

Research Core Services Eligible for Support by Liver Center Tool and Technology Funds <sup>a</sup>		
CTSI	Bostatistics, Research Ethics, Design <sup>b</sup>	Comprehensive research design, biostatistics, ethics support
	Bioinformatics	Clinical/research data repository Analysis of sequencing, genomics, proteomics, microarray, other biological data
	Consolidated Genomics Core	Affymetrix arrays, Agilent arrays, custom array printing Study design, assistance with grant proposals Sample preparation
	Regulatory Knowledge and Support <sup>c</sup>	Investigational new drug applications Data safety monitoring plans IRB assistance
Comprehensive Cancer Center	Mass Spectrometry Core	Protein identification: Peptide mass fingerprinting or tandem mass spectrometry Molecular weight determination: MALDI TOF or ESI QqTOF
	Genome Analysis Core	QPCR (instrument use or full-service support including primer design) Low-density array Superarray Sequenom multiplex SNP analysis
	Array Core	Array comparative genomic hybridization
	Transgenic/Targeted Mutation Core	Gene targeting in embryonic stem (ES) cells Expansion of ES clones Secondary transfection of ES clones (e.g., with Cre) Microinjection of ES cells into pseudopregnant mice Strain rederivation
QB3	Nikon Imaging Center	Total internal reflection fluorescence Swept field confocal, time lapse confocal Spectral confocal suitable for live animal imaging
	Small Molecule Discovery Center	Assay development and high-throughput screening Custom synthesis of chemical probes/reagents
	Membrane Protein Expression Center	Expression/purification of <u>eukaryotic</u> membrane proteins
	Surbeck Laboratory of Advanced Imaging <sup>d</sup>	Magnetic resonance spectroscopic imaging of liver in vivo, ex vivo, cell culture (animal/human)
Center for Molecular and Functional Imaging <sup>e</sup>	---	Magnetic resonance imaging, magnetic resonance spectroscopic imaging, PET scanning (human)
Lipomics (Sacramento, CA)	---	Fatty acid analysis

<sup>a</sup> List is not comprehensive; for full menu of UCSF cores consult <http://ctsi.ucsf.edu/cores/>

<sup>b</sup> Center member Grunfeld is among key faculty

<sup>c</sup> Directed by Center Associate member Venook

<sup>d</sup> Center member Vigneron is Associate Director

<sup>e</sup> Center member Qayyum is among key faculty