MCIC



BioCanRx Funded Core Facilities

BioCanRx has awarded funding to four Canadian academic facilities that offer translational services, including one organization that can support commercialization efforts. The Core Facilities program provides a baseline level of support for core facilities to enable their timely and cost-effective use by researchers of BioCanRx-funded projects.

The funded facilities are:

- Immunotherapy Monoclonal Antibody Platform, Montreal Clinical Research Institute (IRCM)
- Molecular and Cellular Immunology Core (MCIC), BC Cancer
- <u>Biotherapeutics Manufacturing Centre Virus Manufacturing Facility</u>, Ottawa Hospital Research Institute
- IRICOR, Commercialization Support, Université de Montréal

The purpose of this document is to provide greater detail on the funded core facilities. We are happy to support further engagement with Core Facilities for potential collaboration. Please contact Megan Mahoney, Director of Scientific Affairs (<u>memahoney@biocanrx.com</u>)

MCIC - Molecular and Cellular Immunology Core

BC Cancer - Deeley Research Centre

Advanced histological support for cancer immunology and immunotherapy research

What is MCIC?

The Molecular and Cellular Immunology Core (MCIC) is a cutting-edge histology facility that supports both basic and translational research in cancer immunology. Since formalizing in 2016 with BioCanRx support, MCIC has become a global hub for high-quality histological services and has contributed to over 40 peer-reviewed publications. In addition to all histological services provided, the team has extensive experience in helping to define projects from marker and clone selection to discussing analytic methods.

What do they do?

MCIC provides full-service histological support, including:

- Basic tissue processing and embedding
- Tissue microarray (TMA) construction
- Multicolour immunofluorescence (mclF) panel development and staining
- Custom and off-the-shelf biomarker panels
- Imaging and analysis of mouse, xenograft, and human tissues
- Project consultation from marker selection to analytic strategies





Capabilities

- Full suite of histology equipment:
 - 2 tissue microarrayers
 - 2 auto stainers
 - 4 multispectral imaging systems (Nuance, Vectra 3, Vectra Polaris, PhenoImager)
 - 2 whole-slide scanners
 - 8 seats of inForm image analysis software
 - "Off-the-shelf" staining panels
- Rapid development of custom mclF panels (up to 8 markers) using Akoya OPAL technology
- Newly acquired PhenoCycler Fusion for high-plex (up to 100 markers) spatial profiling

Why MCIC?

- Proven track record across over 70 projects per year
- Rapid turnaround times with clear reporting and consultation on project progress
- Deep expertise in complex cancer immunology workflows
- End-to-end support from project design to data analysis
- Global collaborations with researchers, clinicians, and biotech partners
- Dedicated to accelerating cancer immunotherapy through high-quality, scalable histological services

