UC/Lab Fee Research Program Awards

Collaborators		Project Title
LLNL	**UC Berkeley**	
Jennifer Pett-Ridge	Mary Firestone	Root-microbe interactions control soil C stabilization
William Smith	Anastasios Melis	Microfluidic Platforms for Photosynthetic Bioproducts
Heather Whitley	Birgitta Whaley	Quantum calculations for donor qubits in solid state devices
Michael Messerly	Roger Falcone	High energy, short pulse fiber laser R&D for x-ray sources
Peter Lindstrom	James O'Brien	Dynamic Update of Tetrahedral Meshes for Deforming Solids
Marie-Anne Descalle	Stanley Prussin	Primary Screening of Cargo Containers for high-Z Materials
Eric Schwegler	Burkhard Militzer	Computer Simulations of Warm Dense Planetary Materials
Brad Esser	Mark Stacey	Submarine discharge in South and Central San Francisco Bay
Bruce Macintosh	James Graham	Direct detection and characterization of extra-solar planets
Philip Cameron-Smith	Kristie Boering	First modeling of recent stratospheric radiocarbon levels
Cindy Atkins-Duffin	Jasmina Vujic	A UCB-Labs Joint Berkeley Nuclear Research Center
LLNL	**UC Davis**	
Anton Barty	Henning Stahlberg	Biomolecular imaging at LCLS
Aleksandr Noy	Pieter Stroeve	NanoBioelectronics with 1-D lipid bilayers on Si nanowires
John Pask	Zhaojun Bai	Parallel Solvers for Eigenproblems in Quantum Mechanics
Geoffrey Campbell	Nigel Browning	A UC-Davis/LLNL Program in Ultrafast Materials Science
LLNL	**UC Irvine**	
Sonia Letant	Zuzanna Siwy	Synthetic functional nanopores for biosensing applications
Qingyun Duan	Soroosh Sorooshian	Enhancing California Water Resource Decision Support
LLNL	**UC Los Angeles**	
Aaron Tremaine	Pietro Musumeci	Inverse Free Electron Laser driver for ICS X-ray sources
Alice Koniges	Andrea Bertozzi	Multiscale methods of fracture and multimaterial debris flow
LLNL	**UC Riverside**	
Ian Hutcheon	Larissa Dobrzhinetskaya	Experimental studies of metal-nitrides in extreme conditions
Darren Hillegonds	David Parker	Tracking the Origins of Perchlorate in Groundwater

LLNL	**UC Santa Barbara**	
Thomas Han	Galen Stucky	Photoelectrocatalysis for Conversion of CO_2 to Fuels
LLNL	**UC Santa Cruz**	
Tom Guilderson	Nathaniel Dominy	Climate change, lemurs and recent megafaunal extinctions
Scot Olivier	Joel Kubby	Design of an AO microscope for biological imaging
Sat Pannu	Wentai Liu	Wireless Neural Interfaces
Alexander Malkin	Chad Saltikov	Chromium transformation pathways in metal-reducing bacteria
LLNL	**UC San Diego**	
Donald Sirbuly	Sadik Esener	Nanofiber optical junctions for advanced biological sensing
John Reynolds	William Trogler	Explosives Sensing with Bifunctional Luminescent Polymers
Bruce Remington	Marc Meyers	Behavior of Metals under Extreme Laser Pulse Loading
Marie-Anne Descalle	Steve Jiang	Adaptive Radiotherapy Based on High Performance Computing
Felice Lightstone	Ross Walker	Novel Approaches for Analysis of Large Scale MD Simulations
Trevor Willey	Dmitri Basov	Carbon-based structures for information & energy technology
Tina Eliassi-Rad	Charles Elkan	Learning From Presence-Only Data
LLNL	**UC San Francisco**	
Patrik D'Haeseleer	Anita Sil	Regulatory networks that control fungal pathogenesis
Carol Zhou	Raul Andino	Virus population dynamics, genetic diversity and evolution