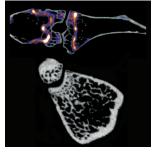
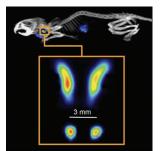
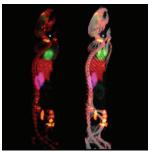
Synergetic Multimodal Preclinical Imaging

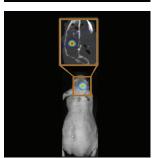


















Seeing more matters in molecular imaging







In any combination or stand-alone











Seeing more matters in molecular imaging

MILabs provides high-performance SPECT, PET, CT, and Optical Imaging systems for *in vivo* animal imaging, in any combination or stand alone. Each modality offers high throughput 2D, 3D, and 4D imaging and enables researchers to improve diagnostics and therapy development through complementary and data-rich, co-registered images. Each modality by itself gives data beyond the capabilities of any other stand-alone system.

U-PET(CT)

- Best PET resolution: down to 0.6 mm for ¹⁸F
- Positron range-free PET: 0.75 mm resolution for ¹²⁴l, ⁸²Rb, ⁸⁶Y, and ⁸⁹Zr
- Simultaneous dual-isotope PET imaging
- · Dynamic PET:
 - < 1s organ frame rate
 - < 8s total body frame rate
- Cost-effective upgrade to VECTor simultaneous PET/SPECT
- Optional integrated ultra-high-performance X-ray CT (U-CT)

U-OI(CT)

- · Universal high-performance Optical Imaging
- Bioluminescence, Fluorescence and Cherenkov imaging
- Fluorescence Tomography
- · Bioluminescence Tomography
- · High throughput 2D Optical imaging
- Standalone high throughput imaging (up to 10 mice)
- Expandable with integrated SPECT, PET, and CT
- · Spectral Unmixing
- Optional integrated ultra-high-performance X-ray CT (U-CT)

U-SPECT(CT)

- Best SPECT resolution: 0.12 mm ex vivo, 0.25 mm in vivo
- Sub-mm resolution theranostic imaging of α- and β-emitting isotopes
- SPECT sensitivity up to 3%
- · Ultra-fast, low dose, high resolution
- · Dynamic SPECT:
 - < 1s organ frame rate
 - < 8s total body frame rate
- Cost-effective upgrades to VECTor simultaneous PET/SPECT
- Optional integrated ultra-high-performance X-ray CT (U-CT)

U-CT

- Ultra-high-performance adaptive X-ray CT
- Field upgradable with full U-PET, U-SPECT, VECTor and/or Optical (U-OI)capabilities
- Extremely dose-efficient (<2 mGy total body dose)
- Ultra-fast acquisitions (<5 s total body)
- Ultra high-resolution options (down to 2.4 μm)
- Widest and adaptable FOV enables to image up to full rabbits
- Sensor-free and dual-gated cardiac and respiratory gating

VECTor(CT) - PET/SPECT/CT

- · Integrating all capabilities of U-PET, U-SPECT, and U-CT
- · Simultaneous sub-mm resolution PET/SPECT
- · Highly quantitative PET and SPECT with uniform resolution
- Ultra-wide energy range: 25 keV 1 MeV
- Sub-mm resolution imaging of α- and β-emitting isotopes
- Expandable with integrated 2D, 3D and 4D Optical Tomography



