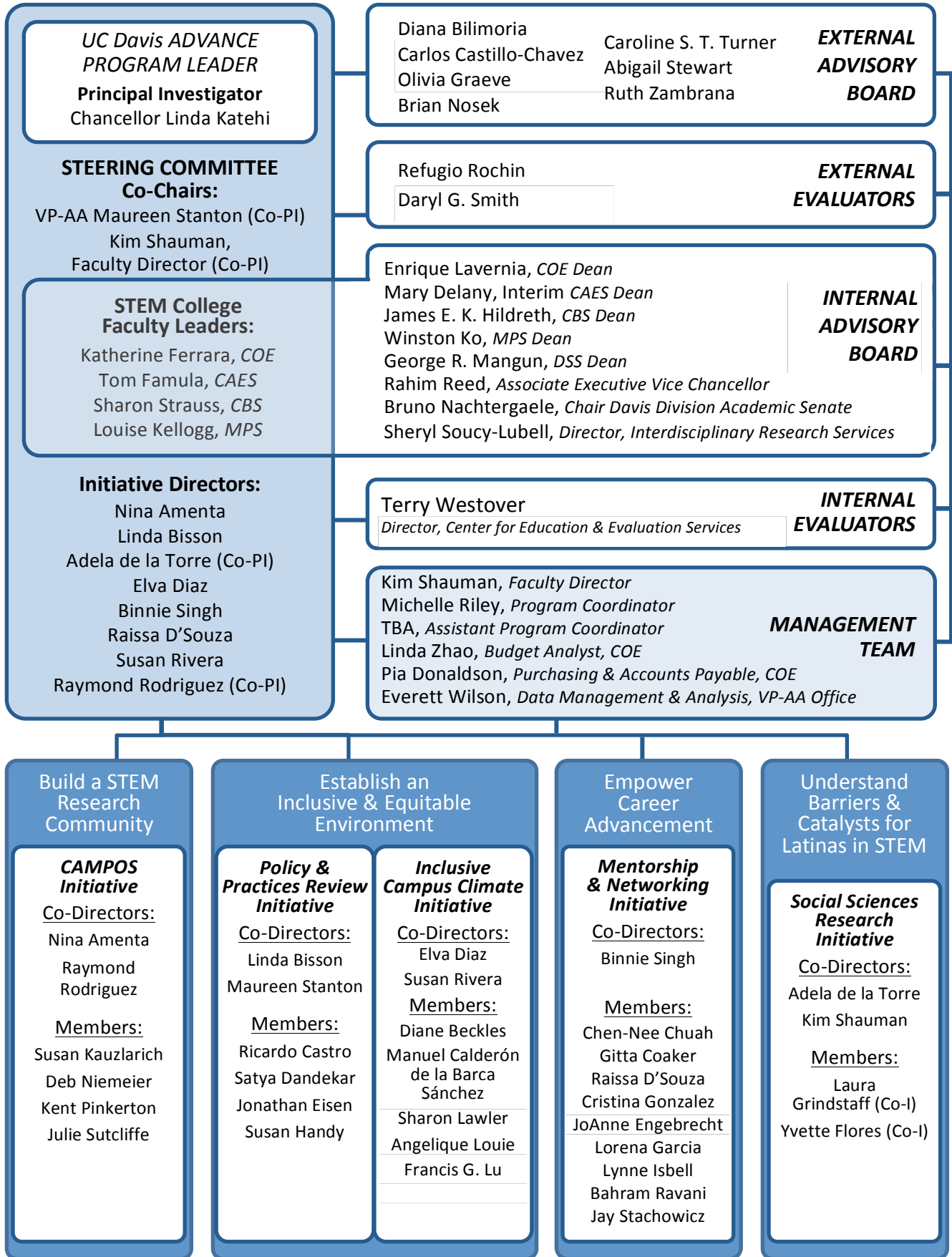


UC Davis ADVANCE:

Institutional Transformation to Build and Sustain a Diverse Community of Innovative STEM Scholars

Management Plan Description and Personnel



DESCRIPTION OF THE MANAGEMENT PLAN COMPONENTS

Senior Project Leadership – The Principal Investigator, UC Davis Chancellor Linda Katehi, will provide executive UC Davis ADVANCE leadership and oversight. She will establish programmatic direction and make key decisions in consultation with Vice Provost of Academic Affairs Maureen Stanton (Co-PI) and Faculty Director Kimberlee Shauman (Co-PI) who will be the Co-chairs of the UC Davis ADVANCE Steering Committee.

Faculty Director Shauman will provide daily project leadership and management. In collaboration with Chancellor Katehi and VP Stanton, Shauman will be the main point of contact with the External Advisory Board, the Internal Advisory Committee, all initiative committees, Internal and External Evaluators and the NSF ADVANCE Program Officers.

VP Stanton and Faculty Director Shauman will meet with PI Katehi regularly (at least monthly), and will communicate with her between meetings via email.

Steering Committee – In addition to Co-chairs VP Stanton and Faculty Director Shauman, the Steering Committee will consist of a Faculty Leader from each STEM college and the Co-directors of each of the five initiatives that comprise our ADVANCE project. The STEM colleges include: the College of Agriculture and Environmental Sciences (CAES), the College of Biological Sciences (CBS), the College of Engineering (COE), and the Division of Math and Physical Sciences (MPS) which is within the College of Letters and Science.

The Steering Committee will meet twice each quarter to set action priorities for each of the initiatives, review progress, review formative evaluation reports and other indicators of program effectiveness, coordinate and modify planned activities for maximum impact.

Management Team – This team manages the daily activities of the project. This team is lead by Faculty Director Shauman and the ADVANCE Program Coordinator. The team includes an Assistant Program Coordinator (we plan to fill this position during Summer 2013), a Budget Analyst, Purchasing & Accounts Payable Specialist, and a Data Manager and Analyst. This team will be responsible for day-to-day operations, human resources management, communications, and coordinating relationships with other academic institutions and ADVANCE programs. The Faculty Director and Program Coordinator will report weekly to VP Stanton. The Faculty Director and Program Coordinator will be *ex-officio* members of each of the initiative committees.

Internal Advisory Committee (IAC) – The IAC includes a cross-section of UC Davis academic and administrative leaders. It is comprised of the deans of the four STEM colleges, the Faculty Leader from each of the STEM colleges, the Chair of the Davis Division of the Academic Senate, and the Associate Executive Vice Chancellor (who is the Affirmative Action Officer at UC Davis and is responsible for University Community Outreach). This committee is chaired by Distinguished Professor and College of Engineering Dean Enrique Lavernia. The IAC will meet quarterly to advise the PI and Steering Committee on ways to optimize programmatic activities and will champion UC Davis ADVANCE during campus-level resource-allocation decisions.

External Advisory Board (EAB) – The EAB includes individuals with national and international prominence, whose expertise includes interdisciplinary STEM research, multi-disciplinary center leadership, institutional change management, experience with past and on-going ADVANCE Institutional Transformation, and expertise in the study of faculty diversity in higher education and the experience of diverse faculty, especially Hispanics. The EAB also represents a cross-section of the greater California and U.S. populations with respect to gender and cultural identity. The EAB will meet quarterly via conference calls and will visit UC Davis once annually to assess progress towards our programmatic goals, recommend appropriate programmatic adjustments and directions, assess research program progress, and identify potential venues

for external/national collaboration. The annual visit will most often coincide with the UC Davis ADVANCE Annual Retreat, when the EAB members will view presentations by ADVANCE leaders and consults with the internal and external evaluators.

Initiative Leadership Committees – Five committees will formulate and direct the activities and advance the goals described for the five UC Davis ADVANCE initiatives. Each committee has 2-3 co-chairs and 2-6 additional faculty participants. The membership of these committees includes representatives from each of the STEM colleges and they reflect the demographic and career-stage diversity of UC Davis faculty. Each committee will meet 3-4 times each quarter to develop, implement, and evaluate the programs and activities that advance the initiative objectives.

