

October 2008 Contract and Grant Awards

Banerjee, K., Electrical & Computer Engineering, \$7,792, UC MICRO, "Interconnect Modeling and Extraction for Ultra-High Frequency Applications."

Banerjee, K., Electrical & Computer Engineering, \$30,000, Intel Corporation, "A Framework for Robust Design of Emerging Nanometer Scale VLSI under Parameter Variations."

Banerjee, K., Electrical & Computer Engineering, \$3,896, UC MICRO, "A Framework for Robust Design of Emerging Nanometer Scale VLSI Under Parameter Variations."

Bazan, G.C. (Chemistry & Biochemistry), Institute For Collaborative Biotechnologies, \$30,000, Air Force, "Optical Approaches for Drug Screening Based Light-Harvesting Conjugated Polyelectrolyte."

Belkin, A. (Political Science), Institute for Social, Behavioral, & Economic Research, \$60,000, Arcus Foundation, "Gays and Lesbians in the Military."

Blumenthal, D.J., Electrical & Computer Engineering, \$20,553, University of Rochester, "Slow Light Using Patterned Metal Structures on Semiconductor Waveguides."

Bowers, J.E., Electrical & Computer Engineering, \$74,996, Hewlett Packard, "High-Speed, Low-Threshold Hybrid Silicon Evanescent Ring Resonator Lasers."

Branigan, E. (Film Studies), Interdisciplinary Humanities Center, \$60,000, American Council of Learned Societies, "ACLS Fellowship: Color in Cinema: Language, Memory, Commerce."

Caselle, J.E., Marine Science Institute, \$34,226, National Oceanic and Atmospheric Administration, "Maintenance of PISCO-CINMS Moorings in the Channel Islands National Marine Sanctuary."

Cheng, K., Electrical & Computer Engineering, \$9,815, UC MICRO, "Digitally-Assisted Validation and Production Testing for Advanced Analog/RF Circuits."

Clarke, D.R., Levi, C.G., Materials, \$900,000, Honeywell, Inc., "Honeywell-UCSB Thermal Barrier Coating Alliance."

Coldren, L.A., Electrical & Computer Engineering, \$9,775, UC MICRO, "High-Speed, High-Efficiency Sources for Active Cables."

Davis, F.W. (Donald Bren School of Environmental Science & Management), Institute for Computational Earth System Science, \$143,350, US National Park Service, "Preparing of Natural Resource Condition Assessment for Santa Monica Mountains NRA, Pinnacles NM, and John Muir NHS."

Dozier, J.C. (Donald Bren School of Environmental Science & Management), Institute for Computational Earth System Science, \$10,000, Department of Agriculture, "Using a Modeling System

to Extend Hydrologic Parameters and Processes From Experimental Watersheds to Larger Regions Within Mountainous Regions of the Western US."

Eckstein, M.P., Psychology, \$297,000, National Science Foundation, "Predictive Cues During Multiple Fixation Search."

Fredrickson, G.H. (Chemical Engineering), Materials Research Laboratory, \$30,000, Sandia National Laboratories, "Field Theoretic Simulations of Mixed Polymer Brushes."

Gossard, A.C., Petroff, P.M., Materials, \$80,000, Harvard University, "Science of Nanoscale Systems and Their Device Applications."

Han, S., Chemistry & Biochemistry, \$875,000, David and Lucile Packard Foundation, "Packard Fellowship: New Spectroscopy Approaches to Protein Function in Assemblies."

Hechinger, R.F., Kuris, A.M. (Ecology, Evolution & Marine Biology), Marine Science Institute, \$76,763, US Geological Survey, "Status and Potential Distribution of the Invasive New Zealand Mudsail Aboard Marine Corps Base Camp Pendleton."

Heeger, A.J. (Physics), Institute for Collaborative Biotechnologies, \$250,001, BAE Systems, "Toward Flexible Solar Panels With Efficiencies Greater Than 10%."

Herbst, D.B., Marine Science Institute, \$100,000, US Forest Service, "Monitoring Of Sentinel Aquatic Management Indicator Species Sites to Account for the Influence of Global Climate Change on Stream Reference Condition."

Holden, P.A. (Donald Bren School of Environmental Science & Management), Institute for Computational Earth System Science, \$67,375, UC Riverside, "Fate, Persistence, and Source Identification of Pathogens, Pathogen Indicator Bacteria, and Human Specific Markers in Coastal Beach and Wetland Sediments of Southern California."

Holden, P.A. (Donald Bren School of Environmental Science & Management), Institute for Computational Earth System Science, \$340,000, City of Santa Barbara, "Microbial Source Tracking Protocol Development."

Hu, E.L. (Electrical & Computer Engineering), Kramer, L., California NanoSystems Institute, \$15,000, Burnham Institute, "Developing Novel Technologies to Diagnose and Treat Diseases of the Heart and Lungs."

Husak, G.J., Michaelsen, J.C., Geography, \$4,084,833, US Geological Survey, "Monitoring and Forecasting Climate, Water and Land Use for Food Production in the Developing World."

Jellison, R.S., Melack, J.M. (Ecology, Evolution & Marine Biology), Marine Science Institute, \$100,000, Los Angeles Department of Water and Power, "Monitoring of Limnology and Plankton in Mono Lake."

Jordan, M.A., Wilson, L. (Molecular, Cellular & Developmental Biology), Neuroscience Research Institute, \$338,000, Bristol-Myers Squibb Company, "Mechanism of Action of Ixabepilone."

