## **FACULTY CONDUCTING SUSTAINABILITY RESEARCH** Data from research.berkeley.edu, Faculty Expertise, pulled 1/18-23/2013. Only UC Berkeley faculty members with permanent academic appointments are listed in this database.

Michelle Wilde Anderson Daniel A.	environmental law, land use, local government		
Daniel A		Boalt Hall School of Law	у
Farber	constiutional law, environmental law, freedom of speech	Boalt Hall School of Law	у
Peter Larsen	Arctic, economic impacts of climate change, energy economics, energy efficiency, energy services companies, environmental economics, extreme events, infrastructure, policy, resource	Boalt Hall School of Law	у
Peter S. Menell	entertainment law, environmental law & policy, intellectual property, property law	Boalt Hall School of Law	у
Joseph L. Sax	environmental law and policy, environmental regulation	Boalt Hall School of Law	у
Leo K. Simon	<u>economics</u>	College of Natural Resources, Department of Agricultural & Resource Economics	у
<u>Sofia Villas-</u> <u>Boas</u>	economics, industrial organization and applied econometrics	College of Natural Resources, Department of Agricultural & Resource Economics	у
Paul L. Gersper	agriculture, ecosystem science, forestry, soils	College of Natural Resources, Department of Environmental Science, Policy & Management	у
Louise N. Glass	biotechnology, plant and microbial biology	College of Natural Resources, Department of Plant and Microbial Biology	у
Steven E. Lindow	bacterial plant diseases, microbial biology, microbial ecology, plant biology, plant disease epidemiology, plant frost control	College of Natural Resources, Department of Plant and Microbial Biology	у
Sheng Luan	microbial biology, plant biology	College of Natural Resources, Department of Plant and Microbial Biology	у
Michael Anderson	environmental economics, health economics	Department of Agricultural & Resource Economics	y
Peter Berck	agricultural & resource economics, agricultural production, environmental economics, natural resource economics	Department of Agricultural & Resource Economics	y
Anthony C. Fisher	economics of climate change, environmental and natural resource economics	Department of Agricultural & Resource Economics	y

Meredith Fowlie	energy efficiency, energy markets, industrial organization, market-based environmental regulation, renewable energy resources.	Department of Agricultural & Resource Economics
Ann E. Harrison	economics, environmental policy, labor management & policy	Department of Agricultural & Resource Economics
Larry S. Karp	economics, environmental policy	Department of Agricultural & Resource Economics
Jeffrey T. LaFrance	agricultural policy, consumer choice, econometrics and statistics, economics, environmental policy, natural resource use, nutrition and health	Department of Agricultural & Resource Economics
leffrey M. Perloff	agricultural economics, antitrust, econometrics, economics, industrial organization, labor, marketing, trade	Department of Agricultural & Resource Economics
Gordon Rausser	bargaining and negotiation theory, biotechnology, environmental policy, futures and options markets, industrial organization and antitrust analysis, regulatory policy, resource economics	Department of Agricultural & Resource Economics
Elisabeth Sadoulet	agriculture, economics, labor management & policy	Department of Agricultural & Resource Economics
David Sunding	economics of law, endangered species, environmental economics, water, water quality, wetlands	Department of Agricultural & Resource Economics
Brian Wright	agricultural policy, catastrophe insurance, commodity markets, economics, innovation, intellectual property, patents, speculation, storage	Department of Agricultural & Resource Economics
David Zilberman	agricultural and environmental policy, biofuels, biotechnology, marketing, natural resources, risk management, the economics of innovation, water	Department of Agricultural & Resource Economics
Maximilian Auffhammer	air pollution, climate change, econometrics, energy economics, environmental economics	Department of Agricultural & Resource Economics, International and Area Studies
Oonald Moore	Africa, and identity, cultural politics, development, environment, ethnicity, governmentality, postcolonial theory, race, spatiality and power	Department of Anthropology
_aura Nader	comparative ethnography of law, comparative family organizations, conflict, contemporary U.S., controlling processes, dispute resolution, ethnology of the Middle East, Latin America, Mexico, social anthropology, the anthropology of professional mind-sets	Department of Anthropology

