
For spatial omics, we request high quality FFPE or Fresh frozen tissues (depending on the application).

Deliverables

We provide **quality controlled data** at the highest published standards and **bioinformatics pipelines** for a first level of data analysis.

CONTACT

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