

Resource Summary Report

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

Record Creation Time: 20221015T050158+0000

Record Last Update: 20260905T133430+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 28 mentions in open access literature.

Listed below are recent publications. The full list is available at [PRECISE-TBI](#) .

Zingg JM, et al. (2026) Measuring Communication in Microbial Biofilms in Response to Antibiotics, Phytochemicals and Stressors. Antioxidants (Basel, Switzerland), 15(3).

Pita-Grisanti V, et al. (2026) Protection Against Type 1 Diabetes Development in Mice With 4E-BP2 Deletion. Diabetes, 75(2), 316.

Borges RL, et al. (2026) Unbalanced chromatin binding of Polycomb complexes drives neurodevelopmental disorders. Molecular cell, 86(4), 604.

Fotouhi N, et al. (2026) HSD3B1 links ileal steroid metabolism to bile acid regulation in patients with prostate cancer. The Journal of clinical investigation, 136(12).

Grunfeld AM, et al. (2026) Amyloid-bodies in the evolution of malignancies. PloS one, 21(7), e0353464.

Clarke S, et al. (2026) Establishing the first Afro-Caribbean breast cancer cell lines reveals ECM pathway enrichment and distinctive drug sensitivities. Scientific reports, 16(1).

Teles LN, et al. (2026) Engineered macroporous gelatin scaffolds enhance lymph node fibroblastic reticular cell identity and enable diabetogenic T cell immunomodulation. Biomaterials, 324, 123460.

Thangaretnam K, et al. (2026) WEE1 stabilizes MYC to promote therapeutic resistance in esophageal adenocarcinoma. Cancer letters, 646, 218418.

Yenisehirli G, et al. (2025) Identification of targetable epigenetic vulnerabilities for uveal melanoma. Cell death & disease, 17(1), 89.

Zhu Z, et al. (2025) A bypass gateway from cholesterol to sex steroid biosynthesis circumnavigates CYP17A1. Nature communications, 16(1), 10611.

Srinivasan S, et al. (2025) CREB Drives Acinar to Ductal Cells Reprogramming and Promotes Pancreatic Cancer Progression in Preclinical Models of Alcoholic Pancreatitis. Cellular and molecular gastroenterology and hepatology, 19(12), 101606.

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.

Zafeer MF, et al. (2025) Human organoids for rapid validation of gene variants linked to cochlear malformations. Human genetics, 144(4), 375.

Tayari MM, et al. (2025) Co-targeting menin and LSD1 dismantles oncogenic programs and restores differentiation in MLL-rearranged AML. bioRxiv : the preprint server for biology.

Manara P, et al. (2025) Blocking NRF2 Translation by Inhibition of Cap-Dependent Initiation Sensitizes Lymphoma Cells to Ferroptosis and CAR T-cell Immunotherapy. Cancer research.

Migliozzi S, et al. (2025) Restraint of cancer cell plasticity by spatial homotypic clustering. Cancer cell.

Coughlin CA, et al. (2025) Bruton's tyrosine kinase inhibition re-sensitizes multidrug-resistant DLBCL tumors driven by BCL10 gain-of-function mutants to venetoclax. Blood cancer journal, 15(1), 9.

Edupuganti RR, et al. (2025) Integrator promotes the association of TFIID and RNA polymerase II to maintain pluripotency during development. Molecular cell, 85(15), 2937.

Mehra S, et al. (2025) Targeting CREB remodels the immune microenvironment to enhance immunotherapy responses in pancreatic cancer. bioRxiv : the preprint server for biology.

Leesang TE, et al. (2025) Retinoic acid and ascorbate synergize to suppress myeloid leukemia via TET2 activation. *Cell reports*, 44(10), 116379.