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4D Quantitative Imaging Lab

4D Quantitative Imaging Lab provides state of the art digital image processing and quantitation. Services and training opportunities include image segmentation, volumetrics, image reformation, visualization, imaging informatics, 3D model generation, and 3D printing. The lab includes workstations configured for anatomical segmentation with research and clinical software installed. Services include DICOM transfer, DICOM anonymization, image/video creation for publication/presentation, and 3D printing.

Equipment and services include: 3 image segmentation workstations with access to Synapse, Synapse 3D, Vitrea Enterprise Server, MIM Software, and Cerner. Form Labs Form 3B Resin 3D printer Vitrea version 7.14 stand alone workstation

Health Sciences Campus
Keck Hospital of USC
KMC B112

[Contact Information](#)

Focus Area:

Computing, Statistics, and Informatics;
Databases and Repositories; Digital Archive
and Media Resources; Imaging

Location:

Health Sciences Campus

Aging Biomarker and Service Core

Aging Biomarker and Service Core owns QuickPlex SQ 120 (Meso Scale Discovery, MSD) and SpectraMax M3 multi-mode microplate readers (Molecular Device).

The ELISA services include: 1) cytokines measurement, 2) Alzheimer-related markers (Amyloid beta, phospho-tau) measurement, 3) hormones measurement including GH, human and mouse IGF-I& IGFbPs, etc., 4) metabolic biomarkers measurement including insulin, leptin and adiponectin, 5) mitochondrial derived peptides (MDPs) measurement including humanin and the other novel MDPs, 6) new assay development.

University Park Campus
3715 McClintock Ave.
Davis School of Gerontology
GER #B1B
Los Angeles, CA 90089
[Website](#)

Focus Area:

Cell Culture & Analysis

Location:

University Park Campus

Bioreagent and Cell Culture Core

The Bioreagent and Cell Culture Core supports cancer related research that requires in vitro experiments, provides reagents for cell culture and prepares bioreagents that are produced by cells grown in the Core. It is one of the longest standing and most widely used shared resources of the Cancer Center.

USC Norris Comprehensive Cancer Center
1441 Eastlake Ave
NOR5323
Los Angeles CA 90033

[Website](#)

Focus Area:

Biomarkers, Cell Culture, and Analysis

Location:

Health Sciences Campus

Biostatistics Core – CHLA

The Biostatistics Core assists researchers with the design and analysis of clinical and laboratory studies.

Services include: formulation of research questions, IRB and grant applications, sample size and power estimation, data management and forms development, statistical analysis, manuscript preparation and publication. The core also gives presentations on Biostatistics topics as well as on the use of Microsoft Access for data management.

Children's Hospital Los Angeles, CHLA
Saban Institute Small Animal Imaging Research Center
4661 Sunset Blvd.
Los Angeles, CA 90027

[Website](#)

Focus Area:

Computing, Statistics, and Informatics

Location:

Children's Hospital Los Angeles

Biostatistics Core – NCCC

The Biostatistics Core – NCCC provides statistical support to clinical and basic science cancer-related research, working with members of the Clinical Investigations Support Office (CISO) on in-house clinical trials approved by the Clinical Investigations Committee (CIC).

Services include: assistance in the development of study design and/or project data management and statistical analysis; the level of support depends on the scale of the project, the support staff available, and the expertise of the investigator.

Health Sciences Campus
USC Norris Comprehensive Cancer Center
1441 Eastlake Ave., NOR 3419
Los Angeles, CA 90089

[Website](#)

Focus Area:

Computing, Statistics, and Informatics

Location:

Health Sciences Campus

Biostatistics Core – SC CTSI

Through training and direct consultation, this group provides high quality, easy-to-access biostatistics service and guidance to investigator-initiated clinical studies and trials from concept to close-out.

University of Southern California
2250 Alcazar Street, CSC 200
Los Angeles, CA 90033

[Website](#)

Focus Area:

Computing, Statistics, and Informatics

Location:

Health Sciences Campus

Cell and Tissue Imaging Core

The Cell and Tissue Imaging Core is available by appointment 24 hr/day for sample processing, technical assistance and training in the operation of imaging equipment.

Services include: tissue processing, thin sectioning, embedding, cryosectioning, immunostaining, paraffin embedding, digital photomicroscopy, digital slide scanning, SEM imaging, and TEM imaging and computer aided graphics. Training and assistance in the use of instruments and associated technical procedures is provided by appointment and in scheduled in-service training sessions.

Health Sciences Campus
Doheny Eye Institute DVRC
Building Room 214 1355
San Pablo St.
Los Angeles, CA 90089

[Website](#)

Focus Area:

Imaging

Location:

Health Sciences Campus

Cellular Imaging Core

The Cellular Imaging Core houses light microscopy and digital image processing equipment to support cell biology research.

Services include: consultation on the design, execution, and analysis of fixed and live cell imaging experiments as well as training in the utilization of Core facilities. Equipment includes: Lightsheet microscope (LaVision Biotec Ultramicroscope II), laser scanning confocal microscopes (Zeiss LSM 710 & 700), live cell imaging microscope and spinning disk confocal (BD/CrEST CARVII) with temperature/CO₂/O₂ control, widefield fluorescence microscopes (Leica DMI6000B AFC & Nikon Eclipse Ti-E), Optical Projection Tomography (OPT) microscope, 3D image rendering and analysis workstation with Arivis Vision4D and AutoQuant deconvolution software, 2D image analysis workstation with MetaMorph software.

Children's Hospital Los Angeles, CHLA
Smith Research Tower
4546 Sunset Blvd
Los Angeles, CA 90027

[Website](#)

Focus Area:

Imaging

Location:

Children's Hospital Los Angeles

Center for Quantum Information Science & Technology (CQIST)

The mission of the USC Center for Quantum Information Science & Technology (CQIST) is to advance fundamental experimental and theoretical knowledge in relevant areas of Engineering and Physical Science. We mentor graduate and postdoctoral research, sponsor a vigorous visiting scholars program, develop and teach novel QIST-based courses, organize international conferences and workshops, and hold regular seminar series.

[Website](#)

Focus Area:

Quantum, Physics, Nanotechnology, and Engineering

Location:

University Park Campus

Chang Stem Cell Engineering Facility

The Chang Stem Cell Engineering Facility genetically modifies embryonic stem (ES) cells and induced pluripotent stem (iPS) cell lines. Genetically modified ES and iPS cell lines derived from disease-specific animal models and patients provide an opportunity to investigate the mechanisms of disease and to further develop new treatments for clinical therapy.

Services include: genome editing, iPS cell derivation, and ES cell derivation.

Health Sciences Campus
Eli and Edythe Broad CIRM Center
1425 San Pablo Street, BCC 205
Los Angeles, CA 90033

[Website](#)

Focus Area:

Biomarkers, Cell Culture, and Analysis

Location:

Health Sciences Campus

Chemistry Instrumentation Facility

Instruments at the Chemistry Instrumentation Facility are maintained and supervised by technical personnel as departmental facilities.

