September 2009 Contract and Grant Awards

American Reinvestment & Recovery Act Funding:

Hayes, C.S., Molecular, Cellular & Developmental Biology, $153,508, National Institute of General Medical Sciences, "Molecular Determinants of A-Site mRNA Cleavage during Ribosome Pausing."

Koegel, R. (Department of Counseling, Clinical, and School Psychology), Gevirtz Graduate School of Education Research Office, $643,748, National Institute of Mental Health, "Child-Initiated Communicative Interactions and Autism Intervention."

Kruegel, C., Kemmerer, R.A., Computer Science, $1,197,306, National Science Foundation, "TC: Medium: Analyzing the Underground Economy."

Kuhn, P.J. (Economics), Bedard, K.L. (Economics), Institute for Social, Behavioral, & Economic Research, $77,733, National Institute of Diabetes, Digestive & Kidney Diseases, "The Impact of Nutritional Information on Restaurant Consumer Behavior."

Lipshutz, B.H. (Chemistry & Biochemistry), Institute for Terahertz Science & Technology, $600,810, National Center for Scientific Review, "New Technologies for Catalysis in Water."

Major, B.N., Psychology, $71,842, National Institute of Heart, Lung & Blood, "The Effects of Perceived Discrimination on Mental and Physical Health."

Mithun, M. (Linguistics), Institute for Social, Behavioral, & Economic Research, $278,144, National Science Foundation, "Athabascan Spoken Language Corpora: Ahtna (Aht) and Navajo (Nav)."

Morrison, G. (Education), Graduate Division, $1,000,000, National Science Foundation, "NSF Graduate Research Fellowship Program."

Reese, B.E. (Psychology), Neuroscience Research Institute, $126,134, National Eye Institute, "Dispersion Patterns for Retinal Neuroblasts."

Smith, W.C., Molecular, Cellular & Developmental Biology, $49,159, National Institute of Child Health & Human Development, "Mutational Analysis of Notochord Development."

Zasadzinski, J.A., Squires, T., Chemical Engineering, $715,880, National Institute of Heart, Lung & Blood, "Lipid and Protein Effects on Mono-Layer Stability."

Other Contract & Grant Awards:

Bamieh, B.A., Mechanical Engineering, $95,644, National Science Foundation, "Smart Thermoacoustics: Active Feedback Control Enabling a New Generation of Energy Conversion Devices."

Banerjee, K., Electrical & Computer Engineering, $35,000, Intel Corporation, "Aging Resilient Digital IC Design."

Bazan, G.C. (Chemistry & Biochemistry), Center for Polymers & Organic Solids, $75,000, Luna Innovations Inc., "Advanced Active Layer Materials for Organic Solar Cells."

Blumenthal, D.J., Electrical & Computer Engineering, $153,924, Army, "Sub-Wavelength Metal Gratings for Slow Light and Optical Communications Applications."

Brenner, M.E. (Education), Duran, R.P. (Education), Gevirtz Graduate School of Research Office, $20,000, UC Links (University-Community Links), "UCSB - UC Links."

Bueno Cachadina, M.I., Stopple, J., Mathematics, $305,328, National Science Foundation, "REU Site: UCSB Mathematics Summer Research Program for Undergraduates."

Bultan, T., Kruegel, C., Computer Science, $349,999, National Science Foundation, "TC: Small: Automata Based String Analysis for Detecting Vulnerabilities in Web Applications."

Busby, C.J. (Earth Science), Institute for Crustal Studies, $12,489, UC MEXUS "Transition from Steady State to Flare-Up Arc Magmatism in the Largest Cenozoic Silicic Igneous and Epitheral Deposit on Earth: Sierra Madre Occidental (Mexico)."

Chmelka, B.F., Scott, S.L., Chemical Engineering, $450,000, National Science Foundation, "International Collaboration in Chemistry: Local Structures of Heteroatom Environments and Their Effects on the Reactivities of Alumino-and Borosilicates."

Clark, J.F. (Earth Science), Institute for Crustal Studies, $101,961, Desert Research Institute, "UCSB Sub-Award: Investigation of Methods of Potential Value to Monitor Groundwater Recharge in the Mountains of California."

Clarke, K.C., Geography, $15,000, UC Transportation Center (Berkeley), "Dissertation Grant, Pingel."

