2014 Zumberge Individual Awardees

Alison Hirsch, Architecture, USC School of Architecture
“Landscape Architecture as 'Thick Description' - Ritual, Performance, Memory”

Ann Owens, Sociology, USC Dornsife College of Letters, Arts and Sciences
“Hispanic Neighborhood Ascent across U.S. Cities”

Barbara Sargent, Biokinesiology & Physical Therapy, Herman Ostrow School of Dentistry
“Development and Validity of an in-home infant Kicking Activated Mobile (iKAM)”

Diana O’Brien, Political Science, Dornsife College of Letters, Arts and Sciences
“Representing Women: Presence, Power, and Policy”

Jon-Paul Pepper, Otolaryngology, Keck School of Medicine
“Peripheral nerve grafts engineered from mature human fibroblasts”

Karen Woo, Surgey, Keck School of Medicine
“Defining Surgical Quality in Dialysis Access: a RAND/UCLA Appropriateness Study”

Liana Asatryan, Clinical Pharmacy & Pharmacutic Econ & Policy, USC School of Pharmacy
“The role of P2X7 receptors in alcohol-induced neuroinflammation and degeneration”

Megan Rosenbloom, Health Sciences Libraries, USC Libraries
“Travel support for death history book research”

Neetu Khanna, Comparative Literature, USC Dornsife College of Letters, Arts and Sciences
“Progressive Feeling: Visceral Realisms and Marxist Aesthetics in the Literature of Decolonizing”

Smaranda Marinescu, Chemistry, USC Dornsife College of Letters, Arts and Sciences
“Metal-Organic Surfaces for Solar Energy Conversion”

Xin Tong, Information & Operations Management, Marshall School of Business
“Information Exchange in Social Networks: a Finite Population and Communication Perspective”

Zsolt Toth, Molecular Microbiology & Immunology, Keck School of Medicine
“Regulation of the establishment of KSHV latency by the Latency-Associated Nuclear Antigen (LANA)”
2013 Individual Awards

Ansgar Siemer, Biochemistry and Molecular Biology, Keck
“The Structure of a Functional Amyloid in Long-Term Memory”

Beatriz Ilari, Thornton School of Music
“The Effects of Extracurricular music and sports on children’s brain, cognitive, motor and social development: A Cross-sectional study”

Benjamin Graham, International Relations, Dornsife College of Letters, Arts and Sciences
“Social Networks, Political Risk, and Foreign Direct Investment?”

Cary Frydman, Finance & Business Economics, Marshall School of Business
“Neural Decoding of Investor Preferences”

Changhan Lee, Gerontology
“Targeting Obesity and Type 2 diabetes by a novel mitochondria-encoded peptide”

David Bridel, Dramatic Arts, School of Theatre
“Clowns Across Continents: When Cultures Collide”

David Rose, Mathematics, Dornsife College of Letters, Arts and Sciences
“Categorified quantum groups and knot homology”

Eunjung Lee, Preventive Medicine, Keck School of Medicine
“Implementing Alzheimer’s disease research in the California Teachers Study cohort”

Jeremy Goldbach, Social Work, School of Social Work
“Understanding Minority Stress in LGDT Adolescents”

Laura Ferguson, Preventive Medicine, Keck School of Medicine
“Is a new global guidance on the prevention of mother-to-child transmission of HIV acceptable to women diagnosed with HIV during pregnancy?”

Melanie Goldfarb, Surgery – Clinical Faculty, Keck School of Medicine
“Thyroid Nodules and Cancer in Pediatrics, Adolescent and Young Adult Survivors of Head and Neck Radiation”

Michael Bowdish, Surgery –Clinical Faculty, Keck School of Medicine
“Characterization of asymmetric dimethylarginine (ADMA), citrulline, and l-arginine levels in patients with pulmonary hypertension secondary to left heart disease before and after left ventricular assist device implantation”

Minlan Yu, Computer Science, Viterbi School of Engineering
“Real-time measurement for data center networks”

Olivia Harrison, French and Italian, Dornsife College of Letters, Arts and Sciences
“Transcolonial Maghreb: Reading Palestine in Maghrebi Literature”
Sandrah Eckel, Preventive Medicine, Keck School of Medicine  
“Nonlinear mixed effects models for multiple flow exhaled nitric oxide”

Weiwei Hu, Mathematics, Dornsife College of Letters, Arts and Sciences  
“Model Reduction and Feedback Boundary Control of a Thermal Fluid with Application to Control Design of Energy Efficient Buildings”