Equipment and services include: Bruker Vertex 80 FTIR spectrometer with vacuum capability; Cary 14 UV-Visible spectrometer; Bruker EPR spectrometer; Jasco temperature-controlled digital polarimeter; Applied Biosystems MALDI mass spectrometer; Bruker APEX diffractometer with a CCD area detector for single-crystal applications; Rigaku Ultima IV powder/thin film diffractometer; Horiba XploRA Raman Microscope System with low temperature cell attachment and a Horiba NanoLog Spectrofluorometer System with both visible and near-IR detectors; as well as a wide variety of specialized laser spectroscopy equipment, surface analysis instruments, mass-selective gas chromatography, mass-selective HPLC, and scanning probe microscopes.

University Park Campus
USC Department of Chemistry
3620 McClintock Avenue, SGM 418
Los Angeles, CA 90033

[Website](#)

Focus Area:

Proteomics and Spectroscopy

Location:

University Park Campus

Choi Family Therapeutic Screening Facility

The Choi Family Therapeutic Screening Facility enables investigators from USC and beyond to improve their understanding of diseases and accelerate the discovery of potential therapeutic drugs.

Equipment and services include: extensive chemical libraries, state-of-the-art screening equipment and trained technicians.

Health Sciences Campus
Eli and Edythe Broad CIRM Center
1425 San Pablo Street, BCC 205A
Los Angeles, CA 90033

[Website](#)

Focus Area:

Databases and Repositories; Flow Cytometry; Gene Expression Profiling, Genotyping, and Genomic Analysis; Imaging

Location:

Health Sciences Campus

Circulating Tumor Cells Research Core

Circulating tumor cells (CTCs) are cancer cells shed by solid tumors into the bloodstream. CTCs have recently emerged as valuable prognostic and predictive cancer biomarkers, providing a non-invasive window into disease biology and progression that can be sampled repeatedly over time from a simple blood draw. Moreover, CTC sampling enables real time tracking of cancer plasticity as tumor cells evolve over time and through progressive lines of therapy, thus elucidating mechanisms of cancer dissemination and identifying new

therapeutic targets. As such, CTC characterization holds the promise of enabling real-time molecular phenotyping of individual cancer patients' tumors at diagnosis and throughout treatment, advancing precision medicine in this important and vast patient group. The USC Norris CTC Research Core is a state-of-the-art, multiplatform facility for

the capture and analysis of peripheral blood CTCs. The Core employs a variety of technologies that enrich CTCs for enumeration or molecular characterization. Enrichment is done from blood samples drawn by standard venous puncture from patients. In addition, Dr. Goldkorn's team has developed mouse xenograft research models using labeled CTCs that can be recovered from the mice.

Health Sciences Campus
USC Norris Cancer Center
1450 Biggy Street., NRT6516

Citavi

USC faculty, postdocs, and students now have access to the licensed web and desktop editions of Citavi, a reference management and note-taking software.

Citavi combines reference management and knowledge organization. With Citavi you can search resources from around the world, create tasks, analyze texts, save quotations and ideas, create outlines for drafts, and write reports, articles, or books – faster and more efficiently than you ever thought possible. Your team's findings and discussions from what they read can be organized separate from the literature making this expert knowledge available to all and easy to use and re-use in individual projects. Your knowledge stays in your organization and can be used by the entire team for years to come. Citavi's categories, groups, filters, and search help you find exactly the literature and information you need efficiently and securely. In your documents all content can be sorted and categorized by the user. Citavi automatically creates a bibliography for your study, report or other publication – if desired with special chapter formatting. The citation style can be changed at any time with a click.

Click [here](#) to create your account.

Click [here](#) for additional information and support. [Website](#)

Los Angeles, CA 90033

Contact Information

Focus Area:

Biomarkers, Cell Culture, and Analysis

Location:

Health Sciences Campus

Focus Area:

Grantwriting and Funding

Location:

Online Resource

Clinical Research Informatics

The SC CTSI provides services enabling complete access and analysis of patient data from the electronic medical records of Keck Medicine of USC, Children’s Hospital of Los Angeles, and the Los Angeles Department of Health Services. We also provide de-identified access to data from partners in federated research networks such as 20 Million patients in the Patient-Centered National Network for Effectiveness Research (pSCANNER), the Los Angeles Data Resource (LADR), the National Patient-Centered Clinical Research Network PCORNET and more than 158 million patient records in Cerner Health Facts. Not sure how to navigate through all these data sources? We can help.

University of Southern California
2250 Alcazar Street, CSC 200
Los Angeles, CA 90033

[Website](#)

Focus Area:

Computing, Statistics, and Informatics

Location:

Health Sciences Campus

Clinical Trials Unit (CTU)

The Clinical Trials Unit (CTU) “is a one-stop shop with highly qualified personnel and offers a broad range of services for investigators to conduct study visits ranging low complexity to high complexity.”

University of Southern California
2250 Alcazar Street, CSC 200
Los Angeles, CA 90033

[Website](#)

Focus Area:

Translational Research and Clinical Trials

Location:

Health Sciences Campus

Cognitive Neuroimaging Center

The Dana and David Dornsife Cognitive Neuroimaging Center pursues structural and functional brain imaging studies using state of the art techniques, to contribute to the development of future brain imaging modalities and to disseminate knowledge about the brain, the mind and neuroimaging.

Equipment and services include: a 3T Siemens TRIO scanner with associated support equipment; a BIOPAC MR-Compatible Physiological Data Acquisition System and an ASL 504 LRO Eye Tracker.

Dana and David Dornsife Cognitive Neuroimaging Center
University of Southern California
3620A McClintock Ave
Los Angeles, CA 90089-1061

[Website](#)

Focus Area:

Imaging; Translational Research and Clinical Trials

Location:

University Park Campus

Core Center of Excellence in Nano Imaging

CNI provides research tools for imaging, visualization, and analysis of nano-scale features and structures, both man-made and natural, including biological structures.

Services include: full-time technical staff support providing training and assistance with advanced applications. Equipment includes: electron microscopy (TEM, SEM, and FIB), and light microscopy (super-resolution, 3D-SIM and TIRF) and Microanalysis (EDS, XPS, EBSD and EELS).

1002 West Childs Way, MCB, Lower Level
Los Angeles, CA 90089-3502

[Website](#)

Focus Area:

Imaging

Location:

University Park Campus

Data Science Core (DSC)

Data Science Core (DSC) develops and supports databases for laboratory data management, multi-center clinical trials coordination, epidemiologic & prevention studies as well as disease specific studies.

Equipment and services include: tools for data collection, migration and reporting, customized survey creation, and web-based data capture & reporting.

Health Sciences Campus
USC Norris Cancer Center
1450 Biggy Street, NRT LG507
Los Angeles, CA 90033

[Website](#)

Focus Area:

Computing, Statistics, and Informatics

Location:

Health Sciences Campus

Department of Animal Resources

The Department of Animal Resources and the Institutional Animal Care and Use Committee assist faculty in preparing proposals and carrying out animal-based research and teaching activities at USC.

