UMassAmherst | Core Facilities

Institute for Applied Life Sciences
University of Massachusetts Amherst
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Research and Innovation to Translate Basic Science into Product Candidates

PARTNER WITH US!

Animal Imaging Inquiries

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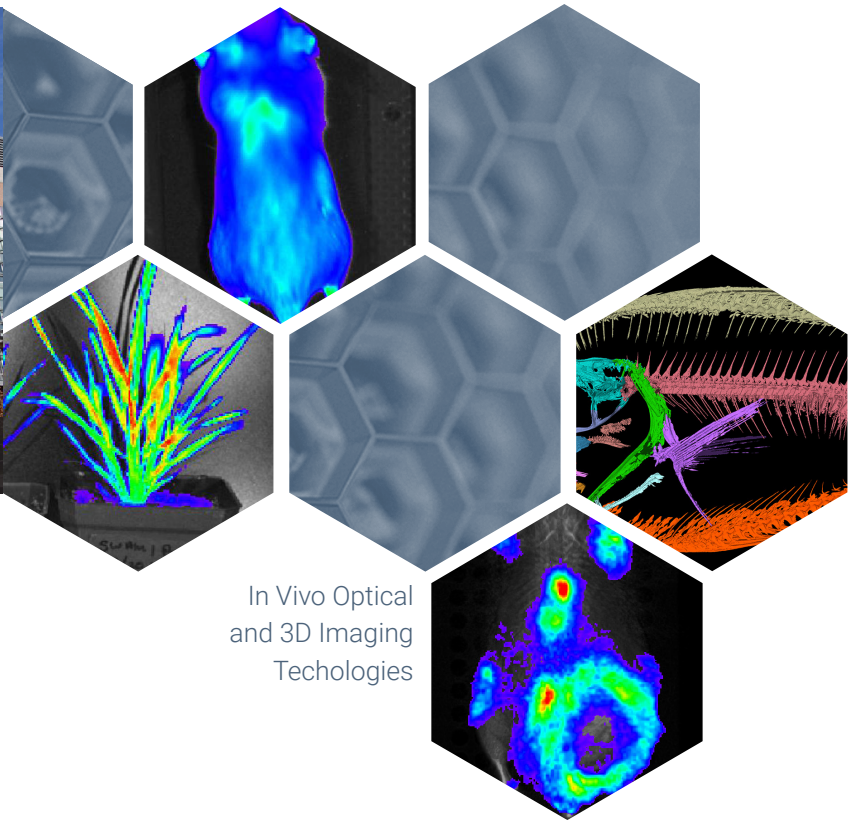
Animal Imaging

Institute for Applied Life Sciences
University of Massachusetts Amherst



In Vivo Optical and 3D Imaging Techologies

Image was generated with florescence and concurrent uCT imaging form the IVIS SpectrumCT.

CAPABILITIES

Optical & 3D Imaging

The **IVIS SpectrumCT** is a combination optical imager (bioluminescence/ fluorescence), and CT scanner (13.5 μm pixel size), thus providing the capability to conduct both optical as well as three dimensional imaging in the same instrument. Allows for multimodal coregistration of 3D images.

Micro-CT Imaging

The **Bruker Skyscan 1276 uCT** is a high performance, stand-alone, fast, desktop in vivo micro CT (smallest pixel size is 2.8 μm) with continuously variable magnification for scanning small laboratory animals and biological samples. It has an unrivalled combination of high resolution, big image size, possibility for round and spiral (helical) scanning and reconstruction, and low dose imaging. The image field of view (up to 80 mm wide and more than 300 mm long) allows full body mouse and rat scanning. [With Materials Testing Stage (MTS)]

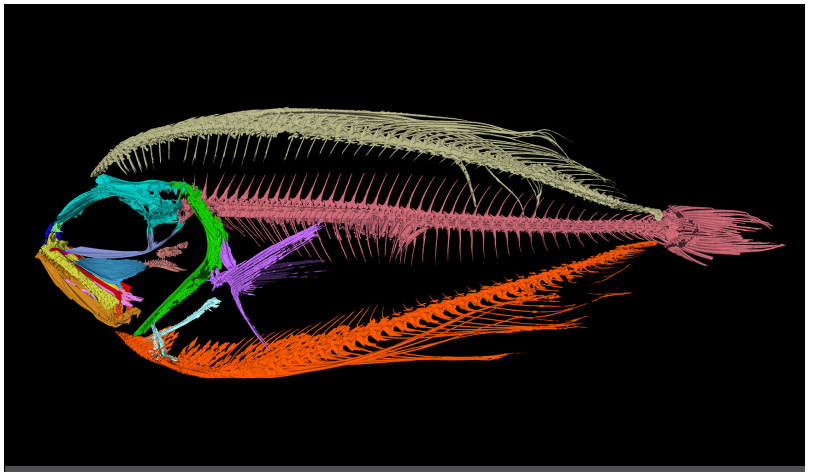
Animal Ultrasound

The **SonoVet Color Doppler Ultrasound System** offers live animal imaging with enhanced Doppler blood flow analysis. Reduces animal model numbers and experimental variation by allowing researchers to monitor disease or treatment progression in a smaller number of animals over time.

MASSACHUSETTS LIFE SCIENCES CENTER

A significant portion of core equipment has been purchased through MLSC grant funding support.

Animal Imaging



umass.edu/ials/animal-imaging

Located in the Integrated Sciences Building the Animal Imaging facility assists members of the internal and external research community with long term, non-invasive imaging of research animal models. Equipment is capable of fluorescence and luminescence imaging independent of or concurrent with CT imaging. A new high-resolution microCT with continuously variable magnification for scanning small laboratory animals and biological samples. Long term non-invasive imaging of research animal models.

The facility accepts samples and will perform requested analysis. We offer training to users to conduct experimentation for use on a fee for service basis to both internal and external researchers, academic or industry based. Following an initial consultation, covering experimental parameters training and access is arranged through the director.

ABOVE: This image was generated with data from the Bruker Skyscan 1276 uCT.

ACCESS

To request access, training, or additional information please contact Amy Burnside at aburnside@umass.edu or (413) 545-1385.

Our rates are competitive and tiered based on needs and usage. Visit our website at *umass.edu/ials/animal-imaging* for current listing.

TRAINING

Training for new users consists of:

- lab safety training,
- operation of the instrument and associated software,
- use of data analysis software,
- exporting or presenting data,
- clean up and shutdown of the instrumentation.

Once the training is complete, researchers may schedule their experiments through the director of Animal Imaging (Amy Burnside).