

Research Core Services

Visit our website at <http://www.lerner.ccf.org/services>

Biological Resources Unit

husbandry and veterinary care

Biomechanical Testing Services

helps investigators advance patient-oriented research

Cell Culture

transformation of human lymphocytes, mycoplasma testing, insect cells, cryovials, roller bottle cultures

Clinical Research Unit

nursing, study coordinator and pre-analytical services

Light Microscopy

instruments and consultation [assistance] for a wide range of advanced imaging technologies including confocal, multiphoton, laser microdissection, time-lapse imaging as well as image processing and analysis

Electron Microscopy

transmission and scanning electron microscopy, including complete sample preparation services

Electronics

custom electronics for research, medical device design and prototyping, data acquisition system design, laboratory equipment repair and maintenance

Engineering and Design

technical development of medical devices, transform ideas into models

Flow Cytometry

quantitative studies of cells and extracellular vesicles, and single-cell gene transcriptome analyses

Genomics

high throughput and capillary sequencing, genotyping, gene expression, methylation, structural variation

Glass Washing and Autoclaving

washing and sterilization of glass and plastic ware; glass pipettes and autoclaving

Gnotobiotics

maintenance of germfree mice as well as mice colonized with defined microbiota

Histology

preparation and staining of histological samples

Hybridoma

monoclonal and polyclonal antibody production

Immunohistochemistry/and F/ISH

chromogenic and fluorescent IHC and in situ hybridization

Instrument Repair and Refurbishing

surgical instrument customization and refurbishing

Laboratory Diagnostic

automated clinical chemistry, immunology, and hematology assays

LRI Computing Services

desktop, server, network computing infrastructure for the research institute

Mechanical Prototype

machining, fabrication, prototyping, surgical instrument customization and refurbishing

Media Production

cell culture media, agar plates, broths and buffers, sterility testing and QC

Metabolomics

detection and quantification of biomarkers

Molecular Biotechnology

peptide synthesis, study biomolecular interactions

Molecular Screening

identify biologically active compounds, chemical library of 34,000, shRNA clones

Polymer

medical device design, prototyping, and testing, particularly polymer related

Proteomics

tandem mass spectrometry to sequence and identify proteins

Rodent Behavioral

study of motor, cognitive, and sensory behaviors as well as a mouse metabolic facility

Small Animal Imaging

Instruments and expertise for pre-clinical bioluminescence, fluorescence, X-ray, and CT imaging of live mice