Services include: clinical, surgical and diagnostic laboratory services, ordering drugs and supplies, animal orders and transfers and rodent euthanasia. Training programs in Animal Care and Use are also offered to principal investigators, staff and students, as well as education programs for Laboratory Animal Technicians.

Health Sciences Campus
Center for Health Professions 234
University of Southern California
Los Angeles, CA 90033-9004

[Website](#)

Focus Area:

Animal Resources

Location:

Health Sciences Campus

Diabetes and Obesity Research Institute (DORI) Clinical Services Core

The DORI Clinical Services Core provides expert obesity- and diabetes-related clinical services to researchers. **Services and equipment include:** scans and analyses of DEXA, BodPod, MRI, Oral Glucose Tolerance Testing (OGTT), and Fasting Blood Draws and the core has a fully equipped metabolic kitchen and gym that can be rented for studies, meetings, exercise analyses, etc. All scans and analyses are run by experienced technicians in a quality-controlled environment.

Health Sciences Campus
Diabetes & Obesity Research Institute
2250 Alcazar Street, CSC200
Los Angeles, CA 90034

[Website](#)

Focus Area:

Translational Research and Clinical Trials

Location:

Health Sciences Campus

Diabetes and Obesity Research Institute (DORI) Metabolic Assay Core

The Metabolic Assay Core provides assay services to investigators of the USC Diabetes and Obesity Research Institute (DORI), and non-DORI investigators. **Services include:** assistance in the measurement of hormones, cytokines, lipids and carbohydrates in human and animal biologic fluids. Equipment includes: an ELISA plate reader, YSI glucose analyzer, and Luminex technology.

Health Sciences Campus
Diabetes & Obesity Research Institute
2250 Alcazar Street, CSC123A
Los Angeles, CA 90033

[Website](#)

Focus Area:

Translational Research and Clinical Trials

Location:

Health Sciences Campus

Dimensions

Dimensions is a tool licensed by USC to find and compare research grants, patents, clinical trials, publications and other metrics by individual, specialty or university. Dimensions can be used to identify potential collaborators or experts.

Dimensions is a linked research data platform. Each of the data sources (publications, research funding, patents and clinical trials) can be searched simultaneously, and they are even linked together where relevant. You can see which paper came from which grant, for example. In some ways, it's similar to other platforms you may have used such as Scopus or Web of Science, but with a much wider and more open scope. Dimensions is designed to help anyone involved in research to get better knowledge about what is going on in their research area and how this is changing over time.

Click [here](#) for basic information on Dimensions.

Click [here](#) for the quick start guide.

Click [here](#) for the product guide.

[Website](#)

Focus Area:

Databases and Repositories; Grantwriting and Funding

Location:

Online Resource

Flow Cytometry Core Facility

The Flow Cytometry Core Facility provides the research community with the technology to selectively phenotype and sort specific populations of cells.

Equipment includes: cytometers. Services include: cell sorting, analysis, training and consultation, Flowjo site licenses and software.

Health Sciences Campus
Eli and Edythe Broad CIRM Center
1425 San Pablo Street, BCC 205
Los Angeles, CA 90033

Focus Area:

Flow Cytometry

Location:

Health Sciences Campus

Functional Biological Imaging Core

The Functional Biological Imaging Center is a newly formed pre-clinical imaging resource at the Zilkha Neurogenetic Institute takes advantage of state-of-the-art preclinical MRI/PET instrumentation provided by MR Solutions (Guildford UK). Simultaneous acquisition of PET and MR images is a newly emerging technology that marries the exquisite sensitivity of PET with the high spatial resolution and soft tissue contrast of MRI.

1975 Zonal Ave.

Focus Area:

Animal Resources; Imaging

Location:

Health Sciences Campus

Los Angeles, CA 90033

[Website](#)

Gene Targeting & Pathology Core

The Genome Targeting and Pathology Core provides genetically manipulated mice for biomedical studies. **Services include:** conditional /tissue-specific knockouts, knockins & lentiviral transgenesis, tissue paraffin embedding and sectioning, routine H&E staining and genotyping of tail DNA.

Children's Hospital Los Angeles
4546 Sunset Blvd
Los Angeles, CA 90027

Focus Area:

Gene Expression Profiling, Genotyping, and Genomic Analysis

Location:

Children's Hospital Los Angeles

Good Manufacturing Practice Core

The Good Manufacturing Practice (GMP) Core, is located at the Saban Research Institute at CHLA. Services include: the manufacture of therapeutic grade cellbased products under GMP conditions for use in clinical trials.

Children's Hospital Los Angeles, CHLA
Smith Research Tower
4546 Sunset Blvd., Rm 106, MS#64
Los Angeles, CA 90027

[Website](#)

Focus Area:

Translational Research and Clinical Trials

Location:

Children's Hospital Los Angeles

GrantForward

Grant Forward is a search engine dedicated to helping institutions and individuals find grant opportunities. GrantForward is able to cover more than 12,000 sponsor sources to provide a comprehensive database of more than 40,000 funding opportunities that continues to grow with the most up to date information.

GrantForward's powerful search system helps to lessen the hassle of searching for grants with adaptable search filters and specialized search features. GrantForward researcher profiles allow researchers to highlight their research achievements and interests to receive personalized grant recommendations for grant opportunities that match their research needs. In order to be able to take advantage of all of the features that GrantForward offers, you will have to create an account using your institution email address. If you would like to benefit from receiving grant recommendations, then you will also need to make sure to create your researcher profile.

[Website](#)

Focus Area:

Databases and Repositories; Grantwriting and Funding

Location:

Online Resource

High Performance Computing Center

The Center for High-Performance Computing and Communications (HPCC) comprises a diverse mix of computing and data resources. **Equipment includes:** two Linux clusters (the principal computing resource) as well as a central facility that provides more than 1.4 petabytes of combined disk storage and potential access to nearly a petabyte of tape storage.

Off-campus; Los Angeles
Carole Little Building
3434 South Grand Ave.
Los Angeles, CA 90089-0706

[Website](#)

Focus Area:

Computing, Statistics, and Informatics

Location:

Off-Campus

Histology Laboratory

The USC School of Pharmacy Histology Laboratory is located on the fourth floor of the Pharmaceutical Sciences Center. **Services include:** all steps to make microscope slides from tissue samples; processing & embedding, paraffin sectioning, frozen sectioning, H&E staining, and Microm HM310 rotary microtome usage. **Equipment includes:** Microm Spin Tissue Processor STP 120, Microm Tissue Embedding Center EC350, Microm Rotary Microtome, Vibratome, Microm Cryostat HM 525, CryoJane, Thermo Shandon Hyperclean Station, and Zeiss Axioskop Microscope.