The **CAMPOS Initiative** committee is co-chaired by Raymond Rodriguez (Co-PI), Professor of Molecular and Cellular Biology, Nina Amenta, Professor of Computer Science, and Kent Pinkerton, Professor, Department of Pediatrics, School of Medicine. The **Policy and Practices Review Initiative** committee is chaired by VP Stanton, and Professor Linda Bisson, Professor of Viticulture and Enology and Past Chair of the UC Davis Academic Senate. The **Inclusive Campus Climate Initiative** committee is Co-Chaired by Susan Rivera, Professor Psychology, the UC Davis MIND Institute, and Chair of the Academic Senate Committee on Affirmative Action and Diversity, and Elva Diaz, Associate Professor of Pharmacology. The **Mentorship and Networking Committee** is co-chaired by Binnie Singh, Director of Faculty Relations and Raissa D'Souza, Associate Professor in the Departments of Computer Science and Mechanical and Aerospace Engineering. The **Social Sciences Research and Program Evaluation** committee is co-chaired by Adela de la Torre (Co-PI), Professor of Chicano Studies and Director of the Center for Transnational Health, and Kimberlee Shauman (Co-PI), Professor of Sociology and Faculty Director of UC Davis ADVANCE.

Internal Evaluator – Terry Westover, Director of The Center for Education and Evaluation Services (CEES) at the UC Davis School of Education is our internal evaluator. Under her direction, CEES will be responsible for compiling and analyzing relevant data, and for helping to prepare reports that will be submitted to the NSF. NOTE: The qualifications and planned activities of the Internal Evaluator will be detailed in the UC Davis ADVANCE Evaluation Plan.

External Evaluator – Our external evaluators are Refugio Rochin and Daryl G. Smith. Dr. Rochin is an agricultural economist and Professor Emeritus, Chicana/o Studies, UC Davis. He is also the past Executive Director of the Society for the Advancement of Hispanics/Chicanos and Native Americans in Science (SACNAS). Dr. Smith is Professor of Education and Psychology at the Claremont Graduate University and an expert on processes related to faculty diversity in higher education. NOTE: The qualifications and planned activities of the External Evaluators will be detailed in the UC Davis ADVANCE Evaluation Plan.

MANAGEMENT PLAN COMPONENT MEMBER PROFILES

Senior Project Leadership

Linda P. B. Katehi, Principle Investigator

Chancellor, Professor of Electrical and Computer Engineering and Gender Studies

<http://chancellor.ucdavis.edu/index.html>

Linda Katehi came to UC Davis as our sixth chancellor in 2000. She holds faculty appointments in electrical and computer engineering and in women and gender studies. She is a member of the National Academy of Engineering, a fellow of the American Association for the Advancement of Science and the American Academy of Arts and Sciences, and a member of many other national boards and committees. Prior to coming to UC Davis, Chancellor Katehi served as provost and vice chancellor for academic affairs at the University of Illinois at Urbana-Champaign; the John A. Edwardson Dean of Engineering and professor of electrical and computer engineering at Purdue University; and associate dean for academic affairs and graduate education in the College of Engineering and professor of electrical engineering and computer science at the University of Michigan. In addition, her work in electronic circuit design has led to numerous national and international awards, 19 U.S. patents, and authorship of 10 book chapters and about 650 refereed publications in journals and symposia proceedings.

Maureen Stanton, Co-PI

Vice Provost for Academic Affairs and Professor of Evolution and Ecology, University of California, Davis

<http://biosci3.ucdavis.edu/FacultyAndResearch/FacultyProfile.aspx?FacultyID=312>

http://www.dateline.ucdavis.edu/dl_detail.lasso?id=13534

Maureen Stanton is Vice Provost for Academic Affairs and Professor of Evolution and Ecology. VP Stanton served as Chair of the Department of Evolution and Ecology (2005-2011), is a member of the American Academy of Arts and Sciences and has received numerous awards for her research and teaching, including the UC Davis Prize for Teaching and Scholarly Achievement (2000). She has also served as the Vice-President of the American Society of Naturalists (1988) and is a fellow of the California Academy of Sciences. VP Stanton's research focuses on how plant and animal populations adapt to environmental change, whether caused by natural processes or human activities, knowledge that is critical for predicting the long-term consequences of climate change, biological invasions and other alterations of global ecosystems. She has conducted fieldwork in both the U.S. and Kenya.

Kimberlee Shauman, Co-PI

Professor of Sociology

<http://sociology.ucdavis.edu/people/kashauma>

Kimberlee Shauman is a professor of sociology at the University of California, Davis. Her main areas of interest are social stratification, family and kinship, demography, sociology of education, and quantitative methodology. Her research focuses on gender differences in educational and occupational trajectories with particular attention to the causal effects of family characteristics. Her book, *Women in Science: Career Processes and Outcomes* (co-authored with Yu Xie), examines the underrepresentation of women in science from a life course perspective. In addition to on-going studies of gender differences in the attainment of STEM degrees, she has studied the career causes and consequences of family migration among dual-earner couples, field-specific gender differences in the utilization of educational credentials, the influence of anti-discrimination laws on gender inequality in the labor market, and the demographic consequences of persistent racial differences in mortality. Dr. Shauman received her Ph.D. from the University of Michigan in 1997.

Steering Committee

STEM College Faculty Leaders

Tom Famula

Professor of Animal Science

<http://animalscience.ucdavis.edu/faculty/famula>

Tom Famula is Professor of Animal Science at UC Davis. Dr. Famula's research focuses on the statistical aspects of genetics and animal improvement. Most recently this has concentrated on the inheritance of disease in dogs, a topic that has focused on epilepsy in Belgian Tervuren, deafness in Dalmatians, and Addison's disease in Bearded collies. The intent is to discover the specific genes that influence the expression of disease. Dr. Famula is renowned for his research and teaching. He received a distinguished teaching award from UC Davis (1999) and was recently listed in the Princeton Review's "300 Best Professors List," one of only 10 University of California professors on the list. His course, Animal Science 1, is one of the best-reviewed and most popular lower-division courses offered at UC Davis. Dr. Famula received a doctorate from Cornell University (1981).

Kathleen Ferrara

Professor of Biomedical Engineering

<http://ferrarialab.bme.ucdavis.edu>

Kathleen Ferrara is a Professor of Biomedical Engineering at UC Davis. Dr. Ferrara began her career as a project engineer for General Electric Medical Systems, involved in the development of early magnetic resonance imaging and ultrasound systems. Following an appointment as an Associate Professor in the Department of Biomedical Engineering at the University of Virginia, Charlottesville, Dr. Ferrara served as the founding chair of the Department of Biomedical Engineering at UC Davis. The central focus of her research is image-guided drug delivery, combining nanovehicles, imaging techniques, and methods to enhance delivery. By encapsulating cancer therapeutics in particles designed to be stable in circulation and targetable to diseased tissue, her research seeks to minimize systemic toxicity and maximize drug efficacy in cancer treatment. She is a fellow of the Institute of Electrical and Electronics Engineers (IEEE), American Association for the Advancement of Science, the Biomedical Engineering Society, the Acoustical Society of America and the American Institute of Medical and Biological Engineering. She received the IEEE UFFC Achievement Award in 2012. Dr. Ferrara received her Ph.D. in 1989 from the University of California, Davis.

Louise Kellogg

Professor of Geology

<http://mygeologypage.ucdavis.edu/kellogg>

Louise Kellogg is Professor of Geology and Director of the KeckCAVES at UC Davis. KeckCAVES is a unique visualization collaboration that is developing software to interact with three-dimensional data in real-time – moving, rotating, coloring, and manipulating datasets with an ease and speed unobtainable even in other 3D CAVE environments. Dr. Kellogg's research focuses on how the flow in the Earth's mantle that drives plate tectonics, and observing and interpreting deformations in the Earth's crust. Within these broad categories are a variety of projects including mantle convection, earthquake physics and crustal deformation, and visualization of geoscience data in an immersive environment. She has received an NSF Presidential Faculty Fellow Award (1992), is a Fellow of the American Geophysical Union (2010), received the Chancellor's Award for Diversity and Community (2005), and was co-holder of the UC Presidential Chair for Undergraduate Education (2006-2009). Dr. Kellogg holds a doctorate from Cornell University (1988).

Sharon Strauss

Professor of Evolution & Ecology

<http://sharonstrauss.wordpress.com>

Dr. Strauss researches how species evolve as a consequence of community membership - their complex interactions with co-occurring species. She studies plant communities, but also works with insect herbivores and pollinators of plants. Most recently, Dr. Strauss has focused on the role of evolutionary history in community assembly of plants, and in explaining plant-herbivore ecology and evolution. In concert with this, she has examined how invasive species evolve post-invasion in new habitats and the impacts of invasives on the ecology and evolution of co-occurring native species. Dr. Strauss is the Principal Investigator on the Responding to Rapid Environmental Change IGERT, an NSF-funded graduate training program that fosters collaboration and multidisciplinary solutions to environmental problems. Dr. Strauss is a UC Davis Chancellor's Fellow (2002), has received the Mercer Award from Ecological Society of America (2009), and is a fellow to the California Academy of Sciences (2009). She holds a doctorate from Florida State University (1988).

