Indiana Institute for Biomedical Imaging Sciences

Department of Radiology and Imaging Sciences, Indiana University School of Medicine

The Indiana Institute of Biomedical Imaging Sciences (IIBIS) In-vivo Imaging Core provides Cancer Center investigators with access to state-of-the-art *in-vivo* imaging resources. As an integral component of an institution-wide imaging center, the core was developed through funds provided by an NCI P20 ICMIC planning grant, the Indiana 21st Century Technology Development Fund, and the Indiana Genomics Initiative (INGEN: Funded in part by the Lilly Endowment). Matching funds to develop this program were provided by the Indiana University Radiology Associates and the Indiana University School of Medicine, and IU Health. In total, nearly $40M has been raised to develop this comprehensive imaging program.

The IIBIS Core will utilize resources located in three research buildings on the Indiana University School of Medicine campus. The Research Institute II building houses a Siemens HR+ PET Scanner, a Siemens Biograph 64 PET/CT Scanner, a GE 1.5T Signa MRI systems and a Siemens 3T Tim Trio MRI for human studies. Small animal imaging resources include the IndyPET III scanner, an EVS RS-9 micro CT scanner, a ART MX3 optical imaging system, and a Berthold NightOWL optical imaging system. Goodman Hall houses recently installed Siemens 3T SKYRA MRI and mCT (PET/CT) imaging systems. In addition, the Tracer and Contrast Agent Development program of the IIBIS Core is located in the Biomedical Research and Training Center building. This building houses a CTI RDS Eclipse medical cyclotron, radiochemistry laboratories, synthetic chemistry laboratories, and molecular biology and cell culture laboratories. The core has recently developed a Tracer and Contrast Validation laboratory which is housed at Research 2, and is aimed at accelerating the development of new imaging tracers.

Highly skilled Faculty and Staff are available to assist with research study design, collection of imaging data, and data analysis, and model and tracer validation.