

# Shared Resources

A variety of shared resources are available to aid Jonsson Cancer Center researchers in their efforts to find more effective ways to prevent, diagnose and treat cancer. They include:



## Media Prep

**Sherie L. Morrison, Ph.D.**

This resource provides quality-controlled media, sera, enzymes and related products to researchers engaged in cell culture work, in a cost-effective manner with quality control assurance. It also provides instrumentation, technical capability and storage facilities to optimize cell freezing and obtain maximal cell viability after thawing, and acts as a broker for cancer center members to obtain reduced prices for sera for use in cell culture media.

## Nude/SCID Mouse

**Jerome A. Zack, Ph.D.**

This resource provides immunodeficient SCID & SCID-beige mice at reduced rates to investigators and state-of-the-art barrier working laboratories for in vivo experiments. It also provides appropriate housing and maintenance for the animals, as well as technical expertise to facilitate in vivo experiments, and provides technical personnel to instruct or assist cancer center investigators with their mouse experiments, and perform services such as observing and/or manipulating animals, changing cages, sterilizing food and bedding and disinfecting contaminated wastes.

## Molecular Genetic Technology Center

**Dr. Hong Wu**

**Xin Liu, Ph.D.**

**Meisheng Jiang, Ph.D.**

The Transgenic/Knockout Mouse/ES Cell shared facility provides a multi-tiered service to accommodate individual investigator's needs in the production of transgenic mice, using pronuclear injection; targeted genetic alterations in embryonic stem cells and murine strains derived from embryonic stem cells with targeted mutations; and strain re-derivation to create specific pathogen-free mice.

## Proteomics & Mass Spectrometry

**Joseph A. Loo, Ph.D.**

**Kym F. Faull, Ph.D.**

Mass spectrometry plays a central role in the endeavor of mapping cellular protein interactions. Targeted protein complexes can be immunopurified by well-established means, and the components of the protein complexes identified by mass spectrometry. The shared resource facilities include a variety of high performance mass spectrometers capable of providing primary protein sequence information.

## Flow Cytometry

**Beth D. Jamieson, Ph.D.**

This resource provides instrumentation and technical and professional assistance for performing laser-based flow cytometric analysis and sorting. The facility operates five Becton Dickinson instruments—one single-laser FACScan analytic flow cytometer, one two-laser FACSCalibur analytic flow cytometer, one three-laser BD-LSR bench top-UV analytic flow cytometer, and for cell sorting, the laboratory has two digital FACS Vantage SE three-laser flow cytometers. The facility also operates one Miltenyi autoMACS, an automated immunomagnetic bead cell separator.

## Human Tissue Research Center

**Tomas Ganz, Ph.D.**

**Dr. Sarah Dry**

This resource provides a reliable and continuous source of remnant human tissues for cancer research as well as histological sections of frozen and paraffin-embedded tissue from human and animal sources. In addition, it provides routine (hematoxylin and eosin) and specialized staining of these sections upon request.

## Gene Expression Core

**Dr. Stanley Nelson**

**Dr. Christopher Denny**

Using survey software developed by the gene expression core, detailed experimental descriptions are attached to all microarray experiments. These data are centrally stored and managed through a database-backed website. Users can search this experimental description database to find past experiments performed by themselves or other investigators. Through its website, the facility assists users in the analysis of their data.

## Immunology

**Dr. Christel Uittenbogaart**

**Anthony Butch, Ph.D.**

This shared resource specializes in assays to evaluate lymphocyte function. Services also include processing and separation of mononuclear cells, preparation of cells for analysis, and data analysis. Testing with those assays that are sensitive to storage (NK, lymphoproliferative assays, etc.) is always performed on fresh specimens (same-day testing). A rigorous quality control program has been established to maintain consistent test results, and reference ranges have been established and/or validated for proper interpretation of test results.

