

Optical Animal Imaging Core

Director: Mary Rusckowski

Phone: 508-856-6972

mary.rusckowski@umassmed.edu

Optical Xenogen IVIS 100 imager & Spectrum CT Imager for in vivo detection and quantification of cells

PAC-BIO Core Facility

Director: Maria Zapp

Phone: 508-856-3265

maria.zapp@umassmed.edu

Offers Next Generation SMRT Sequence Analysis in support of a wide range of research applications

PQHS-Research Informatics Core

Director: Adrian Zai

Phone: 508-856-8994

adrian.zai@umassmed.edu

Provides services such as Compliant Access to Data, Data Innovation Research and Spearhead Data Collaborations

Quantitative Methods Core

Director: Bruce Barton

Phone: 508-856-8525

bruce.barton@umassmed.edu

Clinical research support in biostatistics, experimental design, and data management

Respiratory Physiology Core – Coming Soon!

RLASTIC Core

Director: Mary Rusckowski

Phone: 508-856-6972

mary.rusckowski@umassmed.edu

State-of-the-art single photon computerized tomography (SPECT), positron emission computerized tomography (PET) & X-Ray computerized tomography (CT) cameras for imaging small animals

SCOPE Facility

Director: Christina Baer

Phone: 508-856-6024

christina.baer@umassmed.edu

Advanced quantitative light microscopy including super-resolution (SIM/PALM), multi-photon, TIRF, confocal, and live-cell imaging

Seahorse Analyzer Facility

Director: David Guertin

Phone: 508-856-8064

david.guertin@umassmed.edu

Seahorse Cytations

Skin Diseases Research Core

Director: John Harris

Phone: 508-856-3688

john.harris@umassmed.edu

Basic & translational research on mouse and human skin including acquisition of human skin, skin fluid, or skin cells for translational assays such as flow cytometry, ELISA, or single cell RNA sequencing

Small Molecule Screening

Director: Paul Thompson

Phone: 508-856-8492

paul.thompson@umassmed.edu

Develop high-throughput screens to discover novel drugs & chemical probes utilizing in-house 1M compound collection & detection technologies

Tissue Bank

Director: Karl Simin

Phone: 508-856-3959

karl.simin@umassmed.edu

Human tissues using a dynamic collection, storage, and distribution service

Tissue Culture & Enzyme Supply

Director: David Lambright

Phone: 508-856-6876

david.lambright@umassmed.edu

Supplies, restricted/modifying enzymes, Kits for DNA preparation & cleanup and related reagents

Transgenic Animal Modeling Core

Director: Heather Gray-Edwards

Phone: 508-856-4051

heather.grayedwards@umassmed.edu

Produces genetically altered mice & rats

Umbilical Cord Blood & Birth Tissues Facility

Director: Kristen Matteson

Phone: 508-334-8706

kristen.matteson@umassmed.edu

Providing cord blood units collected real-time from deliveries occurring at the UMass Memorial Labor & Delivery Maternity Unit

Vector Core Facility

Director: Guangping Gao

Phone: 508-856-3563

guangping.gao@umassmed.edu

Cutting-edge technologies to create and produce high quality viral vectors; provide the most suitable & efficient gene transfer vectors for research applications

PARTNER WITH US!!

Core Facilities Inquiries:

Susanna Perkins, Director

Research Cores & Operations

508-856-8255

Megan Barbale

Senior Core Accountant

508-856-1010

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508-856-7588

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REV 9/24



VISIT OUR SISTER CAMPUSES

AMHERST:

www.umass.edu/ials/core-facilities

BOSTON:

<https://www.umb.edu/research/cores>

DARTMOUTH:

<http://www.umassd.edu/research/cores>

LOWELL: www.uml.edu/research/CRF/



UMass Chan
MEDICAL SCHOOL

Advanced MRI Center

Co-Directors: Salman Shazeeb & Manoj Saranathan

Phone: 508-856-1884

mohammed.shazeeb@umassmed.edu

3T Philips body MRI system for human and animal research equipped with a variety of coils for MRI studies of different organ systems; neuroimaging (fMRI, DTI, etc.), body MRI, cardiac MRI, and metabolic imaging (MR spectroscopy)

Animal Medicine

Director: George DeMarco

Phone: 508-856-3150

george.demarco@umassmed.edu

In vivo research by providing animal care, training, surgical, diagnostic, and technical services

BioImage DMS Core

Director: Caterina Strambio-De-Castillia

Phone: 508-856-2383

caterina.strambio@umassmed.edu

alex.rigano@umassmed.edu

Support and training services for the curation, storage, management, sharing, and retrieval of image data; ensures full compliance with the data management and sharing requirements set forth by the NIH and NSF

Bioinformatics Core

Director: Ozkan Aydemir

Phone: 508-856-1217

biocore@umassmed.edu

Computational services in analyzing data generated from next generation sequencing studies

