# 2008 University of California Hellman Fellows

### **UC Berkeley**

Maneesh Agrawala	Electrical Engineering & Computer Science	Design Principles, Algorithms, and Interfaces for Visual Communication
Rodrigo Almeida	Environmental Science, Policy and Management	Disrupting the transmission of insect-borne grapevine pathogens
Geoffrey Bower	Astronomy	The Fly's Eye: Opening a New Window on Fast Radio Transients
Rachel Brem	Institute for the Quantitative Biosciences	Signaling behaviors of the unfolded protein response in aging
Christopher Chang	Chemistry	Revealing Basic Mechanisms of Metal Function in the Brain through Molecular Imaging
Perry Devalpine	Environmental Science, Policy and Management	Estimating predictability of ecological population dynamics

Michael Deweese	Helen Wills Neuroscience Institute	A rodent model of selective auditory attention
Randi Engle	Education	Framing Learning Contexts to Promote Transfer: An Experimental Study
Samera Esmeir	Rhetoric	A History of Violence
Sean Farhang	Public Policy	Why Does Congress Choose Lawsuits for Regulatory Enforcement?
Daniela Kaufer	Integrative Biology	Rescuing neural stem cells from age-related silencing
Sanjay Kumar	Bioengineering	Engineering molecular and cellular function through unstructured protein domains
Seung-Wuk Lee	Bioengineering	Development of Novel Drug Delivery Vehicles Using Genetically Engineered Viruses

Myra Melford	Music	Portable World
Mohammad Mofrad	Bioengineering	Multiscale Models of the Bicuspid Aortic Valve: Linking Whole Organ to Cells
Carlos Norena	History	Mapping Urbanization in the Roman Empire
Leigh Raiford	African American Studies	Imprisoned in a Luminous Glare: Photography and the African American Freedom Struggle
Kathleen Ryan	Plant & Microbial Biology	Molecular Mechanisms of Regulated Proteolysis in the Bacterial Cell Cycle
Richmond Sarpong	Chemistry	Alleviating the Environmental and Economic Cost of Synthesizing Complex Molecules to Combat Lung Cancer
Sanjit Seshia	Electrical Engineering & Computer Science	Provably Error-Resilient Computing at Low Cost

Michael Silver	Helen Wills Neuroscience Institute	Pharmacological studies of spatial integration and visual perception in macular degeneration patients
Russell Vance	Molecular & Cell Biology	How are infections detected? A novel immune pathway for sensing bacterial pathogens
Qing Zhong	Molecular & Cell Biology	Degradation of Organelles
UC Davis		
Simon Chan	Plant Biology	Quantitative Analysis of Centromere Structure in Arabidopsis (deceased)
Lijuan Dawn Cheng	Civil and Env. Engineering	Civil and Environmental Engineering, "Mechanism-based fiber Composite Bistable Structures and its Applications to Deficient Bridge Infrastructure

Robert Guy	Mathematics	Computational Modeling of Intracellular Flow During Amoebid Movement
Fawz George Haj	Nutrition	Role of Protein-Tyrosine Phosphatase 1B in Diabetes
Tessa Hill	Geology	The Oceanic Response to Anthropogenic Climate Change
Victoria Langland	History	Speaking of Flowers: Student Movements and Collective Memory in Military Brazil
Luz Mena	Women and Gender Studies	To Shape a City: Free Blacks in 19th Century Havana - left Davis
Colin Milburn	English	MondoNano: Fun and Games in the World of Digital Matter
W. Flagg Miller	Religious Studies	Al Qaeda's Debated Origins: Evidence from Osama Bin Laden's Audiocassette Library

Cecilia Tsu	History	Asian Migration and the Making of Race, Gender and Agriculture in the Santa Clara Valley, 1880-1940
Julie Wyman	Technocultural Studies	Strong: Expanding Notions of the Large Body and the Documentary Form
Soichiro Yamada	Biomedical Engineering	The Molecular Mechanisms of Cancer Cell Adhesion
Karen Zito	Neurobiology, Physiology and Behavior	Neurobiology, physiology and behavior, "Mechanisms of Dendritic Spine Elimination
UC San Diego		
Morana Alac	Communication	Highly Efficient Semiconductor Nanowire Array Solar Cells

Gaurav Arya	Nanoengineering	Elucidating the Mechanisms of Histone Modifications in Gene Regulation through Advanced Computational Methods
Jeeyang Baum	Political Science	Delegation Dilemmas: Administrative Procedural Reform and Political Control in East Asia
Dennis Childs	Literature	Formations of Neoslavery: The Cultures and Politics of the American Carceral State
Liam Clancy	Theatre & Dance	The Hybrid Authorship Project Presents "The Merry Chase, or, The Recurring Synthesis of an Illusion"
Alan Daly	Education Studies	Understanding Social Network Structure to Understand Change Strategy
Scott Desposato	Political Science	Negative Campaigning: Causes and Effects for New Democracies
Ricardo Dominguez	Visual Arts	Disturbances: Tales of Gestures, Code, and Mayan Technologies (A Book)

