2010 Core Instrumentation Awardees

Awardee:  Peter S. Conti, Director of Molecular Imaging Center  
Equipment:  IVIS Lumina XR Integrated Digital X-Ray & Optical Imaging Unit  
Lab:  USC Molecular Imaging Center (Small Animal Imaging Core)  

The addition of the IVIS Lumina XR Integrated Digital X-Ray & Optical Imaging Unit to the Molecular Imaging Center will strengthen ongoing work in oncology, pharmaceutical sciences, engineering, neurosciences, and genetic medicine. Additionally, the ability of the Center to support new research in dentistry, pathology, orthopedics, and developmental biology will be greatly enhanced. The IVIS Lumina XR will be housed in the Molecular Imaging Center, CSC 101.

Awardee:  David Van Den Berg, director of Genomic Core Facility  
Equipment:  Fluidigm Biomark Real-Time PCR System  
Lab:  USC Molecular Genomic Core Facility  

The USC Molecular Genomics Core Facility has been awarded funds to purchase the Fluidigm Biomark Real-Time PCR System. This is a genomics-based hardware system that assists researchers by providing a platform that performs assays with substantially lower amounts of DNA, reduced costs, and faster turnaround. This hardware can be used to support several forms of analysis including genetic analysis of common variation (Single Nucleotide Polymorphisms or SNPs), real-time quantitation of gene expression, and genome partitioning for targeted sequencing. The system can also assist with intermediate analysis of DNA Methylation status and chromatin associated marks using real-time PCR of Chromatin Immunoprecipitation (ChIP-PCR). The Fluidigm system will be placed in the Molecular Genomics Core Facility (NRT G514) as an open access system.

Awardee:  Ebrahim Zandi, Director of USC Proteomics Core  
Equipment:  Orbitrap XL ETX  
Lab:  USC Proteomics Core Facility  

The USC Proteomics Core Facility has been awarded funds to upgrade the existing linear ion trap mass spectrometer LTQ XL ETD to an Orbitrap XL ETX. This upgrade to the current mass spectrometer will provide the technology for quantitative analysis of proteins and their PTMs, and will have a significant impact on the basic and clinical research of all USC and affiliated research communities. The Core provides high-sensitivity and high-resolution mass spectrometry for protein and peptide analysis as its primary technology. The Proteomics Core Facility will be located in the Hoffman medical Building (HMR 511/513) at the Keck School of Medicine.