Colbert, D., Electrical & Computer Engineering, $38,462, UC Discovery Grant-Fellows Program, "UC Discovery Fellowship - Industry Partners Program Manager, Institute for Energy Efficiency."

Coldren, L.A., Rodwell, M.J., Electrical & Computer Engineering, $480,000, National Science Foundation, "Goali: A Novel Field-Induced Charge-Separation Laser (FICSL) for Ultra High-Speed High-Efficiency Modulation."

Coldren, L.A., Electrical & Computer Engineering, $200,000, Army, "Charge-Separation-Modulation VCSEL."

Coldren, L.A., Bowers, J.E., Electrical & Computer Engineering, $200,000, Space & Naval Warfare Systems Command, "Integrated Photonic Lattice Filters (IPLF)."

Coldren, L.A., Electrical & Computer Engineering, $368,000, Ziva Corporation, "U-VCSEL."

Dawson, D.R., Melack, J.M. (Ecology, Evolution & Marine Biology), Marine Science Institute, $350,000, National Science Foundation, "Laboratory Modernization at the Sierra Nevada Aquatic Research Laboratory."

DenBaars, S.P., Materials, $30,000, Transphorm, Inc., "Epitaxial Growth of the N-face Material by MOCVD."

Dugan, J.E., Wenner, A.M. (Ecology, Evolution & Marine Biology), Marine Science Institute, $33,664, UC Sea Grant College Program, "Beaches as Threatened Ecosystems: An Evaluation of Status and Trends in the Ecology of California's Sandy Beaches - TR - 1/2."

Fouque, J., Ludkovski, M., Statistics & Applied Probability, $16,000, National Science Foundation, "Western Conference in Mathematical Finance, Santa Barbara, CA, November 13-14, 2009."

Garcia, M.T. (History), Chicano Studies Institute, $1,500, UC Mexus, "40th Anniversary Conference on Católicos Por La Raza."

Goodchild, M.F., Geography, $60,000, Department of Interior Minerals Management Service, "Proposal for GIS Research in Response to MMS09HQPA00017."

Gottstein, C. (California NanoSystems Institute), Neuroscience Research Institute, $150,000, UC Breast Cancer Research Program, "Specific Targeting of Breast Cancer Stem Cells."

Goulias, K.G., Geography, $15,000, UC Transportation Center (Berkeley), "Dissertation Grant, Henson."

Goulias, K.G., Geography, $79,802, UC Transportation Center (Berkeley), "Forecasting with Dynamic Microsimulation: Design, Implementation, and Demonstration."

Gwinn, C., Physics, $79,944, National Aeronautics & Space Administration, "Search for Gamma-Ray/Radio Correlation of Vela Pulsar Emission."

Hayton, T.W., Chemistry & Biochemistry, $360,000, Department of Energy, "Exploring the Redox and Oxo Substitution Chemistry of the Uranyl Ion: Implications for Separations and Environmental Remediation."

Hollerer, T.H., Computer Science, $1,160,886, Navy, "Evaluating the Effects of Immersion on Naval Training Applications."

Joo, S., Garcia-Cervera, C.J., Mathematics, $101,645, National Science Foundation, "Mathematical Study of Smectic Liquid Crystals."

MacIntyre, S. (Ecology, Evolution & Marine Biology), Clark, J.F. (Earth Science), Institute for Computational Earth System Science, $399,567, National Science Foundation, "Collaborative Research: Arctic to the Amazon: Physical Processes Controlling Gas Exchange From Freshwater Ecosystems."

Marolf, D.M., Physics, $91,272, National Science Foundation, "School on Quantum Gravity."

Martinis, J.M. (Physics), California NanoSystems Institute, $31,056, National Science Foundation, "Collaborative Research: Eager: Theoretical Development of a General Purpose Molecular Collision Simulator."

Mccahill, J. (Chemical Engineering), Scott, S.L. (Chemical Engineering), Chemistry & Biochemistry, $200,000, National Science Foundation, "Synthesis and Characterization of Supported Metal Sub-Nanoparticles for Applications in Catalytic Reactions of Alkanes."

Mishra, U.K., Electrical & Computer Engineering, $100,000, Intel Corporation, "Nitrides for Improving Digital Electronics."

Moore, J., Jacob, W.B., Mathematics, $90,001, National Science Foundation, "Collaborative Research: Research, Dissemination, and Faculty Development of Inquiry-Based Learning (Ibl) Methods in the Teaching and Learning of Mathematics."