Catherine Gere	History	The Utilitarian Self: Medicine, Morals and the Brain in Nineteenth Century Britain
Monte Johnson	Philosophy	Reconstructing Aristotle's Lost Work: The Exhortation to Philosophy (Protrepticus)
Dayna Kalleres	Literature	Conjuring Demons: Possession and Christian Exorcism in the Late Antique City"
Jan Kleissl	Mechanical & Aerospace Eng	Computational Fluid Mechanics and Radiative Modeling of Urban Heat Islands Using Wireless Sensor Network Data
Margaret Loose	Literature	The Role of Literary Form in the Chartist Demand for the Vote
Keith McNeal	Anthropology	Ecstasy in Exile: Spirits and Transculturation in the Southern Caribbean
Gentry Patrick	Neurobiology	Regulation of AMPA Receptor Trafficking by the Nedd4-1 Ubiquitin Ligase

Curt Schurgers	Elect & Computer Eng	Adaptive Radio Protocols for Emergency Response
Jacques Verstraete	Mathematics	Extremal and probabilistic combinatorics
Hector Viadiu	Chemistry-Biochemistry	Study of MDM2 regulation of the tumor suppressor p53 by electron microscopy
Daniel Widener	History	The Korean War: An African American History
Elina Zuniga	Molecular Biology	Molecular Determinants of Antigen Presentation During Acute and Chronic Viral Infections

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### UCSF

Dorie Apollonio	Clinical Pharmacy	Tobacco Industry Use of Allies in Political Advocacy
Louise Aronson	Geriatrics	Developing a Unique and Innovative Program in Medical Humanities for UCSF
Stephen Bent	General Internal Medicine	Safety and Efficacy of Complementary and Alternative Medicine for Autism
Helge Eilers	Anesthesia	Anesthetic Effects on Peripheral Nociceptors
Jade Hiramoto	Surgery	The Hematological and Renal Effects of Endovascular Thoracoabdominal Aortic Aneurysm Repair
Audrey Lyndon	Family Health Care Nursing	Agency for Safety Among Community Providers of Inpatient Maternity Care

Doruk Ozgediz	Surgery	Surgery and Public Health: An Innovative Multi-Disciplinary UCSF Partnership In Uganda
Prasunthi Ramanujam (now Govindarajan)	Emergency Medicine	Accuracy of Prehospital Triage and Acute Stroke Outcomes in a Regionalized Stroke System
Hilary Seligman	General Internal Medicine	Clinical Significance of Food Insecurity Among Patients with Diabetes
Rebecca Sudore	Geriatrics	Enhancing Advance Care Planning in Diverse Elders with Limited Literacy
Stephanie Tache	Family & Community Medicine	Translating the "Prevent Heart Attacks and Stroke Everyday" (PHASE) Program from Kaiser to San Francisco Safety Net Clinics: A Focus on the Role of Medical Assistants
Sheri Weiser	MED-SFGH-Positive Health Program (PHP)	The Impact of Food Insecurity on HIV Outcomes and Sexual Risk Behavior in Uganda
Brie Williams	Geriatrics	Assessing and Improving Health Outcomes Among Incarcerated Older Adults

Janet Wojcicki	Pediatrics / Gastroenterology	Maternal Depression and Child Obesity in a Latino Cohort
lrene Yen	General Internal Medicine	Proximity of Grocery Stores, Fast Food Outlets, Parks and Girls' Diet and Physical Activity: An Innovative Application of Geographic Information Systems Technology
UC Santa Barbara		
Everett Lipman	Physics	Monitoring the Movement and Mechanism of a Molecular Motor
John Yun	Education	Narrowing Opportunities: The Project of High Stakes Testing and Noncognitive Outcomes in Education
James Roney	Psychological and Brain Sciences	Between-Cycle Influences on Mating Psychology

John Hajda	Music	The Relationship of Musical and Visual Elements in Film
Roberto Strongman	Black Studies	Black Atlantic Transcorporealities: Religious Representations of the Queered Body in Candomblé, Lucumí and Vodou
Tod Kippin	Psychological and Brain Sciences	Consequences of ablation of Pubertal and Adult Neurogenesis to Brain Maturation and Function
Gaye Theresa Johnson	Black Studies	Sobre Las Olas: A Mexican Genesis in the Borderlands Jazz
Russell Samolsky	English	Apocalyptic Futures: Marked Bodies and the Violence of the Text in Modern Culture" and "Killing Dogs: Art and the Afterlife of Animals"
Suk-Young Kim	Theater and Dance	Reconstructing North Korean Propaganda
Heather Stoll	Political Science	Society, Political Institutions, and Political Competition

Juan-Pablo Lupi	Spanish and Portuguese	José Lezama Lima and the Aesthetics of Difficulty
Miriam Wattles	History of Art and Architecture	Images at Play: Five Episodes in Heterodox Japanese Visuality, 1680-1930
Racha El Omari	Religious Studies	Abu l-Qsium al-Ka'bī and the Baghdādī Mu'tazilite School