Internal Advisory Committee (IAC)**Mary Delany**

Interim Dean, College of Agricultural & Environmental Sciences

Professor of Developmental Genetics

<http://animalscience.ucdavis.edu/faculty/delany>

Dr. Delany is a Professor of Developmental Genetics and Interim Dean of the College of Agricultural and Environmental Sciences (CAES) at UC Davis. She holds the John and Joan Fiddymont Endowed Chair in Agriculture. Previously, she was chair of Animal Science (2005-2009) and Associate Dean of CAES (2009-2012). Dr. Delany's research focuses on avian telomere biology, with chicken being the primary study organism. Her studies concentrate on the organization, inheritance, regulation and stability of telomere array organization in normal, immortalized and transformed cell systems, both in vitro and in vivo. Research and technology levels range from molecular and cellular to the organismal. Other interests and areas of research include gene mapping and chromosome organization, congenital and inherited developmental mutations, and conservation of poultry and avian genetic resources. Dr. Delany holds a Ph.D. from Cornell University (1987).

James E. K. Hildreth

Dean of College of Biological Sciences

Professor Molecular and Cellular Biology & Internal Medicine

http://biosci.ucdavis.edu/the_college/meet_the_dean.html

James Hildreth is Dean of the College of Biological Sciences and Professor Molecular and Cellular Biology and Internal Medicine at UC Davis. Dr. Hildreth earned his bachelor degree from Harvard University in 1979, his doctorate from Oxford University in immunology in 1982 as a Rhodes Scholar, and his medical degree from Johns Hopkins University School of Medicine in 1987. He is a member of the Institute of Medicine, part of the National Academy of Sciences. Before coming to UC Davis he was an immunologist and professor, and Director the Center for AIDS Health Disparities Research at Meharry Medical College in Tennessee. Prior to that Dr. Hildreth was a tenured professor and Associate Dean at Johns Hopkins School of Medicine. Hildreth's area of expertise is how HIV enters cells and causes infection. In 2001, while serving as chief of the Division of Research for the National Institute of Health's National Center on Minority Health and Health Disparities, Hildreth and his research team made important discoveries related to HIV transmission. At the College of Biological Sciences, Hildreth serve as dean to 125 faculty,

5,312 undergraduates enrolled in 10 majors, 455 graduate students enrolled in eight graduate groups and 397 full-time equivalent staff. He manages an annual budget of nearly \$90 million, including nearly \$60 million for research.

Winston Ko

Dean of Mathematical and Physical Sciences

Professor of Physics

<http://www.ls.ucdavis.edu/mps/dean/dean-bio.html>

Winston Ko is Dean of the Division of Mathematical and Physical Sciences in the College of Letters and Sciences and Professor of Physics at UC Davis. Dr. Ko's research is in experimental particle physics. He surveyed "inclusive reactions" as a tool early in his postdoctoral career during the pioneer days of Fermilab, earning him the faculty appointment at UC Davis and tenure four years after his initial appointment. Dr. Ko led a series of experiments as a spokesperson and de facto leader and measured the structure of the photon at Stanford Linear Accelerator Center and Deutsche Elektronen-Synchrotron. He has studied electroweak symmetry breaking with the AMY experiment in Japan's Ko Energy Kenkyosho. All of the experiments searched for new particles and undermined many past theoretical models. Dean Ko served in several major areas in the Academic Senate, including Education Policy, Academic Personnel, and Planning & Budget. After a brief stint as the Assistant Vice Provost for Academic Planning and Personnel, he served as the chair of the Physics Department (1998 - 2003) and then became dean of the Division of Mathematical and Physical Sciences. Dr. Ko is known for his mentorship and collaboration. He received a Ph.D. from the University of Pennsylvania (1971).

Enrique Lavernia

Dean of the College of Engineering

Distinguished Professor of Chemical Engineering and Materials Science

<http://chms.engineering.ucdavis.edu/people/faculty/lavernia.html>

Enrique Lavernia is Dean of the College of Engineering and Distinguished Professor of Chemical Engineering and Materials Science at UC Davis. His research focuses on synthesis of structural materials and metal matrix composites with particular emphasis on processing fundamentals; thermal spray processing of nano-structured materials; spray atomization and deposition of structural materials; solidification processing of metal matrix composites; synthesis and behavior of nano-crystalline material and mathematical modeling of advanced materials and processes. Dr. Lavernia returned as dean to the College of Engineering (January 1, 2011) after serving as Provost and Executive Vice Chancellor of UC Davis (January 2009–December 2010). He is a Fellow of the American Association for the Advancement of Science (2000), the American Society of Mechanical Engineers (2006), ASM International (1998), and the Alexander von Humboldt Foundation. In 2011 he received the Hispanic Engineer National Achievement Award (HEENAC) and the Society for the Advancement of Chicanos and Native Americans in Science (SACNAS) Distinguished Scientist Award. Dr. Lavernia is also the recipient of the Edward DeMille Campbell Memorial Lectureship (2013), and the ASM International Gold Medal Award (2013). He holds a doctorate from the Massachusetts Institute of Technology (1986).

Bruno Nachtergaele

Professor of Mathematics

Chair of the UC Davis Academic Senate

<http://www.math.ucdavis.edu/research/profiles/bxn>

Bruno Nachtergaele is Professor of Mathematics and Chair of the UC Davis Academic Senate. Dr. Nachtergaele's general research area is mathematical physics. He works on a variety of problems in equilibrium and non-equilibrium statistical mechanics. His current interests include ground states and

dynamics of quantum spin systems, stability and low-lying excitations of quantum interfaces, hydrodynamic limits of quantum many-body systems, and properties of the dynamics of quantum lattice systems. He is a Fellow of the American Association for the Advancement of Science (2007) and was a Senior Research Fellow at the Erwin Schrödinger Institute for Mathematical Physics (2011). Dr. Nachtergaele holds a doctorate from the Princeton University (1993).

Rahim Reed

Associate Executive Vice Chancellor, University of California, Davis

http://occr.ucdavis.edu/Rahim_bio.html

Rahim Reed has more than 20 years of experience in administration, student affairs and affirmative action policy development at four major universities. From 1998 until September 2001, he served as the Director of the Center for the Study of Race and Race Relations at the University of Florida. AEVC Reed was one of the founding members of the Center, which is an interdisciplinary institution that promotes research and development of public policy in the areas of race relations, interracial dispute resolution, diversity education and training, racial equality and community relations. Prior to becoming director of the Center, AEVC Reed served as the Assistant Dean for Student and Minority Affairs at the University of Florida College of Law from 1988 to 1998. During this period, he also chaired the University of Florida's Council on Affirmative Action from 1994 to 1996. Rahim served as Assistant Dean in the Office of African Affairs at the University of Virginia from 1986 to 1988 and has also taught and held positions as a Teacher/Counselor at the University of Pittsburgh and a Teaching Assistant at Rutgers University Law School. Mr. Reed received his Bachelors Degree in Psychology and Black Studies from the University of Pittsburgh in 1977. He also holds a Masters Degree in Public Administration and a Masters Degree in Social Work from the University of Pittsburgh. He completed his legal studies in 1986 and holds a Juris Doctorate Degree from Rutgers University School of Law. He is also an active member of several national organizations and has made many presentations to groups on topics of diversity education and building inclusive communities.

Sheryl Soucy-Lubell

Director, Interdisciplinary Research Services, Office of the Vice , University of California, Davis

<http://research.ucdavis.edu/u/s/irs/cu>

Sheryl Soucy-Lubell is the Director of Interdisciplinary Research Support team in the UC Davis Office of Research. Under her direction, this team is responsible for the preparation of major grant and contract proposals for large-scale, interdisciplinary research programs. As director of this unit, Sheryl identifies and develops collaborative efforts in pursuit of extramural funding opportunities; advises campus administrators in prioritizing research efforts by determining UC Davis research capacity in specific areas and forecasting opportunities for success prior to committing resources; and conducts campus-wide research development activities such as workshops, trainings, program officer visits, funding opportunity searches and dissemination, and research team building. Sheryl also oversees the administration of the Limited Submissions program, which is a service of the Office of Research that assists faculty in identifying Limited Submission opportunities and coordinates the campus review and nomination of applications for those opportunities. She received a B.A. in Biology and Environmental Studies at Dartmouth College, a Ph.D. in Ecology and Evolution at the State University of New York at Stony Brook, and conducted post-doctoral research in the Department of Biological Sciences at Florida State University.