Health Sciences Campus
USC School of Pharmacy
1985 Zonal Avenue, PSC 402A
Los Angeles, CA 90033

[Website](#)

Focus Area:

Histology and Pathology

Location:

Health Sciences Campus

Image Processing and Informatics Lab

The Image Processing and Informatics (IPI) Laboratory utilizes Biomedical Imaging and Informatics Technologies to train and educate scientists and physicians in clinical R&D services related to medical imaging and informatics. **Services and research areas include:** computer-aided diagnosis (CAD), bone age assessment, development of data grids (clinical trials, small animal imaging, imaging security and combination teleradiology and PACS operations) and radiation therapy informatics. **Equipment includes:** a PACS Simulator, a Fault-tolerance Server, Data Grid, PACS workstations, CAD servers, and connections to two clinical PACS.

Department of Biomedical Engineering, USC
Denney Research Center (DRB) 264
1042 Downey Way
Los Angeles, CA 90089-1111

[Website](#)

Focus Area:

Imaging

Location:

University Park Campus

Immune Monitoring Core

The Immune Monitoring Core offers advice, technical support and equipment for all immune monitoring needs. **Equipment and services include:** technical assistance for performance and/or analysis of ELISPOT, flow cytometry, radioisotope-based proliferation and cytotoxicity, multiplexing ELISA, and molecular-based quantitative PCR assays. The lab is equipped for controlled rate freezing and storage of cryopreserved peripheral blood cells, tissue culture facilities and has a 96-well plate ELISPOT reader. Assays and technical assistance are also available to support translational projects that utilize in vitro and in vivo animal models.

Health Sciences Campus
Harlyne J. Norris Cancer Research Tower
1450 Biggy Street, Room 7517
Los Angeles, CA 90033

[Website](#)

Focus Area:

Translational Research and Clinical Trials

Location:

Health Sciences Campus

Information Technology Services

ITS provides information technology and support services to USC researchers. **Equipment and services include:** a range of software and webbased resources. It holds university-wide and locally held licenses for many software suites and offers consulting services for statistics software as well as fee-based website hosting and design consulting.

University Park Campus

[Website](#)

Focus Area:

Computing, Statistics, and Informatics

Location:

University Park Campus

Integrative Liver Cell Core

The Research Center For Alcoholic Liver and Pancreatic Disease core laboratories supports center investigators and serves as a national resource. **Animal Core services include:** mouse intragastric (iG) and ad lib ethanol feeding models which produce clinically relevant pathologic spectra of ALPD; routine BAL and ALT measurements; non-parenchymal liver cell core services, terminal experiments and sample collection, as well as a Tissue Sharing and Training Program. **Animal models include:** Rodent iG Models Standard iG model; Hybrid model of Western Diet ad lib and Alcohol iG feeding for ASH with liver fibrosis; Hybrid plus Binge Model of Alcoholic Hepatitis and Alcohol/HCV Liver Tumor Models: Metabolomics Core services include: metabolomics analysis in animals and isolated cells, such as stable isotope-based (¹³C and ²H).

Health Sciences Campus
Mudd Memorial Research Building
1333 San Pablo Street, MMR 412
Los Angeles, CA

[Website](#)

Focus Area:

Animal Resources; Flow Cytometry; Histology and Pathology

Location:

Health Sciences Campus

John O'Brian Nanofabrication Laboratory

The John O'Brian Nanofabrication Laboratory is a central user, Class 1000 cleanroom dedicated to supporting the nanofabrication research efforts of USC researchers. **Equipment includes:** photolithography and e-beam lithography, metal deposition, silicon/SiON/oxide and III-V etchers, thin film deposition and growth, and a range of characterization and metrology tools.

University Park Campus
Vivian Hall of Engineering Building
3651 Watt Way, 1st floor
Los Angeles, CA 90089

[Website](#)

Focus Area:

Quantum, Physics, Nanotechnology, and Engineering

Location:

University Park Campus

Lentiviral Core Laboratory

The USC School of Pharmacy Lentiviral Laboratory provides services for production of small-scale lentiviral stocks for delivery and expression of transgenes or shRNA of interest. The engineered lentiviral constructs are either provided by the end-users or produced in the lab according to the needs of the customers. We also help in stable cell line generation and characterization.

[Website](#)

Focus Area:

Gene Expression Profiling, Genotyping, and Genomic Analysis

Location:

Health Sciences Campus

Machine Shop Facilities

The College/Viterbi Machine Shop is located in the basement of Kaprielian Hall and provides machine work for research in the Viterbi School of Engineering and in the Dornsife College of Letters, Arts and Sciences. **Services include:** fabrication of mechanical parts desired out of most materials except glass. Equipment includes: milling machine, band saw, drill press, and grinder. The shop also has CNC mills and lathes and can assist in sourcing out work for machinery for which it does not have processes; the shop also keeps a basic supply of metals and plastics.

University Park Campus
Kaprielian Hall, room B1
3620 S. Vermont Avenue
Los Angeles, CA 90089

[Contact](#)

Focus Area:

Glassware, Machine Shop, and Equipment

Location:

University Park Campus

Molecular Genomics / DNA Oligo Synthesis

DNA Oligo Services in the Molecular Genomics Core Facility are performed by Integrated DNA Technologies (IDT). **Service includes:** Oligonucleotide synthesis. Orders are placed directly on the IDT/USC website.

Health Sciences Campus
USC Norris Comprehensive Cancer Center
1450 Biggy Street, NRT G514
Los Angeles, CA 90033

[Website](#)

Mass Spectrometry Core

The Mass Spectrometry Core at USC School of Pharmacy serves the scientific research community at USC as well as external collaborators. Our Core is equipped with state-of-the-art instruments for imaging mass spectrometry (IMS), high-throughput screening, and quantitative metabolomic and proteomics. Our Core is dedicated to actively collaborate with internal and external research groups in providing comprehensive service in MALDI imaging and high-throughput screening of small molecules, peptides, and proteins using mass spectrometry.

University of Southern California
1985 Zonal Avenue
Los Angeles, CA 90089-9121
[Website](#)

Focus Area:

Proteomics and Spectroscopy

Location:

Health Sciences Campus

Molecular and Cell Biology Support Core

The MCB Support Core provides support services to faculty and laboratories at the Ezralow Tower, the Norris Topping Tower, the Harlyne Norris Research Tower, and the Smith Tower at CHLA. **Services include:** supervision and maintenance of all shared equipment including glassware, and service contracts for heavily-used, expensive pieces of equipment such as ultracentrifuges and liquid scintillation counters, centralized supplies, including carbon dioxide, liquid nitrogen, dry ice and deionized and distilled water (to Cancer Center laboratories), basic services such as routine maintenance of freezers, balances, microscopes and hoods in individual laboratories and assessment of need and recommendations for purchases of new shared equipment or services.