## Small Animal Imaging

**Harvey Herschman, Ph.D.**

The small animal imaging shared resource provides MicroPET small animal studies, including tail vein injection in mice, anesthesia, cardiac puncture for blood sampling, animal monitoring and PET imaging, calibration, and data reconstruction. It also provides data archiving and image display, optical charge-coupled device (CCD) imaging and MicroCAT, CT imaging for rat heads and whole-body mouse imaging.

## Tissue Array

**Dr. David Seligson**

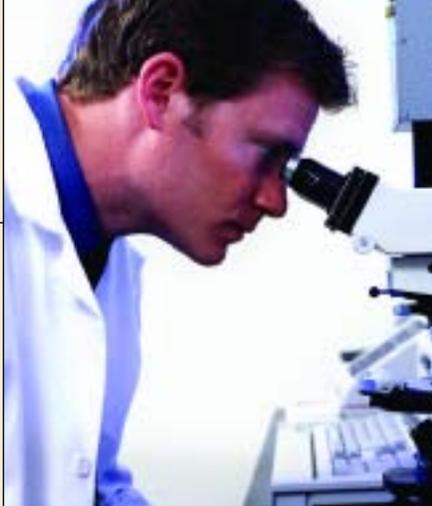
This shared resource constructs and analyzes tissue arrays for research programs, facilitating the effective use of the clinical biological material available at UCLA. Services include consultation regarding tissue array project planning, construction of tissue arrays, array staining (H&E, Immunohistochemistry & FISH), histopathologic evaluation of stained arrays and tissue array educational sessions.

## Biostatistics, Analytic Support and Epidemiology (BASE) Unit

**Robert Elashoff, Ph.D.**

**Dr. Elliot Landaw**

This shared resource serves as the biostatistical and biomathematical resource for investigators in basic science and clinical research design, data analysis and modeling, computing and data management. The BASE Unit provides mathematical and statistical analyses for tissue analysis, gene expression, pharmacokinetics and clinical trials. BASE Unit members provide critical expertise to protocol review and approval functions of the Internal Scientific Peer Review Committee (ISPRC), the Internal Quality Assurance Committee, the Seed Grant Review Committee, and assist individual investigators in grant and manuscript review and preparation.



## Clinical Research Unit

**Dr. John Glaspy**

**Nancy Ryba, R.N.**

The unit serves as a core resource for clinical investigators, and provides a stable, well-trained core staff of clinical research nurses and data managers for the conduct of clinical studies; senior clinical research faculty consultation with new and/or junior investigators developing clinical research protocols; uniform scientific and quality assurance review of protocols and assurance of uniform compliance with federal guidelines for investigational drug use; and coordination and expansion of access to therapeutic clinical trials in all oncology disciplines within the cancer center and, ultimately, the region served by UCLA.

## Family Registry and Genetic Evaluation

**Dr. Patricia Ganz**

**Joyce Seldon, M.S., CGC**

This shared resource brings together the resources of the cancer center and the schools of Medicine and Public Health to meet the scientific and ethical challenges of studying, evaluating, and assisting individuals with a familial risk for cancer. The registry contains information about cancer patients and high-risk individuals with strong family histories of cancer and offers investigators access to biological samples (blood and tissue), complete pedigree data, demographic, lifestyle and behavioral data and a potential subject recruitment pool of individuals and families at increased risk for cancer.

## Recruitment, Retention and Communications Developmental Core

**Annette Maxwell, Ph.D.**

The mission of this resource is to develop institutional capabilities that can facilitate informed, culturally appropriate and ongoing communication between cancer center members and hard-to-reach ethnically and socioeconomically diverse patient population groups in the Los Angeles area in order to extend treatment and prevention trials to these groups.



## Molecular Screening

**Dr. Owen Witte**

The goal of this shared resource is to provide small molecule chemical libraries that will be screened by multiple investigators from different disciplines on campus. The resource will screen thousands of chemicals in large groups to determine which compounds have the potential to disrupt the abnormal cell signaling that serves as the flashpoint for cancer. The shared resource has purchased existing chemical libraries and will also tap into UCLA-established libraries, as well as develop new libraries in conjunction with UCLA chemists. ★