External Advisory Board (EAB)

Diana Bilimoria

Professor of Organizational Behavior

<http://faculty.weatherhead.case.edu/bilimoria>

Diana Bilimoria is the KeyBank Professor and Professor of Organizational Behavior at the Weatherhead School of Management, Case Western Reserve University. Dr. Bilimoria is the current Division Chair of the Gender and Diversity in Organizations Division of the Academy of Management. She has served as the editor of the *Journal of Management Education*. Dr. Bilimoria's research focuses on gender diversity in governance and leadership, and organizational transformation. Her research has been used to facilitate the institutional transformation of research universities to become more inclusive of the success and contributions of women faculty. Other applications include the improvement of corporate and nonprofit organizational practices of selection, performance evaluation, advancement, and leadership development to attract and retain a diverse workforce. She has been internationally recognized for her leadership, research and service. At Case Western Reserve University she received the Flora Stone Mather Center for Women's Spotlight Series Prize for Women's Scholarship (2007), and the Weatherhead School of Management's Doctoral Teaching Excellence Award (2002). She holds a doctorate in business administration from the University of Michigan (1990).

Carlos Castillo-Chavez

Professor of Mathematical Biology

http://mtbi.asu.edu/People_Personal_Pages/Carlos-Castillo-Chavez.html

Carlos Castillo-Chavez is a University Regents and Joaquin Bustoz Jr. Professor of Mathematical Biology at Arizona State University. Dr. Castillo-Chavez's research program is carried out at the interface of the natural and social sciences. Throughout his extensive research career Dr. Castillo-Chavez has examined the role of dynamic social landscapes on disease evolution and the role of dispersal and disease as enhancing mechanisms of ecological diversity. This research agenda has included a great number of topics including the role of cross-immunity on the evolution and dynamics of influenza, problems at the interface of homeland security and disease invasions (natural or deliberate), models for the spread of social "diseases" like alcoholism and of extreme ideologies and their impact on cultural norms. He has been appointed to the Santa Fe Institute's external faculty (Santa Fe, New Mexico) and as adjunct professor in the BSCB department at Cornell University. Founding director of the Mathematical, Computational and Modeling Sciences Center and the graduate field in applied mathematics in the life and social sciences or AMLSS at ASU. Dr. Castillo-Chavez is also the Executive Director of the Mathematical and Theoretical Biology Institute (MTBI) and The Institute for Strengthening the Understanding of Mathematics and Science (SUMS). Castillo-Chavez' undergraduate/graduate research program (established in 1996) was recognized as a "Mathematics Program that Makes a Difference" by the American Mathematical Society in 2007 and by the 2011 Presidential Award for Excellence in Science, Mathematics, and Engineering Mentoring. SUMS' efforts were recognized with a Presidential Mentorship Award in 2002. He received a Ph.D. from the University of Wisconsin (1984).

Olivia Graeve

Associate Professor of Mechanical & Aerospace Engineering

<http://graeve.ucsd.edu>

Dr. Graeve, Professor of Mechanical & Aerospace Engineering at UC San Diego, researches the fundamental principles of materials processing with specific engineering needs with special emphasis on electromagnetic multifunctional materials for sensors and energy applications. Specific areas of concentration are fundamental studies of colloidal systems for the preparation of ceramic and metallic nanoparticles of unique morphologies; the effect of crystallite size and particle size on the sintering behavior of nanopowders and amorphous-metal / nanocrystalline-ceramic composites; luminescence

responses of doped oxide ceramics; morphological effects on the behavior of metal-based nanofluids for thermal energy dissipation; and processing of hexaboride and carbide materials for electro-optics (neutron detection), hydrogen storage, and high-temperature sensor applications. Dr. Graeve has received numerous grants for her work, as well as awards including the Jaime Oaxaca Award, Society of Hispanic Professional Engineers (2011), Karl Schwartzwalder Professional Achievement in Ceramic Engineering (PACE) Award, American Ceramic Society (2010), and an NSF CAREER Award (2007). Dr. Graeve is also the PI on an NSF-funded project, "Enabling Participation of Hispanic Students in SHPE 2011 Graduate Activities." Dr. Graeve received a Ph.D. from UC Davis in Material Science and Engineering (2001).

Brian Nosek

Professor of Psychology

<http://projectimplicit.net/nosek>

Brian Nosek is a Professor of Psychology at the University of Virginia. Dr. Nosek studies the gap between values and practices - the difference between what is intended, desired, supposed to happen and what actually happens. His work is based on the gap between values and practices as it is related to a variety of psychological distinctions: intentions versus actions, explicit versus implicit thoughts, endorsed beliefs versus automatic responses, goals versus outcomes, motivations versus behavior, ideology versus reasoning, and moral judgments versus moral intuitions. The majority of Dr. Nosek's research has applied this interest to implicit social cognition - thoughts and feelings that occur outside of conscious awareness or control - but the interest has general application. He applies this interest to basic science investigations of human behavior, to applied research and examination of organizational behavior, and to scientific practices. He is the co-founder of Project Implicit at Harvard University, and co-founder of the Open Science Framework. In 2010, he received the All University Teaching Award at the University of Virginia, and is also the recipient of an International Social Cognition Network (ISCON) Early Career Award (2007), and Michele Alexander Early Career Award for Scholarship and Service, Society for the Psychological Study of Social Issues (2007). Dr. Nosek received his doctorate from Yale (2002).

Abigail Stewart

*Sandra Schwartz Tangri Distinguished University Professor of Psychology and Women's Studies
Director, University of Michigan ADVANCE*

<http://www.lsa.umich.edu/psych/people/directory/profiles/faculty/?uniquename=abbystew>

Dr. Stewart is a Professor of Psychology and Women's Studies and Associate Dean of the University of Michigan's Rackham Graduate School. Stewart is also the founder and director of the University of Michigan ADVANCE program and Institute for Research on Women and Gender. She has published many scholarly articles and several books, focusing on the feminist theory and the psychology of women's lives, personality, and adaptation to personal and social changes. Her current research, which combines qualitative and quantitative methods, includes comparative analyses of longitudinal studies of educated women's lives and personalities; a collaborative study of race, gender and generation in the graduates of a Midwest high school; and research and interventions on gender and science and technology with middle-school-age girls, undergraduate students, and faculty. She has received the Henry Murray Award in personality psychology and the Carolyn Wood Sherif Award in psychology of women from the American Psychological Association and the American Association of University Women Eleanor Roosevelt Fund Award. Dr. Stewart holds degrees from Wesleyan University, the London School of Economics, and Harvard University.

Caroline S. T. Turner

Professor of Educational Leadership

<http://edweb.csus.edu/edd/faculty/turner-caroline.html>

Dr. Turner is Professor, Doctorate in Educational Leadership, California State University, Sacramento and Professor Emerita, Higher & Postsecondary Education, Lincoln Professor of Ethics and Education, Arizona State University. Dr. Turner's research and teaching interests include access, equity and leadership in higher education, faculty gender and racial/ethnic diversity, organizational change, and the use of qualitative methods for policy research. Her research includes a Spencer Foundation funded study of the faculty search committee process and hiring of faculty of color, a PEW Foundation funded study of Latino faculty in theological education, a Ford Foundation funded study of Diversity in Academe Post-Grutter, a Stanford University funded study of Pre-16 reforms and the promise of a seamless educational system, a study of women of color presidents in higher education, and a study of faculty and students of color in mathematical sciences and related fields. Dr. Turner is the recipient of the American Educational Research Association (AERA) Scholars of Color in Education Distinguished Career Contribution Award (2009) and the AERA Dr. Carlos J. Vallejo Memorial Award for Lifetime Scholarship (2009), the Association for the Study of Higher Education (ASHE) Council on Ethnic Participation Mildred Garcia Award for Exemplary Scholarship (2008), and the Mary Lou Fulton College of Education Dean's Faculty Excellence Award (2008, 2009). Recently, she was a Visiting Scholar with the Stanford Institute for Higher Education Research (SIHER) and named a Distinguished Alumni Scholar by Stanford University. She received her doctorate in Administration and Policy Analysis from the Stanford University School of Education.

