For immediate release

University of Pennsylvania installs second MILabs ultra-high resolution preclinical imaging system

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The University of Pennsylvania (UPENN), Philadelphia, PA, has completed installation of its second MILabs preclinical imaging system, a scalable U-CT^{UHR} microCT system in the lab of Prof. Joel Karp in the Department of Radiology at the University of Pennsylvania. Professor Karp oversees the PET Imaging scanners in radiology that supports both clinical and research studies, and also directs operations of the Nuclear Medicine (PET/SPECT/CT) Core Facility in the Perelman School of Medicine Small Animal Imaging Facility (SAIF).

The new MILabs U-CT^{UHR} system features low-dose, fast scanning at ultra-high spatial resolution. It will be used to complement SAIF 's functional PET and SPECT data with high-resolution anatomical localization and region-of-interest delineation. The system features unique Adaptive X-ray CT technology, designed to handle a broad range of in-vivo imaging applications and animal sizes. It is the only microCT system with a sufficiently large bore size and long axial scan range to enable imaging of entire mice, rats and rabbits.

Under direction of Professor Karp, the nuclear medicine sub-core of the SAIF combines state-of-the-art instrumentation including PET, SPECT and CT and together with Dr. Scott Metzler will assist investigators with a wide range of imaging-based experimental approaches.

About the University of Pennsylvania
UPENN is one of the nation's premier research institutions. Within the University of Pennsylvania, the Perelman School of Medicine advances research and academic efforts at Penn and neighboring scientific communities with 21 research cores offering a complete range of services. Penn has a long history of development of nuclear medicine instrumentation in both SPECT and PET dating back to pioneering work in the 1960's when David Kuhl introduced emission reconstruction tomography. The Physics and Instrumentation Research Group works

to continue this tradition with development of new technology and collaboration between basic science and clinicians to optimize their use for both clinical and pre-clinical imaging applications.

MILabs B.V. (Utrecht, the Netherlands) provides high-end molecular imaging solutions for biomedical and pharmaceutical research. Today these systems contribute worldwide to the development of new diagnostic solutions and therapies for diseases such as diabetes, cancer, cardiac and for neurodegenerative diseases. As documented in hundreds of scientific articles, U-SPECT provides the fastest, most sensitive and highest resolution small-animal SPECT system currently available. Recently MILabs fused state-of-the-art Adaptive PET with its SPECT technology, thus enabling for the first time, to simultaneously acquire PET & SPECT images of co-injected tracer at sub-mm resolutions. This multi-parametric imaging approach has further been enhanced with the introduction in 2016 of Adaptive X-ray CT and Hybrid Optical imaging systems. Featuring industry-leading diagnostic CT capabilities, MILabs' Adaptive U-CT is scalable to handle a wide range of animal sizes and can be upgraded to molecular CT imaging by adding in-line PET, SPECT and/or Optical biolumuninescence & fluorescence imaging modalities. For more information, visit www.milabs.com