

MEDICAL IMAGING

Our Competitive Edge

Medical images are key assets that provide a means for health care professionals to evaluate patients for diagnosis and treatment. Research and development in medical imaging in Saskatchewan is an exciting new field of opportunity.

The local setting provides a strategic advantage to Canadian health and life sciences researchers.

- The University of Saskatchewan (U of S) offers an unparalleled range of health science support for medical research.
- The U of S is located in close proximity to the Royal University Hospital (University of Saskatchewan's teaching hospital), and is associated with the Royal University Hospital are the colleges of Medicine, Dentistry, Nursing, Pharmacy and Kinesiology and the school of Physiotherapy.
- The Saskatoon Health Region has been rated one of the top academic health districts in Canada.
- The U of S has a strong research background in a number of sciences and is home to the Western College of Veterinary Medicine and the nationally recognized Vaccine and Infectious Disease Organization (VIDO).

Innovation and Opportunity

University of Saskatchewan

Provincial expertise in medical imaging is found in a number of colleges at the University of Saskatchewan:

- The College of Medicine Medical Imaging Department is home to some of Canada's top medical imaging researchers active in a number of research fields.
- The College of Engineering has a strong Biomedical Engineering Program working to identify answers to the technical challenges associated with biomedical imaging and therapy.

Most importantly, the research community and business and government partners all benefit from the university's multidisciplinary approach to institutional research. This model plays a vital role in bringing advances of the natural sciences and technology to the knowledge of life and especially to the service of human health.



Canadian Light Source (CLS) synchrotron

Next to the University of Saskatchewan campus is the Canadian Light Source synchrotron, a national facility owned by the University of Saskatchewan. As the newest research tool available for sciences, synchrotron-based medical imaging offers promise for major advances in both diagnosis and precision image-guided therapy.

The new BioMedical Imaging and Therapy (BMIT) beamline has come on stream. BMIT is a national facility at the Canadian Light Source allowing imaging of biological tissue and conducting radiation therapy research. The BMIT research facility uses the synchrotron's super brilliant X-rays for imaging, study and treatment of diseases in a variety of animals. The goal is to use the beamline's X-ray power to follow the progression of diseases.

The BMIT facility is intended to improve upon existing dedicated biomedical synchrotron facilities by having the capacity to conduct imaging and radiation therapy on live humans, animals and plants. The BMIT facility has been designed to accommodate many species, from mice to horses, and reflects an unprecedented breadth of relevance to, and level of commitment of, its proponents. This flexibility will position the BMIT facility as a world leader in veterinary and medical imaging, and will greatly facilitate the development of animal models of human disease.

Want to know more? Contact:

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