University of Miami Sylvester Comprehensive Cancer Center Cancer Modeling Shared Resource Core Facility

RRID:SCR_022891
Type: Tool

Proper Citation

University of Miami Sylvester Comprehensive Cancer Center Cancer Modeling Shared Resource Core Facility (RRID:SCR_022891)

Resource Information

URL: http://www.sylvester.org/CMSR

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Description: Provides small animal cancer modeling services to foster cancer research and to accelerate discovery of tailored anti-tumor therapies, including preclinical data for drug development, proof of principle for novel therapies, preclinical imaging, and disease biomarker studies. Services include facilitating in vivo modeling of human disease using mouse models; supporting preclinical in vivo efficacy and toxicity studies; devising treatment protocols; using noninvasive imaging for diagnosis and evaluation of responses to treatment; and performing histopathological analysis of targeted cancer therapies. Specific services include (1) support for the development of experimental murine models of cancer, including with cell line and patient-derived xenografts (PDXs), genetically engineered mouse models, and humanized models; (2) support for devising and implementing treatment protocols in a pre-clinical setting using murine models of human disease (e.g., drug toxicology and efficacy studies, drug formulation and delivery, and related assessments, like cell blood count, clinical chemistry, and flow cytometry analysis); and (3) diagnosis and evaluation of responses to treatment, using noninvasive small animal imaging for diagnosis and evaluation of responses to treatment, including in vivo bioluminescence and fluorescence optical imaging, high-frequency ultrasound imaging, structural and functional nuclear imaging, and magnetic resonance imaging (MRI); and (b) research histopathological analysis of targeted cancer therapies, including H&E and immunohistochemistry (IHC) sectioning, staining, scanning and analysis, and data storage of digital slide images. The CMSR also offers consultation,
training, educational workshops and seminars. CMSR radiotherapy services support both small animal total body and image-guided radiation treatment delivery with sub-millimetric accuracy for development of radiation therapy regimens in a preclinical setting.

**Abbreviations:** CMSR

**Synonyms:** Sylvester Cancer Modeling Shared Resource, University of Miami Sylvester Comprehensive Cancer Center Cancer Modeling Shared Resource

**Resource Type:** access service resource, core facility, service resource

**Keywords:** USEdit, ABRF, anti-tumor therapies, cancer modeling

**Resource Name:** University of Miami Sylvester Comprehensive Cancer Center Cancer Modeling Shared Resource Core Facility

**Resource ID:** SCR_022891

**Alternate IDs:** ABRF_1592

**Alternate URLs:** https://coremarketplace.org/?FacilityID=1592&citation=1

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**Ratings and Alerts**

No rating or validation information has been found for University of Miami Sylvester Comprehensive Cancer Center Cancer Modeling Shared Resource Core Facility.

No alerts have been found for University of Miami Sylvester Comprehensive Cancer Center Cancer Modeling Shared Resource Core Facility.

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**Data and Source Information**

**Source:** [SciCrunch Registry](https://scicrunch.org)

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**Usage and Citation Metrics**

We have not found any literature mentions for this resource.