Morrison, G. (Education), Graduate Division, $348,416, US Department of Education, "US Department of Education Jacob J. Javits Graduate Fellowship."

Morse, D.E. (Molecular, Cellular & Developmental Biology), Sweeney, A. (California NanoSystems Institute), Marine Science Institute, $1,330,662, Duke University, "Dynamic Camouflage in Benthic and Pelagic Dehalopods: An Interdisciplinary Approach to Crypsis Based on Color, Reflection, and Bioluminescence."

Morse, D.E. (Molecular, Cellular & Developmental Biology), Institute for Collaborative Biotechnologies, $40,000, Raytheon, "Biologically Inspired, Polymer-Based Shutters and Coded Apertures."

Murr, M.M., Mccray, P.P. (History), California NanoSystems Institute, $90,000, National Science Foundation, "Collaborative Grant: Bringing Nanotechnology and Society Courses to California Community Colleges."

Oh, S., Physics, $346,967, National Science Foundation, "Probing Hydrogen and Helium Reionization."

Pearson, J. (Dramatic Art), Interdisciplinary Humanities Center, $15,000, National Endowment for the Arts, "Restaging of Speeds for The UCSB Dance Company."

Ruoslahti, E. (Molecular, Cellular & Developmental Biology), Braun, G.B. (Chemistry & Biochemistry), Institute for Collaborative Biotechnologies, $53,250, Cancer Center of Santa Barbara, "Nanoparticle-Based in Vivo Diagnostics and Therapeutics."

Schimel, J.P. (Ecology, Evolution & Marine Biology), Institute for Computational Earth System Science, $10,000, National Science Foundation, "Dissolved Organic Matter in the Arctic: What Does It Look Like, Why Does It Matter?"

Schimel, J.P. (Ecology, Evolution & Marine Biology), Institute for Computational Earth System Science, $275,736, National Science Foundation, "Collaborative Research: MSB: Microbial Control of Litter Decay at the Cellulose-Lignin Interface."

Scott, S.L., Chmelka, B.F., Chemical Engineering, $1,620,000, Department of Energy, "Heirarchical Design of Supported Organometallic Catalysts for Hydrocarbon Transformations: Structures and Dynamics of the Active Site."

Shraiman, B.I., Physics, $452,373, National Science Foundation, "Growth, Form and Intercellular Interactions."

Singh, A.K., Computer Science, $488,261, National Science Foundation, "III: Small: Techniques for Integrated Analysis of Graphs with Applications to Cheminformatics and Bioinformatics."

Sokolow, S.H., Kuris, A.M. (Ecology, Evolution & Marine Biology), Marine Science Institute, $338,036, PHS Centers for Disease Control, "Emergence and Biological Control of Schistosomiasis."

Stemmer, S., Materials, $540,000, Department of Energy, "Phonons and Electrons Thin Complex Oxides."

Stemmer, S., Materials, $40,000, Agile Materials and Technologies, Inc., "STTR Phase I: Improved Electrodes for Low-Loss Radio Frequency Devices."

Stivala, C.E., Zakarian, A., Chemistry & Biochemistry, $60,000, UC Tobacco-Related Disease Research Program, "Synthesis of Spirolide-Activators of L-Type Calcium Channels."

Treu, T., Physics, $41,048, Association of Universities for Research Astronomy, "Galaxy-Scale Lenses from the CFHTLS Survey."

van Dam, W.K., Computer Science, $600,000, Army, "Quantum Algorithms on the Algebraic Frontier."

Vigna, G., Kruegel, C., Computer Science, $1,041,601, Georgia Institute of Technology, "Botnet Attribution and Removal: From Axioms to Theories to Practice/Removing the Botnet Threat."

Vigna, G., Computer Science, $49,968, National Science Foundation, "Organization of Grand Challenges in Cyber Security."

Wilson, L. (Molecular, Cellular & Developmental Biology), Smith, J.A., Neuroscience Research Institute, $76,000, UC Breast Cancer Research Program, "The Effect of Stathmin on Eribulin Anti-Mitotic Activity."

Yan, X., Computer Science, $248,607, National Science Foundation, "III: Small: Collaborative Research: Mining and Optimizing Ad Hoc Workflows."

Zhao, B.Y., Metzger, M.J. (Communication), Computer Science, $485,508, National Science Foundation, "TC: Small: Towards Automating Privacy Controls for Online Social Networks."

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