Youngmin Choe, East Asian Language and Cultures, Dornsife College of Letters, Arts and Sciences  
“Tourist Distractions: Traveling and Feeling in South Korea’s Reconciliatory Cinema”

2012

Sanjeev Baniwal, Department of Orthopaedics, Keck School of Medicine “Role of Prolactin-induced protein in regulating cytoskeleton dynamics and proliferation of breast cancer cells”

Todd Chang, Department of Pediatrics, Keck School of Medicine “Multimedia in the Assessment of Clinical Decision Making Skills among Pediatric and Emergency Medicine Residents”

William Halfond, Department of Computer Science, Viterbi School of Engineering “Estimating Mobile Software Power Consumption Using Program Analysis”

Houchun Hu, Department of Pediatrics, Keck School of Medicine “Magnetic Resonance Imaging of Human Brown Adipose Tissue”

Jimi Huh, Institute for Prevention Research, Keck School of Medicine “Ecological Contexts of Smoking among Korean American Emerging Adults”

Eve Kelland, Department of Neurology, Keck School of Medicine “Humanizing mouse CNS stem cells: defining functional human CXCR1 expression in murine neural stem cells and their use in developing a humanized CXCR1 mouse for assessing the pathology of demyelinating diseases”

May Anne Kim-Tenser, Department of Neurology, Keck School of Medicine “The Use of Minocycline in Intracerebral Hemorrhage”

Aaron Lauda, Department of Mathematics, Dornsife College of the Letters and Sciences “Odd categorification of quantum groups”

Anne Schuckman, Department of Urology, Keck School of Medicine “Human Papilloma Virus as a Novel Prognostic Factor in Penile Squamous Cell Carcinoma”

Susan Sigward, Department of Biokinesiology & Physical Therapy, Ostrow School of Dentistry “The Development of Postural Strategies in Children”

Sheila Sofian, School of Cinematic Arts “Truth Has Fallen”

Kelly Turner, School of Social Work “An Experimental Examination of the Use of Standardized Clients to Develop Military-Specific Clinical Skill among MSW Students”
2011

Xiaoyi Gao  
Department of Ophthalmology, Keck School of Medicine  
“Multiple Testing Corrections for Imputed SNPs in Latino Genome-wide Association Studies”

Erick Guerrero  
School of Social Work  
“Implementation of Co-occurring Disorder Treatment in Behavioral Health Services in L.A. County”

Shinwu Jeong  
Department of Ophthalmology, Keck School of Medicine  
“A Novel Anti-inflammatory Peptide Therapeutic for Dry Eye Disease”

Rongjie Lai  
Department of Mathematics, Dornsife College of Letters, Arts and Sciences  
“Computational Geometry and Applications to Medical Imaging”

Shuanglong Liu  
Department of Radiology, Keck School of Medicine  
“Melanin-targeted PET imaging of Melanoma Using Quinoxaline Derivatives”

Yan Liu  
Department of Computer Science, Viterbi School of Engineering  
“Granger Graphical Models for Scientific Discovery in Biology, Social Science and Climate Science”

Amy Merrill-Brugger  
Department of Biomedical Sciences, Ostrow School of Dentistry  
“Defining the Distinction between Cell Surface and Nuclear Activities of FGFR2 Signaling During Skeletal Development”

Azin Shahryarinejad  
Department of Obstetrics/Gynecology, Keck School of Medicine  
“Genetic Predictors and Epigenetics of Female Organ Prolapse”
Susumu Takahashi
Department of Chemistry, Dornsife College of Letters, Arts and Sciences

Terry Takahashi
Department of Chemistry, Dornsife College of Letters, Arts and Sciences
“Engineering RNA Binding Proteins with Novel Specifics”

Heather Volk
Department of Environmental Health, Keck School of Medicine
“A Birth Records Based Analysis of Autism and Air Pollution in Anaheim”

Hsiao Huei (Juli) Wu
Department of Cell & Neurobiology, Keck School of Medicine
“MET/HGF Signaling in Hearing Development and Autism”

2010

Jernej Barbic
Department of Computer Science, Viterbi School of Engineering
"Interactive Physical Simulation for Computer Graphics, Film and Games"

Marco Bortolato
Pharmacology & Pharmaceutical Science, School of Pharmacy
"Role of Monoamine Oxidase in the Outcomes of Early Material Separation"

Kai Chen
Department of Radiology, Keck School of Medicine
"[18F]FMAU PET Assessment of Chemotherapeutic Response in Non-Small Cell Lung Cancer"

Ramen H. Chmait
Department of Obstetrics & Gynecology, Keck School of Medicine
"A Fetal Surgical Model for Neural Stem Cell Delivery and Myelomeningocele Repair"

