Resource Summary Report

Generated by NIF on May 19, 2025

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

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

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

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

Keywords: USEDit, ABRF, anti-tumor therapies, cancer modeling

Funding:

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

Record Creation Time: 20221015T050158+0000

Record Last Update: 20250517T060521+0000

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.

Data and Source Information

Source: SciCrunch Registry

Usage and Citation Metrics

We found 8 mentions in open access literature.

Listed below are recent publications. The full list is available at NIF.

Gonzalez GC, et al. (2025) High-Yield Generation of Glucose-Responsive Pseudoislets

From Murine Insulinoma Cells for In Vitro Studies and Longitudinal Monitoring of Graft Survival In Vivo. Cell transplantation, 34, 9636897251315123.

Galoian K, et al. (2024) Targeting cancer stem cells by TPA leads to inhibition of refractory sarcoma and extended overall survival. Molecular therapy. Oncology, 32(4), 200905.

Yenisehirli G, et al. (2024) Identification of targetable epigenetic vulnerabilities in uveal melanoma. bioRxiv : the preprint server for biology.

Manara P, et al. (2024) NRF2 translation block by inhibition of cap-dependent initiation sensitizes lymphoma cells to ferroptosis and CAR-T immunotherapy. bioRxiv : the preprint server for biology.

Elledge C, et al. (2024) Modeling Lymphoma Angiogenesis, Lymphangiogenesis, and Vessel Co-Option, and the Effects of Inhibition of Lymphoma-Vessel Interactions with an ?CD20-EndoP125A Antibody Fusion Protein. Cells, 13(22).

Chaudhry S, et al. (2024) Altered RNA export by SF3B1 mutants confers sensitivity to nuclear export inhibition. Leukemia, 38(9), 1894.

Kurtenbach S, et al. (2024) PRAME induces genomic instability in uveal melanoma. Oncogene, 43(8), 555.

Hersh J, et al. (2023) Targeted Bioluminescent Imaging of Pancreatic Ductal Adenocarcinoma Using Nanocarrier-Complexed EGFR-Binding Affibody-Gaussia Luciferase Fusion Protein. Pharmaceutics, 15(7).