Health Sciences Campus
USC Norris Comprehensive Cancer Center
1442 Eastlake Ave.
Los Angeles, CA 90090
[Website](#)

Focus Area:

Glassware, Machine Shop, and Equipment

Location:

Health Sciences Campus

Focus Area:

Gene Expression Profiling, Genotyping, and

Genomic Analysis

Location:

Health Sciences Campus

Molecular Genomics / DNA Sequencing

DNA Sequencing services in the Molecular Genomics Core Facility are performed by GENEWIZ, Inc. **Services include:** Capillary DNA sequencing. Orders are placed directly on GENEWIZ's website.

Health Sciences Campus
USC Norris Comprehensive Cancer Center
1450 Biggy Street, NRT G514
Los Angeles, CA 90033

Focus Area:

Gene Expression Profiling, Genotyping, and Genomic Analysis

Location:

Health Sciences Campus

Molecular Genomics / Genomics and Arrays

The Molecular Genomics Core Facility performs high throughput analyses of genetic (polymorphism/mutation) and epigenetic variations (DNA methylation) that underlie predisposition and progression to cancer. **Services include:** evaluation of inheritance of information on the basis of epigenetics. The Core utilizes array and Next Generation Sequencing expertise for assisting researchers with epidemiologic, gene expression, and DNA methylation studies.

Health Sciences Campus
USC Norris Comprehensive Cancer Center
1450 Biggy Street, NRT G511
Los Angeles, CA 90033

[Website](#)

Focus Area:

Gene Expression Profiling, Genotyping, and Genomic Analysis

Location:

Health Sciences Campus

Molecular Genomics/Microarray

The USC Norris Comprehensive Cancer Center Microarray Core is located at the CHLA pediatric facility. **Services include:** gene expression profiling with a variety of arrays, including human, mouse and rat; mutation analyses (p53); HIV, yeast, and bacterial genome analyses; and SNP analyses. RNA or DNA is extracted, purified, labeled, and in the case of expression chips, converted into double stranded cDNA, prior to cRNA, labeling and fragmentation.

Children's Hospital Los Angeles, CHLA
4650 Sunset Blvd, MS#103
Los Angeles, CA, 90027

[Website](#)

Focus Area:

Gene Expression Profiling, Genotyping, and Genomic Analysis

Location:

Children's Hospital Los Angeles

Molecular Imaging Center – Small Animal Imaging

The USC Molecular Imaging Center focuses on the translational needs of investigators to allow in vivo imaging of disease processes and development of new molecular therapeutics and diagnostics, providing support to research studies of small animals for a variety of applications. **Equipment and services include:** training and/or assistance with study design, imaging procedures, imaging probe design, and image analysis are provided in the use of microCT, microPET, micro-ultrasound, optical imaging, radio chemistry as well as radiography and autoradiography systems.

Health Sciences Campus
Clinical Science Center
2250 Alcazar Street, CSC/IGM 103
Los Angeles, CA 90033-9061

[Website](#)

Focus Area:

Animal Resources; Translational Research and Clinical Trials

Location:

Health Sciences Campus

MOSIS Very Large Scale Integration Circuit Fabrication

MOSIS service infrastructure, together with partnerships with top foundries, provides customers with technologies and manufacturing solutions that span all parts of the production cycle: from small to large-quantity fabrication runs, to packaging and assembly. **Services include:** low-cost prototyping and small-volume production service for VLSI circuit development and fabrication, among others. MOSIS also provides access to a range of advanced semiconductor processes offered by numerous foundries.

Marina del Rey, Off campus
4647 Admiralty Way, 7th Floor
Marina del Rey, CA 90292-6695

[Website](#)

Focus Area:

Quantum, Physics, Nanotechnology, and Engineering

Location:

Off-Campus

Multi-Photon Microscopy Core

The Multi-Photon Microscopy Core provides in vivo imaging of intact organs in small animals with high temporal and subcellular resolution, ideal for studying (patho)physiological processes in health and disease. **Equipment includes:** a Leica TCS SP5 AOBS Multi-Photon Confocal Microscope System.

Health Sciences Campus
Zilkha Neurogenetic Institute
1501 San Pablo Street, ZNI 313
Los Angeles, CA 90089
[Contact](#)

Focus Area:

Imaging

Location:

Health Sciences Campus

Nanobiophysics Core

The Center of Excellence in NanoBiophysics supports faculty and students across the university in the study of molecular nano-assembly, structures and functions. Housed in the Dornsife College, the Center is used by research programs in structural biology, nanotechnology, anomedicine, molecular biology, biochemistry, and materials sciences.

3616 Trousdale Parkway
AHF B15
Los Angeles, CA 90089

[Website](#)

Focus Area:

Proteomics and Spectroscopy; Quantum, Physics, Nanotechnology, and Engineering

Location:

University Park Campus

NCCC Bioinformatics Core

The Bioinformatics Core offers a range of services to researchers across Norris Cancer Center at USC and other academic institutions on a fee-based or combination of fee- and collaboration-based service. **Services include:** in-silico (computational) Bioinformatics-based analysis to basic, clinical, and translational research applications.

Health Sciences Campus
USC Norris Comprehensive Cancer Center
1450 Biggy Street, NRT G511
Los Angeles, CA 90033
[Website](#)

Focus Area:

Computing, Statistics, and Informatics

Location:

Health Sciences Campus

Neuroplasticity and Imaging

Research at the Neuroplasticity and Imaging Lab uses Transcranial Magnetic Stimulation (TMS) to investigate brain-behavior relationships during motor skill learning and motor control in non-disabled and brain-injured individuals.

Equipment and services include: the lab maintains a range of TMS technologies for research use (Magnetic stimulation system, Magstim 2002, Bistim2, Magstim Rapid2, 2nd Generation Remote Coils, Custom Coils, Double 70mm Cooled Coil System, Brain navigation system, EMG recording system, DataWizard).

Health Sciences Campus
Center for Health Professions
1540 Alcazar Street, CHP 155
Los Angeles, CA 90089-9006

[Website](#)

Focus Area:

Imaging; Translational Research and Clinical Trials

Location:

Health Sciences Campus

Norris Library Bioinformatics Support

Bioinformatics support at HSC is provided by the Norris library to faculty, students and researchers. **Services include:** Statistical analysis of highthroughput data and DNA/protein sequence analysis, comprehensive functional analysis and advanced literature and data search and mining, as well as workshops and training of available software tools.

Health Sciences Campus
Norris Medical Library, Room 203
2003 Zonal Ave, Los Angeles, CA 90089-9130

[Website](#)

Focus Area:

Computing, Statistics, and Informatics; Gene Expression Profiling, Genotyping, and Genomic Analysis

Location:

Health Sciences Campus

NubiS

NubiS is a complete data collection tool that has been developed by the team behind the Understanding America Study (UAS) panel at the Center for Economic and Social Research at the University of Southern California. NubiS runs on any server, pc, laptop or netbook as well as on android tablets or smartphones.

