

Preclinical Facilities						
Sponsor	Type	Name of Resource	Description of services: Capabilities	Open to:	Physical Location	Website/ Contact
FoMD	Animal	Health Sciences Laboratory Animal Services (HSLAS)	HSLAS is an animal care facility that provides level one animal housing facilities including: full barrier rodent housing (immune deficient rodents and transgenic breeding colonies), modified barrier rodent housing (immune competent breeding colonies, conventional rodent housing--rodent housing for all research activities, level one housing for other animal research models (rabbits, guinea pigs, ducks, miniature swine, canine, feline, frogs and axolotls), and quarantine housing for importation of unique animal models. HSLAS also has Animal Biocontainment Level 2: housing for rodents and small animal models containing level 2 pathogens. The Alberta Institute of Virology and Immunology also developed a purposed built suite of BSL-2 space for work with infectious agents. Within this suite are various instruments for whole body imaging. Furthermore HSLAS provides support of animal biocontainment Level 3 facility: housing for rodents containing level 3 pathogens. Technical services team is available for all research models housed in HSLAS facilities is also.	All animal protocol holders		http://www.hslas.ualberta.ca
FoMD & Centre for Prion Research	Transgenic	Transgenic core	Nascent core to serve the campus for cryopreservation of mouse lines and for production of new transgenic mouse lines via pronuclear microinjection. A list of charges is under development. The Alberta Institute of Virology and Immunology also developed a purposed built suite of BSL-2 space for work with infectious agents. Within this suite are various instruments for whole body imaging. Furthermore HSLAS provides support of animal biocontainment Level 3 facility: housing for rodents containing level 3 pathogens. Technical services team is available for all research models housed in HSLAS facilities is also.	All	204 Brain and Aging Research Building	http://www.prioncentre.ca/slwl@ualberta.ca
Cross Cancer Institute (CCI)	Animal	Vivarium at the CCI	The Vivarium is a multi-user facility that houses mice, rats and rabbits. We ensure that animal research is performed according to Canadian Council on Animal Care guidelines. A Veterinarian is available to assist with protocol development. We also provide training and technical services in support of animal research needs and assistance is available for monitoring for MRI and PET imaging.	Approved Researchers	Room 4381. Cross Cancer Institute	Contact Vivarium Manager
ADI	Small Animal Modeling	ADI's InVivoCore	InVivoCore is a strictly fee-for-service facility that performs a variety of procedures related to diabetic animal models, transplant models, and glucose/hormone monitoring: streptozotocin-induced diabetic rodent models, pancreatic islet isolations/transplantations (hepatic vein or kidney capsule), glucose tolerance testing (OGTT, IPGTT),	All	5-032 LKS	http://www.adi.ualberta.ca/CoreServices/InVivoCore.aspx

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Dept of Surgery	Surgery Education and Research	Surgical-Medical Research Institute	The new Surgical-Medical Research Institute (SMRI) is a state-of-the-art surgical research and teaching centre for both large and small animal surgery. The Institute provides researchers and educators an environment to improve surgical care and develop research strategies to numerous medical challenges that is facing the next-generation of surgeons and physicians. The Institute has state-of-the-art surgical equipment, anesthetic machines and monitoring equipment that the CCAC has requested for acute and chronic surgery. The SMRI has a minimally invasive suite (MIS) with teleconferencing capability, three chronic operating rooms with one lead-lined for x-ray imaging. In addition to the chronic operating rooms, one large acute operating room can accommodate 6-8 pig surgeries at one time. This large operating room is used for teaching of courses such as ATOM, Surgical Skills and laparoscopic skills (CAMIS). The operating rooms are also used for Continuing Medical Education for surgeons in Alberta and across the country.	All	140 HMRC	SMRI Homepage
Dept of Surgery	Surgery Education and Research	Surgical-Medical Research Institute	In addition to the large animal operating rooms, the SMRI has five small animal surgical suites with hepa filtered air and anteroom for preparing the animals for surgery. One of the small animal operating rooms was built specifically to accommodate microvascular surgeries such as kidney, heart, liver and small bowel transplants in mice and rats for investigators in the Faculty of Medicine and Dentistry. A microvascular surgery course is also being taught to our surgical residents at the SMRI.	All	141 HMRC	SMRI Homepage
Dept of Surgery	Surgery Education and Research	Surgical-Medical Research Institute	The SMRI has also a post-surgery recovery area and a clean-up area that has two steam and one ozone sterilizer. The ozone sterilizer is used to sterilize laparoscopic and endoscopic equipment and is the only one on campus dedicated to animal surgery. To support all users, the SMRI has a clinical biochemistry lab that can do blood gases which may be needed during surgery or during post-operative follow-up. As Mentioned above, the SMRI has a teleconferencing link to all the operating rooms and to our conference room, which can be used for group teaching on campus or across the city to other hospitals.	All	142 HMRC	SMRI Homepage

