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Mount Sinai School of Medicine: In-Vivo Molecular Imaging Laboratory

RRID:SCR_001785 Type: Tool

Proper Citation

Mount Sinai School of Medicine: In-Vivo Molecular Imaging Laboratory (RRID:SCR_001785)

Resource Information

URL: <u>http://icahn.mssm.edu/research/resources/shared-resource-facilities/in-vivo-molecular-imaging</u>

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Description: The In-Vivo Molecular Imaging Laboratory (IMIL) is a MSSM shared resource facility serving the research community of Mount Sinai with equipment and imaging expertise. State-of-the-art bioluminescent as well as fluorescent imaging modalities are supported for in-vivo monitoring of cellular and genetic activity. Investigators are provided with cutting edge imaging technologies as well as analysis techniques. The long-term goal is to establish a comprehensive SRF for in-vivo molecular imaging using micro-MRI, micro-PET and other modalities. IMIL houses a Xenogen IVIS-200 Series imaging system with the integrated fluorescent imaging options. Simultaneous dual reporter in-vivo imaging is possible with bioluminescence and fluorescence probes. The imaging chamber has a gas anesthesia manifold that can accommodate up to 5 mice for simultaneously image acquisition. Selectable field of views allow in-plane (X,Y) imaging resolutions of up to 60microm. Integrated spectra filters allow for the determination of signal source depth (Z). IMIL will provide data acquisition services as well as analysis. IMIL has a dedicated imaging technologist for data acquisition. Investigators will bring their prepared animal to the lab and an IMIL imaging technologist will assist in sedating the animals and acquire imaging data. Typical imaging sessions last about an hour. Certified users who are trained in the use of the software will be able to perform their own analysis at the console. Usage of the imaging device is charged by the hour (\$100/hour). Structural Imaging The IVIS-200 has the built-in capability of obtaining an image of the surface topography of the animal for 2D and 3D localization. If additional true 3D imaging data is required, micro MRI is available through the Imaging Science Laboratories (ISL). Image Analysis The IVIS-200 has an integrated image

acquisition and analysis software (Living Image Software 2.50). Comprehensive data quantification is possible with this software. Raw data as well as analyzed results can be electronically transferred to the investigators. Support is also available for additional image analysis such as intermodality coregistration, 3D rendering, and group statistics. Additional software packages include MedX, SPM, Brainvoyager, Analyze, and in-house developed software.

Synonyms: MSSM IMIL

Resource Type: biomaterial analysis service, service resource, production service resource, material analysis service, analysis service resource, data computation service

Keywords: equipment, fluorescence, fluorescent, genetic, 2d, 3d, analysis, bioluminescence, bioluminescent, cellular, imaging, intermodality coregistration, in-vivo, localization, mice, micro-mri, micro-pet, molecular, probe, software, spectra, technology, xenogen ivis-200 series

Funding:

Resource Name: Mount Sinai School of Medicine: In-Vivo Molecular Imaging Laboratory

Resource ID: SCR_001785

Alternate IDs: nif-0000-10299

Old URLs: http://www.mssm.edu/research/resources/molecular_imaging/

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Ratings and Alerts

No rating or validation information has been found for Mount Sinai School of Medicine: In-Vivo Molecular Imaging Laboratory.

No alerts have been found for Mount Sinai School of Medicine: In-Vivo Molecular Imaging Laboratory.

Data and Source Information

Source: <u>SciCrunch Registry</u>

Usage and Citation Metrics

We have not found any literature mentions for this resource.