Ruth Zambrana

Professor of Women's Studies

Director, Consortium on Race, Gender, and Ethnicity, University of Maryland, College Park

<http://www.popcenter.umd.edu/mprc-associates/rzambran>

Dr. Zambrana is Professor in the Department of Women's Studies, Director of the Consortium on Race, Gender and Ethnicity, Interim Director of the U.S. Latino Studies Initiative at the University of Maryland, College Park, and Adjunct Professor of Family Medicine at University of Maryland Baltimore, School of Medicine, Department of Family Medicine. Her work focuses on the intersections of gender, race/ethnicity, socioeconomic status and other contextual variables in disparities in the provision of public health, human services and education with an emphasis on Latino women, children, and youth. Emerging scholarship is on inequalities in racial/ethnic women's health and disparity, knowledge production and public policy. Co-authored books include *Health Issues in the Latino Community* (2001); *Drawing from the Data: Working Effectively with Latino Families* (2003), and an anthology (Forthcoming, 2008) entitled *Emerging Intersections: Race, Class, and Gender in Theory, Policy, and Practice*. She has published extensively in her field, has served on several editorial boards including the *American Journal of Public Health* and *Journal of Health Care for the Poor and Underserved*. She has served on several national and state boards and committees and recently served as a member of the Centers for Disease Control and Prevention, Agenda Committee, Office of Public Health Research, Health Information Services and Health Equity Champions Workgroups (2005) and the State of Maryland Governor's Transition Task Force on Higher Education (2006). She was honored by Hispanic Business Magazine as 2007 Elite Woman of the Year for her commitment and dedication to improving the Hispanic community through her service and scholarship. She has a doctorate in sociology from Boston University (1977).

Initiative Leadership Committees

CAMPOS Initiative

Nina Amenta

Professor & Vice Chair of Computer Science

<http://www.cs.ucdavis.edu/~amenta>

Nina Amenta is a Professor and Vice Chair of Computer Science at UC Davis and is Director of the Institute for Data Analysis and Visualization at UC Davis. She works in computational geometry, using discrete geometry to develop algorithms for problems in areas like computer graphics and simulation. Her recent research has focused on the construction of good models of 3D objects from clouds of points, improvements in the construction of basic geometric structures, and visualization for computational biology. In addition to numerous research grants, she is the recipient of an Alfred P. Sloan Foundation Research Fellowship (2000) and an NSF CAREER award (2001). Dr. Amenta holds a Ph.D. from UC Berkeley (1993).

Susan Kauzlarich

Professor of Chemistry

<http://chemgroups.ucdavis.edu/~kauzlarich>

Susan Kauzlarich focuses on finding new materials with novel structures and properties. She has worked in the area of nanomaterials since 1992, starting with porous Si, the synthesis of group IV nanoparticles, and most recently, magnetic nanoparticles. Her research group maintains a balance of exploratory and directed research projects, spanning both novel structures and nanomaterials. She focuses on problems at the interface of chemistry and physics, biochemistry, and or engineering with a focus on the design and synthesis of new materials and compounds. Dr. Kauzlarich has received numerous awards including most a UC Davis Distinguished Graduate Mentoring Award (2005) and Presidential Award for Excellence in Science, Mathematics, and Engineering Mentoring (2008). She is a Fellow of the American Association for the Advancement of Science (2009) and Iota Sigma Pi, National Honorary Member (2011) and IUPAC Distinguished Women in Chemistry/Chemical Engineering inductee (2011). Dr. Kauzlarich received her Ph.D. from Michigan State University (1995).

Deb Niemeier

Professor of Civil and Environmental Engineering

<http://dn.engr.ucdavis.edu>

Deb Niemeier is a Professor of Civil and Environmental Engineering at the University of California, Davis. Dr. Niemeier's research interests span transportation, air quality modeling, energy consumption and land use interactions, sustainability and the project development process for major infrastructure projects. She has served on the expert independent review teams to assess the cost increases associated with the San Francisco Bay Bridge and to review the cost methods used for the proposed 3rd locks of the Panama Canal. She has published more than 110 journal articles and book chapters. Dr. Niemeier has served as Chair of the Department of Civil and Environmental Engineering and she recently served for four years as the Director of the John Muir Institute and Associate Vice Chancellor in the Office of Research at UC Davis. She is currently the Editor-in-Chief of *Transportation Research*, Part A and is a member of the MARs Corporation Scientific Advisory Council (Sustainability). She is also the Director of the UC Davis-Caltrans Air Quality Project, a continuing state and federally funded research program, which began in 1999, aimed at improving vehicle emissions modeling and developing regulatory responses for state and local agencies. She has received a number of awards including the Aldo Leopold Leadership Award (2005), the Chancellor's Fellow Award (2001-2004), an NSF CAREER award (1997), and UC Davis Outstanding Faculty Mentor (1997) and Faculty Advisor (1995) Awards. She completed her Ph.D. at the University of Washington.

Kent Pinkerton

Professor, Department of Pediatrics, School of Medicine

Professor-In-Residence, Department of Anatomy, Physiology and Cell Biology, School of Veterinary Medicine
<http://faculty.vetmed.ucdavis.edu/faculty/kepinkerton>

Kent Pinkerton holds joint appointments in the School of Medicine and School of Veterinary Medicine, and Director of the Center for Health and the Environment. He studies the health effects of environmental air pollutants on lung structure and function and the interaction of gases and airborne particles within specific sites and cell populations of the lungs in acute and chronic lung injury. He also researches the effects of environmental tobacco smoke on lung growth and development. Dr. Pinkerton has received many honors and awards including the University of California Distinguished Teaching Citation (2008), Distinguished Faculty Teaching Award, School of Veterinary Medicine (2006) and the School of Veterinary Medicine Favorite Teacher Award (Class of 1998, 2000, 2001 and 2003). In 2010, he was a Visiting Professor at Nanjing Medical University, China. He completed his Ph.D. degree in Pathology at Duke University (1982).

Raymond Rodriguez, Co-PI

Professor of Molecular and Cellular Biology

<http://www.mcb.ucdavis.edu/faculty-labs/rodriguez/about>

Raymond Rodriguez is a Professor in the Department of Molecular & Cellular Biology and is currently Director of the NIH-sponsored Center of Excellence for Nutritional Genomics at UC Davis. . After receiving his Ph.D. at the University of California, Santa Cruz in 1974, he was an A.P. Giannini Foundation Postdoctoral Fellow in the laboratory of Herbert W. Boyer at UC San Francisco Medical Center. While at UCSF, Dr. Rodriguez developed molecular cloning technologies that now serve as the foundation for the biotechnology industry. In 2003 he became Director of the Center of Excellence for Nutritional Genomics, a multi-investigator, multi-institutional research program to study the impact of diet-genome interactions on human health. For his leadership in the field of nutritional genomics, Dr. Rodriguez was selected as the 2008 distinguished lecturer by the USDA-ARS Beltsville Center and in 2009 he received an Honorary Doctorate of Science from the Nara Institute of Science and Technology, Japan. Dr. Rodriguez is a member of numerous scientific organizations and committees and he has been an adviser to the NIH and NSF since 1988. He has published numerous articles and books on molecular biology and biotechnology. Dr. Rodriguez holds 18 U.S. patents and his current research focus is nutritional epigenomics, the study of how dietary factors alter human gene activity by chromatin modification. He holds a Ph.D. from UC Santa Cruz (1974).

Pamela Ronald

Professor of Plant Pathology

http://indica.ucdavis.edu/ronald_bio/pamcv

Pamela Ronald is Professor in the Department of Plant Pathology and the Genome Center at UC Davis. She also serves as Director of Grass Genetics at the Joint Bioenergy Institute. Dr. Ronald's laboratory has engineered rice for resistance to disease and tolerance to flooding, which seriously threaten rice crops in Asia and Africa. Ronald led the isolation of the rice XA21 immune receptor and the rice Sub1A submergence tolerance transcription factor. In 1996, she established the Genetic Resources Recognition fund, a mechanism to recognize intellectual property contributions from less developed countries. She and her colleagues were recipients of the USDA 2008 National Research Initiative Discovery Award for their work on rice submergence tolerance. Dr. Ronald was awarded a Guggenheim Fellowship, the Fulbright-Tocqueville Distinguished Chair and the National Association of Science Writers "Science in Society Journalism" Award. She is a fellow of the American Association for the Advancement of Science. Dr. Ronald received her Ph.D. from UC Berkeley (1985).