The NubiS system includes all the traditional modes of data collection like selfadministered, face-to-face, and telephone interviewing. NubiS can also collect continuous information from smartphones, tablets or other external devices like accelerometers, GPS devices, blood pressure meters and other biomedical devices. This information can be combined with survey data and for example used to prompt or ask questions to respondents.

[Website](#)

Focus Area:

Databases and Repositories

Location:

Online Resource

Optical Imaging Facility

The Optical Imaging Facility specializes in cellular and subcellular fixed or dynamic imaging and analysis of biological material. The facility provides access to powerful microscopes that enable scientists to take high-resolution pictures of stem cells. These include still images and time-lapse videos. Cells or parts of cells can be labeled with fluorescent dyes, which enable better identification of molecules and structures within cells, or to trace the fate of cells as they migrate, divide and differentiate within tissues.

Health Sciences Campus
Eli and Edythe Broad Center for Regenerative Medicine and Stem Cell Research
at USC
1425 San Pablo Street, BCC 212
Los Angeles, CA 90033

[Website](#)

Focus Area:

Imaging

Location:

Health Sciences Campus

Philanthropy News Digest

Philanthropy News Digest publishes requests for proposals (RFPs) and notices of awards as a free service for U.S.-based nonprofit and grantmaking organizations.

PND, a daily news service of Candid (formerly Foundation Center), publishes RFP listings daily, and the RFP Bulletin summarizes the week's listings every Friday afternoon. Each RFP listing provides a brief overview of a current funding opportunity offered by a foundation or other grantmaking organization. Interested applicants should read the full RFP at the grantmaker's website or contact the grantmaker directly for complete program guidelines and eligibility requirements before submitting a proposal. PND also maintains a comprehensive list of foundations and philanthropic organizations.

Website

Proteomics Core

Located at the CHLA Saban Research Institute, the Proteomics Facility utilizes proteomics with advanced mass spectrometry to investigate protein functions and roles in disease. **Equipment & services include:** proteomics and mass spectrometry services utilizing Eksigent nanoLC-2D and Thermo LTQ Orbitrap XL. Proteomics software includes Thermo Bioworks and Protein Scaffold Software.

Children's Hospital Los Angeles, CHLA
Smith Research Tower
4546 Sunset Blvd., Rm 106, MS#64
Los Angeles, CA 90027

Focus Area:

Grantwriting and Funding

Location:

Online Resource

Focus Area:

Proteomics and Spectroscopy

Location:

Children's Hospital Los Angeles

Research Imaging Core at the Saban Research Institute

The Research Imaging Core at the Saban Research Institute, CHLA, is a fullservice in vivo imaging laboratory providing non-invasive capabilities for use on mammalian models. **Equipment & services include:** data collection, processing and interpretation and access to core instrumentation: a Xenogen for optical imaging (bioluminescence and fluorescence), a 7T micro Magnetic Resonance Imager (MRI), a micro X-ray Computed Tomography (CT) instrument and a Gamma Medica combined CT micro Single Photon Emission Computed Tomography (SPECT).

Children's Hospital Los Angeles, CHLA
Saban Institute Small Animal Imaging Research Center
4661 Sunset Blvd.
Los Angeles, CA 90027

Focus Area:

Imaging

Location:

Children's Hospital Los Angeles

SC CTSI-Southern California Clinical and Translational Science Institute

Welcome to the Southern California Clinical and Translational Science Institute (SC CTSI), a multifaceted resource for clinical and community-partnered translational research. Set in the urban heart of Los Angeles where 85% of residents are from minority groups, 90 languages are spoken, and disease burden is high, we support researchers who face special challenges above and beyond traditional research hurdles. We view these challenges as opportunities to make research with diverse populations easier and more beneficial for our communities.

University of Southern California
2250 Alcazar Street, CSC 200
Los Angeles, CA 90033

[Website](#)

Focus Area:

Translational Research and Clinical Trials

Location:

Health Sciences Campus

Schaeffer Center Data Core

The Schaeffer Data Core's mission is to improve the quality and productivity of research related to health economics and policy through organized data resources, training, and the expertise of its staff.

Services include: comprehensive data library, analytic computing environments, data and programming expertise, and protected data management.

University Park Campus
USC Schaeffer Center
635 Downey Way VPD
Los Angeles, CA 90089-3333

[Website](#)

Focus Area:

Computing, Statistics, and Informatics;
Databases and Repositories; Translational
Research and Clinical Trials

Location:

University Park Campus

Seahorse Core Facility Gerontology

About the Seahorse XF96 Analyzer: The Seahorse XF96 is a unique instrument that measure extracellular O₂, pH, glucose and lactate fluxes to provide estimates of glucose utilization in cultured cells. The XF96 instrument provides a significant advance over existing methodologies to quantitate cellular metabolic pathways. Unlike radiometric assays, the XF96 does not require radiolabeled substrates, and unlike measurements of cellular oxygen consumption using the classic Clark electrode, it is possible to make high throughput measurements on 96 samples simultaneously in a microplate format.

Davis School of Gerontology
3715 McClintok Ave, B1A
Los Angeles, CA 90089

[Website](#)

Focus Area:

Biomarkers, Cell Culture, and Analysis;
Compound Testing and High-Throughput
Analysis

Location:

University Park Campus

Shoah Foundation

The Shoah Foundation's mission is to develop empathy, understanding, and respect through testimony. The Institute currently has more than 55,000 video testimonies, each one a unique source of insight and knowledge that offers powerful stories from history that demand to be explored and shared. The testimonies are preserved in the Visual History Archive, one of the largest digital collections of its kind in the world. They average a little over two hours each in length and were conducted in 65 countries and 43 languages. The vast majority of the testimonies contain a complete personal history of life before, during, and after the interviewee's firsthand experience with genocide.

650 West 35th Street, Suite 401
Los Angeles, California

[Website](#)

Focus Area:

Digital Archive and Media Resources

Location:

University Park Campus

Spatial Sciences Institute

The power and importance of spatial thinking and digital geography is what the USC Spatial Sciences Institute is all about.

As front-line researchers and educators, we are dedicated to deploying the power of: people, place, and time; information as maps; environmental sustainability and human well-being; and actionable research and informed decision-making.

We collaborate with a cross-cutting array of researchers, businesses, nonprofits, NGOs, and other entities from a wide range of disciplines and industries to analyze, model, and visualize location-based data. Through our innovative undergraduate programs – minors in GIS and Sustainability Science, Human Security and Geospatial Intelligence, and Spatial Studies and majors in GeoDesign and Global GeoDesign – masters programs in Geographic Information Science and Technology, Spatial Data Science, and Spatial Economics and Data Analysis, and doctoral programs in Spatial Analytics and Population, Health & Place, we develop the next generation of spatial thinkers, empowering them with capabilities to help address global challenges. Members of our internationally-recognized faculty contribute to the rapidly-evolving body of geospatial knowledge

3616 Trousdale Parkway
AHF B55
Los Angeles, CA 90089-0374

[Website](#)

Focus Area:

Computing, Statistics, and Informatics

Location:

University Park Campus

Structural Biology Center

Structural Biology Center @ Bridge (SBC@Bridge) would provide you all the necessary means required for structural determination of your protein of interest either soluble or membrane protein. Here at SBCB you have access to a world class facility and highly trained experts to assist you to achieve your goal.

