

Developing a World-Class Scientific Program for the Biomedical Imaging and Therapy Beamline

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The Biomedical Imaging and Therapy (BMIT) beamlines project is presently under construction at the Canadian Light Source. The project includes a bend magnet beamline, insertion device beamline as well as a biomedical laboratory complex to support the broad range of research planned. The systems which can be investigated will include live animals, tissues (plant, animal & human) and ultimately human studies. This presentation will briefly touch on the layout, present status and facility capabilities and arrangement. Also, some discussion on where this facility fits in world-wide with regard to other synchrotrons. Most of the discussion will be on the building of the scientific program for BMIT presently underway using other facilities and other CLS beamlines. These programs are in the area of cancer therapy research, imaging of tumor cell migration or metastasis, imaging of growth plate fractures, spinal column fusion research and gene expression imaging research.

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