Bone Analysis Core

Director: JaeHyuck Shim

Phone: 508-856-6245

jaehyuck.shim@umassmed.edu

Services for bone imaging, histology and histomorphometry

BSL-3 Core Laboratory

Director: Hardy Kornfeld

Phone: 508-856-2646

hardy.kornfeld@umassmed.edu

Laboratory space for BSL-3 containment

Cardiovascular & Surgical Models

Director: Timothy Fitzgibbons

Phone: 508-856-6573

timothy.fitzgibbons@umassmemorial.org

Phenotyping of cardiovascular system in mouse models of metabolic diseases within a

cardiovascular disease model pipeline

Clinical Research Center (CRC)

Director: Bethany Trainor

Phone: 508-856-2800

bethany.trainor@umassmed.edu

Providing efficient, reliable and high-quality study support for Umass clinical investigators

Cryo-EM Core Facility

Director: Chen Xu

Phone: 774-502-6698

chen.xu@umassmed.edu

Titan Krios, Talos Arctica, Glacios, Aquilos, VitroBots & Gatan K3 Cameras, Phase plate solution & tomography software

Crystallography & Drug Design

Director: Ala Shaqra

Phone: 508-856-2636

ala.shaqra@umassmed.edu

Provides instrumentation for determination of crystal structures using X-Ray diffraction techniques

Deep Sequencing Core

Director: Ellen Kittler

Phone: 508-856-6137/3265

ellen.kittler@umassmed.edu

Next Generation Sequence Analysis. Services are provided using current Illumina NovaSeq6000 and MiSeq instrumentation.

Drosophila Resource Facility

Director: Andreas Bergmann

Phone: 508-856-6423

andreas.bergmann@umassmed.edu

Low/High Yeast Brown food and Yellow food

Electron Microscopy Core Facility

Director: Greg Hendricks

Phone: 508-856-2602

gregory.hendricks@umassmed.edu

Scanning & transmission electron microscopes with ancillary equipment for key ultrastructural procedures from the tissue to the molecular level

Flow Cytometry Core

Director: Carol Schrader

Phone: 508-856-3276

carol.schrader@umassmed.edu

Cytometry with sorting & analyzing capabilities

Humanized Mouse Core

Directors: Michael Brehm & Dale Greiner

Phone: 508-856-3130

michael.brehm@umassmed.edu

dale.greiner@umassmed.edu

Immunodeficient mice that can be engrafted with human cells/tissues for analysis of function

Image Processing & Analysis Core (iPAC)

Co-Directors: Manoj Saranathan

Phone: 508-856-4255

manojkumar.saranathan@umassmed.edu

Provides image analysis tools & expertise for pre-clinical & clinical imaging studies of diseases

Investigational Drug Services

Director: Brendan Sendrowski

Phone: 774-443-8667

IDS@umassmemorial.org

High quality pharmaceutical services and supports research activities for all clinical trials at UMass Chan and UMass Memorial

Leukocyte Facility

Director: Dr. Jeremy Luban

Phone: 508-856-6899

jeremy.luban@umassmed.edu

The core provides leukoreduction filters, obtained from New York Biologics, that have been used to remove leukocytes from whole units of blood obtained from normal blood donors

Mass Spectrometry Facility

Director: Vikas Kumar

Phone: 508-856-8917

vikas.kumar5@umassmed.edu

State of the art proteomics, metabolomics, and mass spectrometry imaging analyses

Media Prep Core Facility

Director: Rachel Lamson

Phone: 508-856-1745

rachel.lamson@umassmed.edu

Liquid & plate form custom media laboratory buffers using standard or customer-modified recipes

Metabolomics Core

Director: Caroline Lewis Chidley

Phone: 508-856-2604

metabolomics@umassmed.edu

Caroline.Chidley@umassmed.edu

Instrumentation and expertise for metabolomics and lipidomics needs; mass spectrometry methods

and experimental design optimized for small molecules and include polar metabolomics, lipidomics and stable-isotope tracing

Metabolic Disease Research Center

Director: Dr. Jason Kim

Phone: 508-856-6840

jason.kim@umassmed.edu

Offers an array of sophisticated and standardized experiments for the purpose of investigating transgenic mouse models of diabetes, obesity, and metabolic liver disease.

Molecular Biology Core Lab

Director: Ellen Kittler

Phone: 508-856-6137

ellen.kittler@umassmed.edu

DNA fragment analysis, Genotyping & SPR services; host to the Oligonucleotide program providing discounted oligos

Morphology Core

Director: Yu Liu

Phone: 508-856-5639

yu.liu@umassmed.edu

Histology services including routine histologic preparations, special stains, immunohistochemistry, and frozen sections

Mouse Behavioral Core

Director: David Weaver

Phone: 508-856-2495

david.weaver@umassmed.edu

Facilitate neuroscientific research by providing facilities, equipment, and training to characterize behavior in wild-type and genetically modified mice

NE Center for Stroke Research

Director: Matt Gounis

Phone: 508-856-1884

matthew.gounis@umassmed.edu

Neuroradiology facility that offers the latest technology in image guided intervention

NMR Consortium

Director: Francesca Massi

Phone: 508-856-2251

francesca.massi@umassmed.edu

The NMR Core provides access to instrumentations to study the structure, dynamics, interaction, and organization of molecules