



COBRE Medical Imaging Technology Development Core (MITDC)

COBRE Oklahoma Center of Medical Imaging for Translational Cancer Research (OCMICR)

Introduction

COBRE Medical Imaging Technology Development Core (MITDC) provides a unique research service and supporting capability to enhance the overarching goal of this COBRE. It is not merely a collection of imaging equipment in a distinct space, other than allows us fully network our current research expertise to better support translational cancer research using medical imaging technology to benefit patients in the future.

Our MITDC aims to:

- (1) Develop a Supportive Infrastructure to Facilitate Bench Top to Bedside Research;
- (2) Develop New Investigative Imaging Tools and Testbeds to Support COBRE Projects;
- (3) Develop and Test New Quantitative Imaging Feature Analysis Software Tools.

Facility & Equipment



Phase Sensitive Breast Tomosynthesis (PBT) System



OU Advanced Medical Imaging Core Facility



Renishaw inVia™ confocal Raman microscope



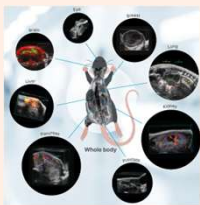
Andor BC43 Spinning Disk Inverted Confocal Microscope



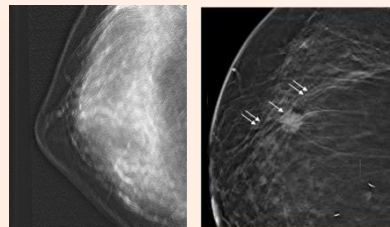
Vevo F2 Ultrasound and Photoacoustic Imaging System

Research / Service

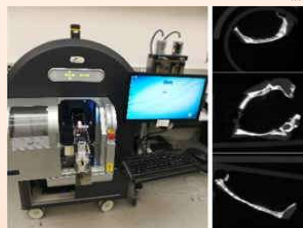
Medical Imaging Scanning Service



Photoacoustic imaging



Phase sensitive breast tomosynthesis system phantom/patient imaging

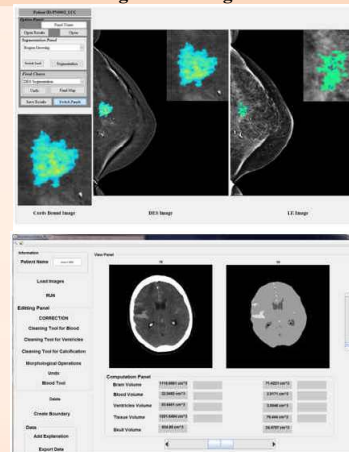


Micro CT scanning of a rat skull



NIRScout X functional near infrared spectroscopy system scanning

Image Processing Service



GUI tools for lesion segmentation (top) and feature computation (bottom)