Yingying Fan
Department of Information & Operations Management, Marshall School of Business
"New Methodologies for High Dimensional Sparse Models"

Malancha Gupta
Department of Chemical Engineering & Material Science, Viterbi School of Engineering
Fabrication of Bio-Inspired Nanostructured Polymeric Materials

Roksana Karim
Pediatrics/Preventive Medicine, Keck School of Medicine

Subclinical Atherosclerosis in HIV-infected Children and Adolescents

Kathleen Page
Department of Internal Medicine, Keck School of Medicine

Mechanisms Underlying Risk for Obesity and Type 2 Diabetes in Hispanic Youth with a History of Intrauterine Exposure to Gestational Diabetes Mellitus

Mark Shiroishi
Department of Radiology, Keck School of Medicine

Assessing the Value of Perfusion and Permeability MR Imaging to Characterize Pseudoprogression and Pseudoresponse in Patients with High-Grade Glioma

Barbara Thompson
Department of Cell & Neurobiology, Keck School of Medicine

Social Motivation in Children with and without Autism

Xuelin Wu
Department of Biology/MCB, College of Letters, Arts and Sciences

Identification of Early Molecular Events in Sugar-Induced Dedifferentiation in Arabidopsis thaliana

2009

Curtis Cetrulo
Department of Surgery, Keck School of Medicine

Long-term Permanent Gene Expression in Myocutaneous Flaps

Roberto Delgado
Department of Anthropology, College of Letters, Arts and Sciences

Variation in Diet, Behavior and Energy Budgets among Zanzibar Red Colobus

Alireza Dibazar
Department of Anthropology, College of Letters, Arts and Sciences

Nonlinear Dynamic Modeling of Impaired Voice for the Purpose of Restoring Lost Function

Reyes Enciso
School of Dentistry

Differential Diagnosis of Periapical Lesions with Cone-Beam CT

Rahul Jain
Department of Electrical Engineering, Viterbi School of Engineering

Economics of Quality of Service on the Internet

Zibo Li
Department of Radiology, Keck School of Medicine

Integrin α2β1 Targeted Imaging of Prostate Cancer
Keigo Machida  
Department of Microbiology and Immunology  
"Hepatocellular Carcinoma Induced by Hepatitis C Virus"

Francesca Mariani  
Department of Cell & Neurobiology, Keck School of Medicine  
"Skeletal Regeneration in Adult and Neonate Mice"

Coralie Poizat  
Department of Biochemistry, Keck School of Medicine  
"Role of LMPTP in Cardiac Contractility"

B.J. Shen  
Department of Psychology, College of Letters, Arts and Sciences  
"Anxiety and Progression of Subclinical Coronary Heart Disease"

Gregory Stevens  
Department of Medicine, Keck School of Medicine  
"National Disparities in the Quality of a Medical Home for Children"

2008

Hossein Ameri  
Doheny Eye Institute, Keck School of Medicine  
“Subchoroidal Retinal Prosthesis for Sight Restoration”

Woojin An  
Department of Biochemistry & Molecular Biology, Keck School of Medicine  
“Development of Cell Permeable Histone H3 Tail Mimics as a Transcription Blockade”

Zemin Deng  
Department of Psychiatry & Behavioral Sciences, Keck School of Medicine  
“Discovery of X-linked Genetic Loci for Schizophrenia Using Next Generation DNA Re-sequencing”

David Etzioni  
Department of Colorectal Surgery, Keck School of Medicine  
“Adjuvant Therapy for Colon and Rectal Cancer in Los Angeles County: Analysis of Use, Strategies for Improvement”

Amani Fawzi  
Department of Ophthalmology, Keck School of Medicine  
“The Use of Ultrasound to Enhance Drug Delivery to Ocular Tumors”

Derick Han, Department of GI and Liver, Keck School of Medicine  
“New Strategies to Reduce Drug Induced Liver Injury”
Jinchi Lv
Marshall School of Business
“High Dimensional Variable Selection and Covariance Matrix Estimation”

Nerses Sanossian
Department of Neurology, Keck School of Medicine
“Dysfunctional High-Density Lipoprotein Cholesterol and the Brain”

Dong Song
Department of Biomedical Engineering, Viterbi School of Engineering
“Nonlinear Dynamic Modeling of Hippocampal System Function during Learned Behavior and Memory Formation”

Olga Solomon
Occupational Sciences, School of Dentistry
“Animal Assisted Therapy as Socially Assistive Technology: Implications for Autism”

