



Aurélie Cleret-Buhot
Core Facility Manager

The cellular imaging core facility offers a full range of equipment and services, from experimental design to image analysis, allowing you to carry out your optical microscopy experiments.

Our staff puts a great deal of effort into maintaining equipment performance, supporting users and developing new cellular imaging techniques.

SERVICES

TRAINING

- › Lecture-based microscopy training
- › Practical training in basic and advanced techniques (two-photon intravital imaging, TIRF, Airyscan)

IMAGE ACQUISITION

- › Turnkey projects for users
- › Development of techniques on some of our instruments

DIGITAL IMAGE ANALYSIS

- › Use of open-source image analysis software: FIJI, ImageJ, Cell Profiler, etc.
- › Use of dedicated software: Imaris Full Spectrum, latest version with deconvolution module
- › Consultations for assistance with image analysis

CONSULTATION AND TECHNICAL ASSISTANCE

- › Sample preparation
- › Selection of the appropriate imaging technique
- › Support with publication

RESEARCH IN ACTION

Our core facility has specialized in renal intravital imaging in collaboration with Dr. Marie-Josée Hébert's laboratory, with whom we have published the results of our research in the *American Journal of Physiology – Renal Physiology* in 2021. Our core facility has also developed a live-cell imaging technique in collaboration with researcher Nathalie Arbour's laboratory to image the interactions between astrocytic and lymphocytic cells from patients diagnosed with multiple sclerosis. This approach was published in the journal *Frontiers in Immunology* in 2021.

CELLULAR IMAGING

HIGHLIGHTS

Since its beginning in 2014, our core facility has:

-  contributed to more than **45 publications**
-  trained more than **450 users**
-  made available **9** acquisition and analysis **systems**
-  implemented **4** quality controls on its systems