Julie Sutcliffe

Associate Professor of Biomedical Engineering
Director, Cyclotron and Radiochemistry Facility
<http://www.bme.ucdavis.edu/sutcliffe>

Julie Sutcliffe's research involves the design, synthesis and in vivo evaluation of targeted molecular imaging agents with a focus on positron emission tomography (PET). Her group has developed rapid radiolabeling technologies using both solid-phase and solution-phase chemistries to incorporate the short half-life PET radionuclide fluorine-18 into peptides. Peptide based radiopharmaceuticals are gaining extensive attention as targeted molecular imaging agents. It is therefore important that technologies are developed that allow these agents to be synthesized rapidly and screened both in vitro and in vivo to assess their efficacy. Dr. Sutcliffe has a Ph.D. in Medicinal Chemistry (2002) from King's College London.

Policy and Practices Review Initiative

Linda Bisson

Professor of Viticulture and Enology
Former UC Davis Academic Senate Chair
<http://lfbisson.ucdavis.edu>

Linda Bisson holds the Maynard A. Amerine Endowed Chair in Viticulture and Enology at UC Davis. She is also the Chair of the UC Davis Academic Senate. Her research investigates the utilization of carbon and energy sources in yeast, with a specific focus on how eukaryotic cells detect energy sources in their environment and prioritize use when presented with a mixture of substrates. Her research is important from a very fundamental perspective, in adding to knowledge of the mechanisms of regulation of metabolism, but also has broad application in both enology and medicine. Dr. Bisson is a member of the advisory boards of the American Viticulture and Enology Research Network and has just accepted the position of Science Editor for the *American Journal of Enology and Viticulture*. She is lead principal investigator on the multidisciplinary multi-principal investigator program in stuck fermentations funded by the American Vineyard Foundation. Dr. Bisson received her Ph.D. in 1980 from UC Berkeley.

Ricardo Castro

Associate Professor of Chemical Engineering & Material Science
<http://www.chms.ucdavis.edu/research/web/castro>

Ricardo Castro is an Associate Professor of Chemical Engineering & Material Science and a faculty affiliate of the Peter A. Rock Thermochemistry Laboratory and the Nanomaterials in the Environment, Agriculture, and Technology (NEAT) Research Center. This NEAT center is a multidisciplinary research and education program which links the fundamental physics, chemistry, and engineering of small particles and nanomaterials to several challenging areas of investigation. He coordinates research in the thermochemistry of nanoparticles controlling the nanoscale via interface energetics using specially designed procedures, and in the development of nanotech applications. Dr. Castro was recently awarded an NSF Career Award and the Department of Energy Early Career Award (2011). Castro also received the Young Faculty Award from the Society of Hispanic Professional Engineers and the 2012 Outstanding Junior Faculty Award from the College of Engineering at UC Davis. Castro has active projects with Brazil and collaborations with other U.S. institutions and Chinese universities. He received his Ph.D. in 2005 from the University of São Paulo.

Satya Dandekar

Chair of Medical Microbiology & Immunology

Professor of Microbiology

<http://www.ucdmc.ucdavis.edu/medmicro/staff/dandekar.html>

Satya Dandekar is a professor of Microbiology and the chairperson of the Department of Medical Microbiology and Immunology at UC Davis and has a joint appointment in the Department of Internal Medicine, Division of Infectious Diseases, UC Davis School of Medicine. Dr. Dandekar's research program is focused on the molecular pathogenesis of human immunodeficiency virus and simian immunodeficiency virus infections with special emphasis on gastrointestinal mucosal lymphoid tissue as a major target organ of the viral infection and as a viral reservoir. This has led to a recent appointment to the NIH Director's Council of Public Representatives and is also recognized in her frequent contributions as a reviewer of many journals in her field of research such as the *Journal of Virology*, *Blood*, *Journal of Experimental Medicine*, *American Journal of Pathology*, *AIDS Research and Human Retroviruses*, *AIDS* etc. Dr. Dandekar maintains memberships in several societies and associations, is a well-known lecturer both nationally and internationally, and has been an invited speaker at a number of recognized academic institutions. She received her Ph.D. in 1979 from the University of Baroda, India.

Jonathan Eisen

Professor of Microbiology & Immunology

Professor of Evolution & Ecology

<http://phylogenomics.wordpress.com>

Jonathan Eisen's lab is in the UC Davis Genome Center and he holds faculty appointments in the Department of Medical Microbiology and Immunology in the School of Medicine, and the Department of Evolution and Ecology in the College of Biological Sciences. In addition he holds an Adjunct appointment at the Department of Energy Joint Genome Institute in Walnut Creek, CA. Dr. Eisen's research focuses on the mechanisms underlying the origin of novelty (how new processes and functions originate). Most of his work involves the use of high-throughput DNA sequencing methods to characterize microbes and then the use and development of computational methods to analyze this type of data. In particular, his computational work has focused on integrating evolutionary analysis with genome analysis—so-called phylogenomics. Dr. Eisen has been awarded numerous grants and accolades, including the Benjamin Franklin Award (2011) for his efforts to provide open-access to the materials and methods used in the life sciences. He holds a Ph.D. from Stanford (1998).

Susan Handy

Professor of Environmental Science and Policy

<http://www.des.ucdavis.edu/faculty/handy>

Susan Handy is a professor of Environmental Policy and Planning and a faculty affiliate of the Transportation Technology and Policy Program at UC Davis. Dr. Handy is also the director of the Sustainable Transportation Center, part of the federal university transportation centers program. Dr. Handy's research focuses on the relationship between transportation and land use, particularly the impact of land use on travel behavior, and on strategies for reducing automobile dependence. Her recent work includes a series of studies on bicycling in Davis, including an exploration of the formation of attitudes towards bicycling and a study of factors affecting bicycling to high school, in addition to projects for the California Air Resources Board and Caltrans on the impacts of "smart growth" strategies on vehicle travel. Dr. Handy serves on the Committee on Women's Transportation Issues and the Committee on Transportation Education of the Transportation Research Board. Dr. Handy received her doctorate from UC Berkeley (1992).

[Inclusive Campus Climate Initiative](#)

Diane Beckles

Assistant Professor of Plant Sciences

http://www.plantsciences.ucdavis.edu/plantsciences_faculty/beckles

Diane Beckles is an Assistant Professor of Plant Sciences at UC Davis. Dr. Beckles' research focuses on the biochemical, eco-physiological and genetic mechanisms that determine the accumulation of carbohydrates in tomato fruit and wheat caryopsis. This is important because sugar accumulation is a major determinant of the postharvest quality of fruit and the starch stored in cereal endosperm provides as much as 50% of human caloric intake. As an Assistant Professor of Plant Sciences, she works to address these questions using a systems biology approach, especially metabolomics, to understand the regulation of carbohydrate metabolism and how this impacts other primary metabolic pathways and whole plant growth and morphology as this is of agronomic importance. Dr. Beckles' experimental approach to study starch encompasses food sciences, applied chemistry and physics. She received a Ph.D. from the University of Cambridge (1999).

Manuel Calderón de la Barca Sánchez

Associate Professor of Physics

<http://nuclear.ucdavis.edu/~calderon>

Manuel Calderón de la Barca Sánchez is a Professor of Physics at UC Davis. Dr. Calderón de la Barca Sánchez's research in nuclear physics focuses on heavy quark production. His research group is involved in quarkonium measurements from particle collisions. One focus of this research is the new material state called the Quark-Gluon Plasma, a state produced by the collision of nuclei at the highest possible energies in order to make matter that is hotter than the sun for an instant and one that produces a new state of matter in which the protons and neutrons have melted into their more elementary constituents – quarks and gluons. Dr. Calderón de la Barca Sánchez' research is supported by numerous grants from NSF, and he is the recipient of an NSF CAREER award (2007). He was also a nominee from the UC Davis Association of Students for Excellence in Education (2012). He holds a Ph.D. from Yale University (2001).

Elva Diaz

Associate Professor of Pharmacology

<http://www.ucdmc.ucdavis.edu/pharmacology/faculty/diaz>

Elva Diaz is an Associate Professor of Pharmacology at UC Davis. Dr. Diaz' main research interest is the molecular mechanisms of neural development and she uses a rodent model system to investigate these mechanisms. She specifically focuses on neural proliferation and synapse development utilizing DNA microarrays as a tool to identify genes that are developmentally regulated during postnatal cerebellum development. Her research group has identified several candidate molecules that increase in gene expression during the period of neural proliferation or synapse formation and her group is currently studying the role of two molecules (Mad3 and synDIG1) in these processes. Funding for her work is provided by NSF and NIH. Dr. Diaz has received the Helen Hay Whitney Fellowship, an Alfred P. Sloan Research Fellowship, and the NIH Director's New Innovator Award. Dr. Diaz received a Ph.D. from Stanford University in 1999.