SBC@Bridge can assist you in sample preparation, protein characterization, ligand search, crystallization, data collection and structural determination of your protein.

University Park Campus
3430 S Vermont Ave
Los Angeles, CA 90089

[Website](#)

Focus Area:

Structural Biology

Location:

University Park Campus

Structures and Materials Research Laboratory (SMRL)

The Structures and Materials Research Laboratory (SMRL) at the University of Southern California (USC) is located in the basement of Kaprielian Hall (KAP). SMRL is specially designed to conduct material, and reduced-, large- and fullscale structural testing. The laboratory is equipped to conduct research to improve the safety, sustainability and serviceability of built infrastructures. The Laboratory consists of over 4,000 ft² of test space and associated fabrication facilities. A series of servo-hydraulic actuators with capacities ranging from 11 kips to 340 kips are available for structural testing on a large-scale reaction frame with a 30 ft. by 18 ft. footprint and a 14 ft. high L-shaped wall. Five universal testing machines with capacities ranging from 1 kips to 1,000 kips are available for mechanical characterization of materials. Additionally, one of the universal testing machines is equipped with an environmental chamber with a temperature range of -200 °F to 600 °F for thermo-mechanical testing of materials under loads of up to 110 kips. A dedicated room with all the necessary infrastructure (drains, ventilation, etc.) is available for mixing and casting cementitious materials. SMRL also has a salt spraying chamber, a moist cure chamber and two high range ovens for materials curing, conditioning and longterm durability testing. In terms of data acquisition and sensors, a wide range of instrumentation and supplemental equipment for measurements of load, deflection and strain is available.

University Park Campus
USC Viterbi School of Engineering
Kaprielian Hall, room B39
3620 S. Vermont Avenue
Los Angeles, CA 90089-2531

[Website](#)

Focus Area:

Glassware, Machine Shop, and Equipment

Location:

University Park Campus

Transgenic/ Knockout Rodent Core Facility

The USC Norris Comprehensive Cancer Center Transgenic/Knockout Core Facility provides high-quality embryo and stem cell manipulation, microinjection and related services to the USC community, as well as non-USC researchers. **Services include:** gene targeting and the production of knockout rats and mice, transgenic mice, construction targeting vector design, preparation of DNA for injection and in vitro fertilization, re-derivation, and cryopreservation.

Health Sciences Campus
USC Norris Comprehensive Cancer Center
1441 Eastlake Ave. Room 5318
Los Angeles, CA 90089-9176

[Website](#)

Focus Area:

Animal Resources

Location:

Health Sciences Campus

Translational Imaging Center

The Translational Imaging Center (TIC) and the Light Microscopy Imaging Center bring together advanced light and fluorescence microscopy systems, providing facilities and instruments for scientists engaged in translational research. The TIC is also focused on developing new technologies for automating and providing advanced imaging technologies. **Equipment includes:** confocal and two-photon OPO fluorescence microscopes and state of the art image analysis software.

University of Southern California
Translational Imaging Center
425 Michelson Hall (MCB)
1002 West Childs Way
Los Angeles, CA 90089

[Website](#)

Focus Area:

Imaging; Translational Research and Clinical Trials

Location:

University Park Campus

Translational Pathology Facility – Adult Tissue Arm

The Translational Pathology Core Facility – Adult Tissue Arm provides a single point of access for tissue procurement and banking services for funded HSC and UPC investigators. We procure, bank, process, track and distribute both fresh/frozen and formalin-fixed paraffin embedded normal and pathologic human tissue biospecimens for investigators with IRB approved studies. We also provide histology services for both human biospecimens and animal tissues, including embedding, sectioning, and histologic staining and design and construction of tissue microarrays to support translational and basic research studies and we process blood/fluid specimens for translational research studies.

Health Sciences Campus
Norris Comprehensive Cancer Center
1441 Eastlake Ave.
Los Angeles, CA 90089

[Website](#)

Focus Area:

Histology and Pathology

Location:

Health Sciences Campus

Translational Pathology Facility – Slides & Soft Tissue

The Norris Cancer Center Translational Pathology Core provides normal and tumor tissue specimens for laboratory-based, epidemiologic and clinical studies conducted by Cancer Center investigators. **Services include:** adult and pediatric normal and tumor tissue specimens, and population-based, fixed tissue specimens.

Health Sciences Campus
Norris Comprehensive Cancer Center
1441 Eastlake Ave.
Los Angeles, CA 90089

[Website](#)

Focus Area:

Translational Research and Clinical Trials

Location:

Health Sciences Campus

Translational Research Laboratory

The USC School of Pharmacy Translational Research Laboratory provides USC researchers with access to lab resources and technical guidance to promote translational research. **Equipment includes:** a Real-Time PCR and suspension array system, flow cytometers, bioimagers, extracellular flux analyzers, microplate readers, spectrofluorometers, automated electrophoresis systems, separation systems, multilabel readers, liquid scintillation and luminescence counters, and microplate luminometer with injectors.

Health Sciences Campus
Pharmaceutical Sciences Center
1985 Zonal Avenue, PSC406
Los Angeles, CA 90033

[Website](#)

Focus Area:

Computing, Statistics, and Informatics; Digital Archive and Media Resources; Flow Cytometry; Gene Expression Profiling, Genotyping, and Genomic Analysis; Imaging; Translational Research and Clinical Trials

Location:

Health Sciences Campus

Understanding America Study

The Understanding America Study (UAS) is a panel of households at the University of Southern California (USC) of approximately 9,400 respondents representing the entire United States. The study is an 'Internet Panel,' which means that respondents answer surveys on a computer, tablet, or smart phone, wherever they are and whenever they wish to participate. Right now the USC Center for Economic and Social Research's Understanding Coronavirus in America tracking survey is following the attitudes and behaviors around the Novel Coronavirus pandemic in the United States. They also tracked the U.S. 2020 Presidential Election both pre and post-election.

A majority of the UAS data is publicly available. An excellent start is the UAS Comprehensive File, which merges the data from a number core surveys in the UAS that are repeated every two years. To explore the UAS data in an interactive manner check out the UAS Visualization Toolkit.

[Website](#)

Focus Area:

Databases and Repositories

Location:

Online Resource

USC Center of Excellence for Molecular Characterization

The Department of Chemistry operates a Nuclear Magnetic Resonance Spectroscopy lab for the investigation of magnetic properties of nuclei, providing information on the number and type of chemical entities in molecules. **Equipment includes:** NMR spectrometers, a Quantum Technologies Helium Liquifier as well as additional equipment available at their X-Ray Crystallographic facility. The Center also provides access to analytical software and computational workstations, including Varian VNMRJ for Red Hat Linux, Mestrelab MestReNova (all platforms) and Chemistry data archival services.