Lee, H., Iltis, R.A., Electrical & Computer Engineering, \$200,000, Naval Postgraduate School, "High-Performance Sensor and Sensing Technology, III-C."

Leifer, I.S., Marine Science Institute, \$7,984, Applied Science Associates, Inc., "A Literature Review Of Seep Research."

Love, M.S., Marine Science Institute, \$32,236, US Geological Survey, "Comparison of Levels and Profiles of Polycyclic Aromatic Hydrocarbon Metabolites in Bile of Fishes from Off-Shore Oil Platforms and Natural Reefs Along the California Coast."

Love, M.S., Marine Science Institute, \$297,509, US Geological Survey, "Arctic Marine Fish Ecology Catalog."

Marek-Sadowska, M., Electrical & Computer Engineering, \$5,950, UC MICRO, "Modeling, Testing, and Diagnosing of Deep-Submicron Defects."

Marek-Sadowska, M., Electrical & Computer Engineering, \$2,550, UC MICRO, "Research on Physical Synthesis."

Morse, D.E. (Molecular, Cellular & Developmental Biology), Institute for Collaborative Biotechnologies, \$400,000, Army, "Bio-Inspired Dynamically Tunable Polymer-Based Filters for Multi-Spectral Infrared Imaging."

Morse, D.E. (Molecular, Cellular & Developmental Biology), Institute for Collaborative Biotechnologies, \$20,000, Air Force, "Proposal for Conference/Symposium/Workshop Support from ITC-PAC."

Ostwald, T., Chemistry & Biochemistry, \$48,000, UC Office of the President, "CSMP-NCLB5 (2008-2009)."

Pennathur, S., Mechanical Engineering, \$125,000, Charles Stark Draper Laboratory, Inc., "Nanofluidic Technology for Influenza Separation and Detection."

Polchinski, J.G., Sugar, R., Physics, \$2,250,000, National Science Foundation, "Problems in Theoretical Physics."

Rice, W.R. (Ecology, Evolution & Marine Biology), Marine Science Institute, \$136,350, University of Washington, "Drosophila Seminal Fluid: Proteomic Discovery and Functional Variation Analyses."

Roberts, D., Geography, \$50,000, Naval Postgraduate School, "Mapping Urban Materials Using Imaging Spectrometry and Multi-Return Lidar."

Rodwell, M.J., Electrical & Computer Engineering, \$450,000, Teledyne, "High Frequency Integrated Vacuum Electronics."

Rose, K., Gibson, J.D., Electrical & Computer Engineering, \$19,550, UC MICRO, "Efficient Compression and Processing of Audio and Video Signals."

Rothman, J.H. (Molecular, Cellular & Developmental Biology), Joshi, P.M., Neuroscience Research Institute, \$1,258,365, National Cancer Institute, "Modulation of Cell Proliferation in *C. elegans*."

Rumberger, R.W. (Gevirtz Graduate School of Education), Gevirtz Graduate School of Education Research Office, \$30,000, Walter S. Johnson Foundation, "California Dropout Research Project Follow-Up Activities (Walter S. Johnson)."

Rumberger, R.W. (Gevirtz Graduate School of Education), Gevirtz Graduate School of Education Research Office, \$70,000, James Irvine Foundation, "California Dropout Research Project Follow-Up Activities (Irvine)."

Sherman, D.A., Psychology, \$10,000, UC ACCORD All Campus Collaborative on Research for Diversity, "Undermining the Effects of Stereotype Threat on Student Performance: A Self-Affirmation Intervention."

Shynk, J.J., Electrical & Computer Engineering, \$35,000, Applied Signal Technology, Inc. "Adaptive Receiver Algorithms For Co-channel Signal Separation and Detection."

Shynk, J.J., Electrical & Computer Engineering, \$5,950, UC MICRO, "Adaptive Receiver Algorithms for Co-channel Signal Separation and Detection."

Speck, J.S., Materials, \$733,000, Air Force, "Development of Advanced III-Nitride Materials."

Tao, A., Morse, D.E. (Molecular, Cellular & Developmental Biology), Institute for Collaborative Biotechnologies, \$45,000, UC Office of the President, "Biomimicry of Cephalopod Skin to Construct Tunable Photonic Nanostructures."

Thorsch, J.A. (Ecology, Evolution & Marine Biology), Marine Science Institute, \$33,572, California State Library, "The Katherine Esau Digital Archive of Plant Anatomy."

Turk, M.A. (Computer Science), Hu, E.L. (Electrical & Computer Engineering), California NanoSystems Institute, \$500,000, National Science Foundation, "MRI: Development of the Allosphere, an Immersive Instrument for Scientific Exploration."

Valentine, D.L. (Earth Science), Marine Science Institute, \$562,584, Department of Energy, "Assessing the Efficacy of the Aerobic Methanotrophic Biofilter in Methane Hydrate Environments."

Wang, L.C., Electrical & Computer Engineering, \$3,896, UC MICRO, "Applying Data Mining Techniques in Analog Design: Tools and Methodologies."

Weissglass, J. (Gevirtz Graduate School of Education), Gevirtz Graduate School of Education Research Office, \$26,000, UC Office of the President, "Tri-County Mathematics Project 07-09 *NCLB."

Wudl, F. (Chemistry & Biochemistry), Heeger, A.J. (Physics), Center for Polymers & Organic Solids, \$510,116, Cbrite Inc., "Hemispherical Array Detector for Imaging (Hardi)."

Data provided by the Office of Research. “()” represent investigators’ home departments when those are different from the administering unit.