Sharon Lawler

Associate Professor of Entomology

http://entomology.ucdavis.edu/Faculty/Sharon_Lawler

Sharon Lawler is a Professor of Entomology at UC Davis. Dr. Lawler conducts basic and applied research on the ecology of aquatic systems. Her lab has two main areas of study: predator-prey dynamics in complex communities, and effects of mosquito control techniques on aquatic systems. To understand predator-prey dynamics, Dr. Lawler uses both a laboratory model system of protozoans, and field

research on the effects of introduced fish on native fauna. The research on mosquito control is field-based. She is also involved in research and scientific discourse on how biodiversity affects the functioning of ecosystems. Dr. Lawler is also the Faculty Equity Advisor in the College of Agriculture and Environmental Sciences and the Chair the Diversity and Equity Committee for the college at UC Davis. Dr. Lawler received a Ph.D. from Rutgers University.

Angelique Louie

Professor of Biomedical Engineering

<http://www.bme.ucdavis.edu/people/departamental-faculty/profiles2/angelique-louie>

Angelique Louie is Professor of Biomedical Engineering at UC Davis. Dr. Louie's research is driven by the belief that imaging technologies offer unique testing grounds for probing the cellular and molecular basis of biological events. Her work is based on a highly interdisciplinary approach to solve research problems with the unifying theme being the applications of imaging techniques and the design of probes to characterize molecular phenomena. Specific interests are in the major health problems of retinal degeneration, cardiovascular disease and tumor formation. The unifying theme of this research is the application of imaging techniques and the design of probes to characterize molecular phenomena in diseased versus normal states. Dr. Louie holds a doctorate from UC Irvine (1994).

Francis G. Lu

Professor of Clinical Psychiatry

Director of Cultural Psychiatry

<http://www.ucdmc.ucdavis.edu/psychiatry/ourteam/faculty/lu.html>

Francis Lu is the Luke and Grace Kim Endowed Professor in Cultural Psychiatry, Director of Cultural Psychiatry, and Associate chair for Medical Student Education at the UC Davis Health System. Dr. Lu's career has focused on cultural competence and diversity, mental health disparities, psychiatric education with an emphasis on recruitment and mentorship, and the interface of psychiatry and religion/spirituality especially through film. He currently works with both the Asian American Center on Disparities Research and the Center for Reducing Health Disparities at UC Davis and has served on the California State Department of Mental Health Cultural Competence Advisory Committee since 1996. The American Psychiatric Association (APA) awarded him the 2001 Kun-Po Soo Award for his work in integrating Asian issues into psychiatry; in 2002, he received a Special APA Presidential Commendation for his work in cross-cultural psychiatry. In 2008, the American Psychiatric Foundation awarded him one of its Advancing Minority Mental Health Awards and the Association for Academic Psychiatry honored him with its Lifetime Achievement in Education Award. He currently serves as an issues representative on the National Steering Committee of the Association of American Medical Colleges Group on Diversity and Inclusion and as chair of the University of California Committee on Affirmative Action and Diversity of the Academic Senate. He received an M.D. from Dartmouth Medical School (1974).

Susan Rivera

Professor of Psychology and Research Professor at the UC Davis Medical Investigation of Neurodevelopmental Disorders (MIND) Institute

<http://neuroscience.ucdavis.edu/user/52>

Susan Rivera is Professor of Psychology and Research Professor at the UC Davis MIND Institute. Dr. Rivera conducts research on the origins and development of symbolic representation in both infants and children. She uses classic behavioral as well as neuroimaging techniques to investigate such things as the development of dorsal versus ventral visual processing, object representation, numerical cognition and affective processing. As a member of the UC Davis MIND Institute, she also conducts research contrasting typical development with that of children with neurodevelopmental disorders including

Autism and fragile X Syndrome. One of her main research goals is to build a framework for integrating the previously disparate methodological and theoretical orientations of cognitive developmental and neuroscience research. By employing a variety of converging research techniques, she strives to elucidate the complex brain-behavior relationships that underlie cognitive development. She is the Associate Editor of *Frontiers in Developmental Psychology*, and is the UC Davis School of Medicine Dean's Award for Excellence in Collaboration (2010). Dr. Rivera has a Ph.D. from UC Berkeley (1998).

Mentorship and Networking Committee

Chen-Nee Chuah

Professor of Electrical & Computer Engineering and Chancellor's Fellow

<http://www.ece.ucdavis.edu/rubinet/people/chuah/bio.html>

Chen-Nee Chuah is a Professor of Electrical and Computer Engineering at UC Davis. Dr. Chuah received her Ph.D. in Electrical Engineering and Computer Sciences from U. C. Berkeley in 2001. From 2001 to 2002, she was a visiting researcher of the IP-Group at Sprint Advanced Technology Laboratories in Burlingame, CA. She joined UC Davis as a full-time Assistant Professor in July 2002, and currently leads the Robust and Ubiquitous Networking (RUBINET) Research Group. Dr. Chuah's research interests lie broadly in communications and computer networks, distributed systems, and wireless/mobile computing, with emphasis on Internet measurements and analysis, anomaly detection, architecture of the future Internet, routing, traffic engineering, multimedia and emerging applications, and vehicular ad hoc networks. Dr. Chuah is an Association for Computing Machinery Distinguished Scientist, received the National Science Foundation CAREER Award (2003), and she received the Outstanding Junior Faculty Award from the College of Engineering at UC Davis in 2004. In 2008, Dr. Chuah was named a UC Davis Chancellor's Fellow. She currently serves as the Associate Editor of IEEE/ACM Transactions on Networking.

Raissa D'Souza

Professor Computer Science and Mechanical and Aerospace Engineering

External Professor, Santa Fe Institute

<http://mae.ucdavis.edu/dsouza/>

Raissa D'Souza is a Professor of Mechanical Engineering and of Computer Science at the University of California at Davis, as well as an External Professor at the Santa Fe Institute and Managing Editor of the journal *Internet Mathematics*. Dr. D'Souza's research focuses on mathematical models of self-organization, phase transitions and the structure and function of networked systems. Her publications span the fields of statistical physics, theoretical computer science and applied math. Dr. D'Souza's current interest is developing methods to enhance or delay the onset of phase transitions in random graphs as well as using random graphs to model statistical properties of interacting networks, such as congruence between social networks and technical artifacts in Open Source Software, the interplay of genetic-regulatory and protein-interaction networks in biological systems, and diffusion of ideas and viruses through distinct communities. Dr. D'Souza received a doctorate in Statistical Physics from MIT in 1999, was a Postdoc at Bell Labs and then a Postdoc in the Theory Group at Microsoft Research.

Gitta Coaker

Associate Professor of Plant Pathology

http://ucanr.edu/sites/plp/faculty/Coaker_Gitta_L/

Gitta Coaker is an Associate Professor of Plant Pathology at University of California, Davis. Her research focuses on the molecular genetics of plant innate immunity. Dr. Coaker uses a combination of molecular biology, genetics, biochemistry and high-throughput proteomics to elucidate the signaling mechanisms associated with plant disease resistance following pathogen perception. She uses the Arabidopsis-Pseudomonas syringae model system to (1) investigate the host targets and activation mechanisms of bacterial effectors and (2) decipher the early signaling events that occur during plant resistance gene activation. She received her Ph.D. from Ohio State University 2003 Genetics and Plant Pathology.

Cristina Gonzalez

Professor of Education, Professor of Spanish

<http://education.ucdavis.edu/faculty-profile/cristina-gonzalez>

Dr. Gonzalez is a Professor of Education and Professor of Spanish at UC Davis. Her research interests include education policy and governance, educational leadership, graduate education issues, Hispanic culture, history of Latinos in the U.S., history of higher education, history of the University of California, minority leadership issues, status of the Spanish language in the U.S., undergraduate education issues and women's leadership issues. From 1993 to 1997 she was Chair of Spanish and Portuguese at the University of Massachusetts, Amherst. Dr. Gonzalez was Dean of Graduate Studies at UC Davis from 1997 to 2002, and Senior Advisor to the Chancellor at UC Davis from 2002 to 2004. Currently, she is a member of the University of California President's Advisory Committee on Family-Friendly Policies for Ladder Faculty, a role she has had since 2004. She holds Ph.D. from Indiana University in Spanish.