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Dept of Surgery	Surgery Education and Research	Surgical-Medical Research Institute	The SMRI has technicians that are dedicated to support cutting-edge research projects, which enables educators and/or investigators to find solutions in surgical research, acquire biomedical validation, obtain simulation training and develop and educate techniques in open and minimal invasive surgery. In the era of new technology explosion, novel techniques are developed for healthcare. The SMRI embraces surgical innovations and connects innovators with surgeons in all surgical fields. Emergent medical devices can be tested and validated at the SMRI prior to clinical implementation for patient safety.	All	143 HMRC	SMRI Homepage
Medical Physics (Oncology)	MRI - Animals	Animal 9.4T at Cross Cancer Institute	This multiuser facility supports magnetic resonance imaging and spectroscopy on small laboratory animals and ex-vivo samples. Equipment for anesthesia and animal monitoring is available. Various types of scans can be performed and custom pulse sequence programming is also possible. Scans are performed by an expert technician.	All with support of Medical Physics	Room 0812, Cross Cancer Institute	http://mp.med.ualberta.ca/facilities/cbiar.htm?subheader=5
Oncology	Imaging - Animal	Animal imaging facility	The animal imaging facility provides dedicated small animal PET and multimodality small animal PET/CT imaging in mice and rats. The facility operates a dedicated SIEMENS R4 PET scanner and a SIEMENS INVEON multimodality PET/CT imaging platform. The preclinical imaging facility focuses on investigating and refining novel diagnostic and therapeutic strategies using radiotracers. The imaging facilities allow the determination of PET-labeled drug distribution, pharmacokinetics and pharmacodynamics in animal models. The facility also performs metabolic profiling to allow for fast and quantitative analysis of radiometabolites. Collaborative research projects have access to the instrumentation.	Approved researcher	Room 4312 Cross Cancer Institute	wuest@ualberta.ca
CVRC	ECHO	CVRC's ECHO Core	High Frequency Ultrasound Biomicroscopy (echocardiography) using both the Visualsonics Vevo 770 and the Acuson Sequoia Echocardiography systems. The Vevo 770 provides the small animal researcher the ability to visualize and quantify small animal anatomical targets. Hemodynamics and noninvasive therapeutic interventions can be repeatedly performed with a resolution to 40 microns.	All	4099A Katz	Jason.dyck@ualberta.ca Donna.beker@ualberta.ca www.cvrc.med.ualberta.ca/
CVRC	Small Animal Physiology	CVRC's Small Animal Physiology Core	Non-invasive physiological and behavioral measurements such as activity, food and water consumption with metabolic performance using the Columbus Instruments™ Oxymax Lab Animal Monitoring (CLAMS). IITC Life Science mouse and rat blood pressure determination. Using the high precision and accuracy of the EchoMRI's specialized NMR-MRI-based technology, it provides body composition analysis in live subjects, including total body fat, lean muscle tissue, free water, and total body water. Research conducted in animals ranging in size from fruit flies to mice (100gram) and rats (1000 grams) as well as small tissue samples (10grams) and biopsy samples (10 to 30 mg). No anesthesia required.	All	4099A Katz	Jason.dyck@ualberta.ca sidlick@ualberta.ca www.cvrc.med.ualberta.ca/

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CEGIIR	Small Animal Endoscopy	CEGIIR	The Centre of Excellence for Gastrointestinal Inflammation and Immunity Research (CEGIIR) has the capability to perform endoscopic procedures in small animals. Both standard endoscopy and confocal endomicroscopy can be performed, as the small animal endoscopy suite is equipped with an Olympus flexible endoscopy and a OptiScan fluorescence confocal endomicroscope. Video and image capture systems enable data analysis.	All approved animal protocol holders	Katz 7-142	