



	<ul style="list-style-type: none"> <li>• Laser Doppler Finger Tremor Monitor</li> <li>• Force Plate Postural Sway Monitor, and Temp, Skin Resistance, Environmental Monitors</li> </ul>	Lawson Lawson
<b>Cyclotron and Radiochemistry</b>	<ul style="list-style-type: none"> <li>• GE PETtrace 8 cyclotron (16.5 MeV)</li> <li>• Comecer hot cell chambers (10)</li> <li>• GE FASTlab synthesizer units (2)</li> <li>• GE TRACERlab synthesizer units (3)</li> <li>• GMP facilities with production area, clean room and QC area</li> <li>• Shipping room</li> <li>• Medicinal Chemistry Laboratory for the design and synthesis of receptor-targeting chemical entities, automated solid-phase synthesis, purification and characterization of imaging probes.</li> <li>• Radiochemistry Laboratory used in the preparation of novel molecular imaging probes. Radiolabelling of small molecules, peptides and larger biomolecules for SPECT and PET imaging for human and small animal imaging</li> </ul>	Lawson Lawson Lawson Lawson Lawson VRL VRL
<b>Optical Imaging</b>	<ul style="list-style-type: none"> <li>• Particle image velocimetry (PIV) and flow visualization system</li> <li>• Multi-channel near infrared (NIR) intravital spinning disk confocal microscope for imaging of human cancer in small animal models</li> <li>• Olympus FluoView™ FV1000 Confocal Imaging System built on the IX81 Motorized Inverted System Microscope (IX2 Series) platform <ul style="list-style-type: none"> <li>○ Imaging laser lines: 405/458/488/515/559/635 nm. 10X, 20X, 40, 60X oil, 100X oil. Epifluorescence and DIC (Nomarski) illumination</li> <li>○ Support infrastructure for live imaging: maintaining desired CO<sub>2</sub> level and temperature during live imaging; drug perfusion system with perfusion chambers for cultured cells and embryos</li> <li>○ Image analysis workstation for analysis of confocal images with software: Image-Pro Analyzer (version 6.2, Media Cybernetics) and FV 10-ASW 1.6 (FluoView 1000 software, Olympus corporation)</li> </ul> </li> </ul>	Physics VRL VRL
<b>Positron Emission Tomography</b>	<ul style="list-style-type: none"> <li>• PET/3.0T MRI/EEG (operational 2012)</li> <li>• MicroPET (2)</li> <li>• GE Healthcare Discovery VCT PET/CT scanner</li> </ul>	Lawson Lawson Lawson
<b>Ultrasound</b>	<ul style="list-style-type: none"> <li>• 10 Diagnostic ultrasound machines</li> <li>• 6 3D ultrasound imaging systems for vascular diseases, prostate and breast cancer research</li> <li>• 2 Research enabled Ultrasonix Ultrasound machines</li> <li>• 1 Research enabled Ultrasonix Ultrasound machine</li> <li>• 2 VisualSonics micro-ultrasound imaging and Doppler blood flow facility with a resolution of 60µm</li> <li>• VisualSonics micro-ultrasound imaging for detection and assessment of growth and treatment of primary and metastatic tumours in animal models</li> <li>• 3 Resonant Ultrasound Image Guidance Systems</li> <li>• 2 Varian Sonoray Ultrasound Image Guidance Systems</li> <li>• Ion chambers, survey meters and neutron remmeter</li> </ul>	Robarts Robarts Robarts Physics Robarts VRL LRCP LRCP LRCP

	<ul style="list-style-type: none"> <li>• Intravital Microscopy (Chambers, Lewis Labs)</li> </ul>	LRCP
<p><b>Other Facilities</b></p>	<ul style="list-style-type: none"> <li>• Fully equipped Prototyping Facility including CAD/CAM design programs (RhinoCad, AutoCad, EdgeCam) to build digital and analog circuits.</li> <li>• Metal rapid prototyping system (first in Canada)</li> <li>• Fully equipped machine shop with NC mills</li> <li>• Electronic, RF coil, and gradient coil shops for building prototypes</li> <li>• Autostereoscopic 3D display system</li> <li>• Stereoscopic Laparoscopic system</li> <li>• 3D Histology workstations</li> <li>• Optics lab with in vivo confocal and intrinsic signal optical microscopes</li> <li>• One 24 and one 64 processor SGI Altix Supercomputers</li> <li>• Optical and magnetic tracking equipment and haptic controllers for surgical and therapy guidance</li> <li>• Virtual workbenches for surgery and therapy simulation</li> <li>• Simulated High Altitude Chamber with neurobehavioral and cognitive test batteries</li> <li>• Fully equipped digital histology room with surgical suite for small animals, Leica ASP300 Tissue Processor, Leica Microtome RM2235, Zeiss Histological Imaging Microscope with Nikon Digital Camera DXM1200 and America Optical Histostat Tissue Embedder (Paraffin)</li> </ul>	<p>Lawson</p> <p>Robarts Robarts</p> <p>Robarts</p> <p>Robarts</p> <p>Robarts</p> <p>Robarts</p> <p>Robarts</p> <p>Robarts</p> <p>Robarts</p> <p>Robarts</p> <p>Robarts</p> <p>Robarts</p> <p>Robarts</p> <p>Robarts</p> <p>Lawson</p> <p>Med Bio</p>