Wiebke Ziebis
Department of Biological Sciences, College of Letters Arts and Sciences
“Animal-Sediment-Microbe Interactions at Pacific Methane Seeps”

2007

Lisa Aziz-Zadeh
School of Dentistry and USC Brain and Creativity Institute
"Neural Basis for the Perception of Prosody"

Orlando Betancor
Department of Spanish & Portuguese, College of Letters, Arts and Sciences
“The Life of Metals in Potosi”

Yong Chen
Department of Industrial & Systems Engineering, Viterbi School of Engineering
"Designing Complex Internal Structures for Rapid Manufacturing"

Eun Jin Lee
Department of Biomedical Engineering, Viterbi School of Engineering
"Visual Controls in Retinal Development"

Eric Ley
Department of Surgery, Keck School of Medicine
“Increased Receptor Tyrosine Kinase Expression in Colon Cancer”

Aimin Li
Obstetrics & Gynecology, Keck School of Medicine
“Effects of 17-a Hydroxyprogesterone Caproate on Infection-Induced Preterm Birth”

Oliver Mayer
Playwriting, School of Theatre
"Six-Play Thematic Cycle"

Ruty Mehrian-Shai
Department of Biochemistry, Keck School of Medicine
"Oligodendroglioma miRNA Profiling and Treatment Response"

Christine Pollard
Department of Biokinesiology, School of Dentistry
"Mechanisms of Articular Cartilage Changes Following Anterior Cruciate Ligament Reconstruction: Effect of Various Surgical Procedures"

Anne Porter
School of Religion, College of Letters, Arts and Sciences
"Community and Cosmology; Participatory Political Practice In Ancient Mesopotamia"

Shirin Towfigh
Department of Surgery, Keck School of Medicine
"Evaluation of Wound Probing to Reduce Wound Infection in Contaminated Wounds"

Yan Zhou
Center for Craniofacial Molecular Biology, School of Dentistry
"Human Embryonic Stem Cells and Neural Crest Osteogenesis"

2006

Steven Anderson
Interactive Media Division, School of Cinematic Arts
"Open Source Scholarship: Innovations in Digital Research, Publication and Pedagogy"

Bettine Birge
Department of East Asian Languages and Cultures, College of Letters, Arts and Sciences
"Marriage and the Law in Mongol-Yuan China"
Samantha Butler  
Department of Biological Sciences, College of Letters, Arts and Sciences  
"Mechanisms of Axon Guidance in the Developing Spinal Cord"

Meiling Cheng  
School of Theatre  
"Beijing Xingwei: Time-Based Experimental Art in China"

Sarah Gualtieri  
Department of History, College of Letters, Arts and Sciences  
"Race and Identity Among Arab Immigrants in the United States"

Alexandra Hammond-Isfahani  
Department of Spanish & Portuguese, College of Letters, Arts and Sciences  
"White Negritude: Race, Writing, and Brazilian Cultural Identity"

Young-Kwon Hong  
Department of Surgery, Keck School of Medicine  
"A Novel Anti-Lymphangiogenic Therapy Against Kaposi’s Sarcoma"

Jane Iwamura  
Departments of Religion & American Studies, College of Letters, Arts and Sciences  
"Altared States: A Cultural History of the Japanese American Home Shrine"

Elsi Kaiser  
Department of Linguistics, College of Letters, Arts and Sciences  
"Investigating the Effects of Discourse Factors on Real-Time Pronoun Interpretation"

Mohammad Pashmforoush  
Department of Medicine, Keck School of Medicine  
"Defining the Molecular Pathways for Cardiac Conduction Cell Development"

Judd Rice  
Department of Biochemistry and Molecular Biology, Keck School of Medicine  
"Identification of Histone H3 Lysine 9 Methyl-Specific Binding Proteins"

James Spindler  
School of Law  
"Do Mandatory Disclosure Rules Result in Better Information for the Marketplace?"

Bangyan Stiles  
Department of Molecular Pharmacology and Toxicology, School of Pharmacy  
"The Mechanisms of PTEN Regulated B-cell Regeneration"

Antonia Szabari  
Departments of French and Italian and Comparative Literature, College of Letters, Arts and Sciences  
"Less Rightly Said: Scandalous Words in the French Reformation"
Maria Villacres  
Department of Pediatrics, Keck School of Medicine  
"Role of Single Nucleotide Polymorphisms on T-Cell Responses Following HIV Treatment"

Song-Guo Zheng  
Department of Medicine, Keck School of Medicine  
"CD4+CD25+ Regulatory T-Cells Generated Ex Vivo Cure Systematic Lupus Erythematosus"