University Park Campus
Laird J. Stable Memorial Hall
840 Downey Way, LJS 159
Los Angeles, CA 90033

[Website](#)

Focus Area:

Structural Biology

Location:

University Park Campus

USC Digital Repository

USCDR provides fee-based consulting and services to help USC researchers meet grant data management plan requirements. **Services include:** digitization, cataloging, preservation, and online access. Consulting is also available to help researchers determine appropriate web hosting and web design solutions. USCDR is a center that is jointly operated by the USC Libraries, the USC Shoah Foundation Institute (SFI), and USC's Information Technology Services (ITS) division. As such, USCDR is able to offer researchers access to the professional expertise and technological infrastructure of the SFI, Libraries, and ITS.

University Park Campus
Edward L. Doheny Jr. Memorial Library
3550 Trousdale Pkwy, DML 310
Los Angeles, CA 90089-0183

[Website](#)

Focus Area:

Digital Archive and Media Resources

Location:

University Park Campus

USC Genome Core

The USC Genome Core is located on the UPC campus, and it offers NextGeneration Sequencing services to all USC researchers. Equipment includes: Illumina HiSeq 2500, Illumina NextSeq 550, and Ion Torrent PGM, plus all ancillary equipment needed for sample and library QC (Bioanalyzer, qPCR, etc.). Services include: NGS sequencing, library preparation, sample and library QC, and consultation.

University Park Campus
Center for Electron Microscopy & Microanalysis
814 Bloom Walk, CEM203
Los Angeles, CA 90089

[Website](#)

Focus Area:

Gene Expression Profiling, Genotyping, and Genomic Analysis

Location:

University Park Campus

USC Libraries Bioinformatics Support

Bioinformatics support at UPC is provided by the Jennifer Ann Wilson Dental Library (DEN21) to faculty, students and researchers. Services include: Statistical analysis of high-throughput data and DNA/protein sequence analysis, comprehensive functional analysis and advanced literature and data search and mining, as well as workshops and training of available software tools.

University Park Campus
Wilson Dental Library & Learning Center
925 W. 34th Street, DEN 21, Los Angeles, CA 90089

[Website](#)

Focus Area:

Computing, Statistics, and Informatics

Location:

University Park Campus

USC Stem Cell

The CIRM Stem Cell Core Facility is a CIRM-funded comprehensive support center that provides knowledge, resources and state-of-the-art technology to researchers working with stem cells. Services include: stem cell and biomedical research and centralized technologies and technical assistance to facilitate pluripotent stem cell research. The facility also offers courses and workshops focused on human pluripotent stem cell culture and research methodologies.

Health Sciences Campus

Eli and Edythe Broad Center for Regenerative Medicine and Stem Cell Research at USC

1425 San Pablo Street, BCC 209

Los Angeles, CA 90033

[Website](#)

Focus Area:

Biomarkers, Cell Culture, and Analysis

Location:

Health Sciences Campus

USC Stem Cell Flow Cytometry Facility

The Flow Cytometry Facility provides the research community with state-of-the-art technology to selectively phenotype and isolate specific populations of cells. Using fluorescent probes and transgenic proteins, researchers monitor several aspects of their cell populations, including phenotype, cell viability, proliferation, cell cycle and cell activation. Additionally, cell purification by electrostatic cell sorting enables cutting-edge research on low frequency cells. This essential resource aids investigators performing research in cancer, cancer-related areas, stem cell biology and regenerative medicine. With the increasing number of assays being developed that utilize flow cytometry, this resource supports a diverse group of investigators at USC and in the Los Angeles region.

Eli and Edythe Broad CIRM Center for Regenerative Medicine and Stem Cell Research at USC

1425 San Pablo Street, BCC 205B

Los Angeles, CA 90033

[Website](#)

Focus Area:

Flow Cytometry

Location:

Health Sciences Campus

Vector Core

The Vector Core provides researchers with state of the art technology, facilities, support staff and services and a broad range of resources. **Services include:** assistance in the design and construction viral vectors and viral particles for gene-modified in vitro/in vivo studies. The core also provides consulting services to identify researcher gene transfer needs, determine the best way to produce gene-modified cells, and to assist in experimental troubleshooting. **Equipment includes:** Hollow fiber tangential flow filtration (TFF) columns (Spectrum Labs) to filter and concentrate lentiviral vectors up to 100 fold with high recovery (>90%).

Children's Hospital Los Angeles, CHLA
Smith Research Tower
4546 Sunset Blvd., Rm 405
Los Angeles, CA 90027

Focus Area:

Gene Expression Profiling, Genotyping, and Genomic Analysis

Location:

Children's Hospital Los Angeles

Video Tracking Core

The USC Video Tracking Core (VTC) facility provides specialized research video services to USC and non-USC researchers. High-speed video combined with specialized lighting and software enables us to assay 3D movement, behavior patterns, gene expression and metabolite levels in free-moving animals, including *Drosophila melanogaster* and *C. elegans*, for periods ranging from <1/30 second to months. **Services include:** Analysis of movement and behavior patterns; Quantification of fluorescent transgenic reporter molecules, including green-fluorescence (GFP), red-fluorescence, blue-fluorescence and others; Quantification of fluorescent transgenic reporter molecules in specific tissues, including CNS, muscle, liver, heart and intestine; Small molecule testing for effects on behavior, gene expression and metabolite levels; Quantification of *Drosophila* life span and healthspan; Training and education.

University Park Campus
Ray R Irani Hall (RRI 219C)
1050 Childs Way, Bldg. #291
Los Angeles, CA 90089

[Website](#)

Focus Area:

Imaging

Location:

University Park Campus

West Semitic Research Project

The West Semitic Research Project uses advanced photographic and computer imaging techniques to document objects and texts from the ancient world. Equipment and services include: advanced photographic and imaging technologies to document texts and objects from the ancient world. Its archives, accessed electronically via its InscriptiFacts database application, include a wide variety of inscriptional materials, particularly in Northwest Semitic languages.

University Park Campus
Mark Taper Hall
328 Taper Hall
Los Angeles, CA 90089

[Website](#)

Focus Area:

Digital Archive and Media Resources

Location:

University Park Campus

X-Ray Crystallography Facility

The purpose of the X-Ray Crystallography Facility is to structurally characterize single-crystal samples of organic, inorganic, and organometallic compounds using X-ray diffraction. Equipment and services include: a Bruker APEX DUO single-crystal diffractometer equipped with an APEX2 CCD detector, Mo finefocus and Cu micro-focus X-ray sources and a Rigaku Ultima IV powder/thin film diffractometer to conduct rapid structural analysis. It is capable of handling samples that are sensitive to air, moisture, and/or temperature and the core provides training for users to conduct their own experiments.

University Park Campus
John Stauffer Science Lecture
837 Bloom Walk
Los Angeles, CA 90087