JoAnne Engebrecht

Professor of Molecular and Cellular Biology

<http://biosci3.ucdavis.edu/FacultyAndResearch/FacultyProfile.aspx?FacultyID=198>

JoAnne Engebrecht is a Professor of Molecular and Cellular Biology at UC Davis. Dr. Engebrecht studies meiosis and checkpoint function in the *C. elegans* germ line. She is investigating several aspects of germ line biology using the nematode, *Caenorhabditis elegans*, as a model. The *C. elegans* germ line is particularly amenable to these studies due to its unique structural organization, the molecular genetics of the system, and the high degree of conservation with genes and pathways in humans. Dr. Engebrecht specifically investigates how checkpoint pathways are differentially regulated in the female and male germ line; how unpaired sex chromosomes of the heterogametic sex repair double strand breaks and are hidden from the checkpoint machinery; and how different checkpoint pathways interact to ensure the faithful transmission of the genome. She holds a doctorate from the Scripps Institution of Oceanography in Marine Biology (1986).

Lorena Garcia

Assistant Professor of Public Health Sciences

http://phs.ucdavis.edu/faculty_detail.php?id=532

Lorena Garcia is an Assistant Professor of Public Health Sciences. Her research focuses on health disparities, in particular obesity and diabetes (metabolic and nutritional disorders), intimate partner violence (injuries), immigrant health and acculturation in the Latino community. A public health epidemiologist, Lorena Garcia is an expert in disease and health patterns in Latinas. She studies how diabetes, obesity and cancer have become some of the worst diseases affecting Latinas in the United States. Garcia has also researched domestic violence among Latinos, working with the Southern California Injury Prevention Research Center. Garcia has found that domestic violence for Latina women worsens when they immigrate to the United States. Recently, UC Davis was awarded a National Institute on Aging (NIA) grant to fund a Latino Aging Research Resource Center and Dr. Garcia is affiliated with

this new effort. Dr. Garcia received her doctorate in public health from the Department of Epidemiology at UCLA.

Bahram Ravani

Professor of Mechanical and Aerospace Engineering, University of California, Davis

http://ahmct.ucdavis.edu/?page_id=1152

Bahram Ravani is Professor of Mechanical Engineering, University of California, Davis and past Chair of the Department of Mechanical and Aeronautical Engineering (7/96 to 7/01). Dr. Ravani currently serves as Interim Chair of the Department of Electrical and Computer Engineering and is a member of graduate programs in Biomedical Engineering and Forensic Science and Engineering. His research focuses on kinematics and dynamics, advanced stress analysis and design, computer-aided design and computations, collision mechanics and biomechanics, forensic evaluation of accidents and trauma, mechatronics and intelligent transportation systems. He is the recipient of numerous grants and awards, including the Machine Design Award from American Society of Mechanical Engineers for Research Contributions in Kinematics and Computer-Aided Design (2005), the Dedicated Service Award from the American Society of Mechanical Engineers (2004), and the Gustus Larson Memorial Award for Outstanding Achievements in Mechanical Engineering within 10 to 20 years of Graduation from the American Society of Mechanical Engineers.

Binnie Singh

Director of Faculty Relations and Development in the Office of the Vice Provost for Academic Personnel

<http://www.hr.ucdavis.edu/sdps/catalog/instructors/binnie-singh>

Binnie Singh is the Director of Faculty Relations and Development in the Office of the Vice Provost of Academic Personnel at UC Davis. She works with campus leaders, such as Deans' offices and Department chairs/managers, on resolving conflicts that involve academic employees, mediates and settles formal complaints and grievances, coordinates and delivers development/training programs for faculty, especially department chairs and new faculty, manages faculty medical leaves and issues related to disabilities and accommodations, and administers the Work Life Program for academic faculty. Binnie serves as a campus mediator, as a member of the campus' Violence Prevention Team, as a member of the Sexual Harassment Case Management Team, and as a member of the Diversity Train the Trainers group. Before coming to UC Davis, Binnie worked as the Human Resources Director for the San Francisco Fire Department and in Human Resources/Personnel with the City and County of San Francisco for 12 years. She has over 20 years of experience in a large breadth of human resources areas, including organizational development, equal employment opportunity, recruitment and retention, personnel selection, labor relations and training/development. Binnie holds a BS in psychology from UC Davis, and a Master's in organizational psychology from California School of Professional Psychology.

Jay Stachowicz

Professor of Evolution and Ecology

<http://www-eve.ucdavis.edu/stachowicz/stachowicz.shtml>

Jay Stachowicz, Professor of Evolution and Ecology at UC Davis, researches the ecological causes and consequences of biodiversity. He is the current director of the Center for Population Biology. Dr. Stachowicz has found seaweeds and marine invertebrates to be particularly tractable experimental subjects and has conducted research involving a diverse suite of invertebrate taxa including corals, hydroids, crabs, echinoderms, polychaetes, ascidians, bryozoans, and gastropods. The main issues his research has focused on the effects of species diversity on communities and ecosystems; the ecological consequences of genetic diversity; positive interactions and mutualisms; the ecology and evolution of decorator crabs; and biological invasions. Dr. Stachowicz is the recipient of the UC Davis College of

Biological Sciences Teaching Award (2011), the Aldo Leopold Leadership Fellowship (2008) and was a UC Davis Chancellor's Fellow (2007-2011). Dr. Stachowicz earned his Ph.D. from the University of North Carolina, Chapel Hill in 1998.

Social Sciences Research and Program Evaluation

Adela de la Torre, Co-PI

Interim Vice Chancellor of Student Affairs

Professor of Chicana/o Studies

<http://chi.ucdavis.edu/faculty/adela-de-la-torre>

Adela de la Torre, an agricultural economist, is a professor in the Chicana/o Studies Department and director of the Center for Transnational Health at UC Davis. Dr. de la Torre's publications and research primarily focus on social determinants of Chicano/Latino health issues, including border and binational health. In addition, her recent NIH funded work includes targeting English Language Learning student science educational disparities and developing university- and school-based partnerships to tackle this growing educational divide. Recently she was awarded a \$4.8 million USDA NIFA grant focusing on addressing childhood obesity issues within the Mexican origin community. She was appointed to the national advisory committee for the American Human Development Index, is founding and former President of the American Society of Hispanic Economists and is a founding board member of the Latino Coalition for a Healthy California. Dr. de la Torre holds a Ph.D. in Agricultural Economics from UC Berkeley (1986).

Yvette Flores

Professor of Chicana/a Studies

<http://chi.ucdavis.edu/faculty/yvette-g-flores>

Yvette Flores is a Professor of Chicana/o Studies at University of California, Davis and Co-Investigator on the UC Davis NSF ADVANCE-IT grant. Dr. Flores holds a Masters Degree in Community-Clinical Psychology from California State University, Long Beach and a doctoral degree in Clinical Psychology from UC Berkeley (1982). She has worked as a research psychologist, university professor, and licensed psychologist for almost three decades. She has done research in health psychology, in particular substance abuse treatment outcomes and intimate partner violence. Her current research examines intimate partner violence among Mexicans on both sides of the border. She is also part of a NIA funded study of caregiving among spouses and adult children of Anglo and Latino elderly with dementia. Her publications reflect her life's work of bridging clinical psychology and Chicano/Latino studies, as she foregrounds gender, ethnicity and sexualities in her clinical, teaching and research practices.

Laura Grindstaff

Professor of Sociology

<http://sociology.ucdavis.edu/people/laura-grindstaff>

Laura Grindstaff is a Professor Of Sociology and Director of the Consortium for Women and Research at the University of California, Davis and a Co-Investigator on the NSF ADVANCE-IT grant. Dr. Grindstaff teaches in the areas of popular culture, cultural sociology, gender and society, and field methods. Her research focuses broadly on American popular culture and its role in constructing gender, race, and class relations. Her book, *The Money Shot*, is an ethnographic account of daytime television talk shows. Based on interviews and participant observation behind-the-scenes, it explores how the production process works to transform the private experiences of "ordinary" people into extraordinary public performances, and what these performances tell us about class inequality in the U.S. Currently she is writing a series of articles on cheerleading based on more than ten years of ethnographic research with

colleague Emily West. The authors use cheerleading as a vehicle to examine how and why young people embrace particular cultural scripts regarding gender and sexuality, why young people participate in cheerleading when other sports are open to them, and current tensions between the "feminine" realm of cheerleading and the "masculine" realm of sport. Dr. Grindstaff holds a Ph.D. from UC Santa Barbara (1996).