Mark S. T. Anderson	architecture, architecture in China, architecture in Japan, BIM, building construction, building design, building integrated modeling, design-build, housing design, integrated project delivery, IPD, modular, net zero energy desig, nurban design, prefabricated, school design, urban water	Department of Architecture
Edward Arens	architectural aerodynamics, building environmental control, indoor environment, occupant surveys, thermal comfort, ventilation, wind	Department of Architecture
Harrison S. Fraker	architecture, daylighting, environmental design, passive solar, sustainable design, sustainable systems, transit oriented neighborhoods, urban design, urban design principles	Department of Architecture
Maria Paz Gutierrez	biologically inspired technologies, multifunctional materials, next- generation building systems, self-regulated facades	Department of Architecture
Stefano Schiavon	building energy efficiency, energy simulation, indoor air quality, indoor environment quality, personal environmental control system, post-occupancy evaluation, simulation and verification, surveys, sustainable building design, thermal comfort, underfloor air distribution	Department of Architecture
Susan Ubbelohde	architecture, California residential industry, climate and architecture, Correa, culture and practice, daylighting design tools, Doshi, India, Kahn, Le Corbusier, low-energy design, sky simulator design, software evaluation	Department of Architecture
Adam Arkin	bioenergy, Biomedicine, Bioremediation, Environmental Microbiology of Bacteria and Viruses, Systems and Synthetic Biology	Department of Bioengineering
Jay D. Keasling	biochemical engineering, biodegradable polymers, biofuels, chemical engineering, degradation of environmental contaminants, environmentally friendly synthesis, metabolic engineering of microorganisms, mineralization of organophosphate nerve agents, pesticides	Department of Bioengineering, Department of Chemical Engineering
Harvey W. Blanch	applied enzymology, biochemical engineering, biofuels, bioproduct recovery, biotechnology, chemical engineering, DNAelectrophoresis, Mammalian Cell Metabolism, protein interactions	Department of Chemical Engineering
Enrique Iglesia	alkane activation deoxygenatiion and desulfurization catalysis, catalytic materials, chemical engineering, chemical reaction engineering, heterogeneous catalysis, hydrogen generation, methane and biomass coversion processes, refining processes, zeolites	Department of Chemical Engineering
<u>Danielle</u> <u>Tullman-Ercek</u>	bioenergy, bionanotechnology, protein engineering, synthetic biology	Department of Chemical Engineering
Wenjun Zhang	biofuel synthesis, biomolecular engineering, chemical biology, enzyme discovery and characterization, natural product biosynthesis, synthetic biology	Department of Chemical Engineering
A. Paul Alivisatos	nanoscience, physical chemistry, semiconductor nanocrystals	Department of Chemistry
Christopher J. Chang	bioinorganic chemistry, chemical biology, chemistry, general physiology, inorganic chemistry, neuroscience, new chemical tools for biological imaging and proteomics, new metal complexes for energy catalysis and green chemistry, organic chemistry	Department of Chemistry
Samuel Markowitz	environmental chemistry, nuclear chemistry, nuclear reactions for chemical analyses	Department of Chemistry

T. Don Tilley	and reactivity studies on transition metal compounds; catalysis; new chemical transformations; advanced solid state materials; renewable energy; solar fuels, inorganic, organometallic, polymer and materials chemistry; synthetic, structural	Department of Chemistry
Kristie Boering	atmospheric chemistry, carbon dioxide, climate change, earth and planetary science, environmental chemistry, isotopic compositions of atmospheric trace gases, methane, molecular hydrogen, nitrous oxide, ozone, physical chemistry, stratospheric ozone	Department of Chemistry, Department of Earth and Planetary Science
Ronald C. Cohen	air pollution, analytical chemistry, atmospheric chemistry, climate, clouds, CO2, environmental chemistry, nitrogen oxides, ozone, physical chemistry, water	Department of Chemistry, Department of Earth and Planetary Science
Robert B. Cervero	city and regional planning, international transportation, transportation & land use, transportation & urban development, transportation planning	Department of City & Regional Planning
<u>Daniel</u> <u>Chatman</u>	agglomeration, housing, transportation, travel behavior, urban planning	Department of City & Regional Planning
<u>Elizabeth</u> <u>Deakin</u>	city and regional planning, energy and the environment, institutions and organizations, land use policy and planning; legal and regulatory issues, new technologies, planning and analysis, transportation policy, urban design	Department of City & Regional Planning
Malo Hutson	community development, population health, urban and regional planning, urban policy	Department of City & Regional Planning
Elizabeth Macdonald	urban design	Department of City & Regional Planning
Paul Waddell	land use models, transportation models, urban sustainability, UrbanSim	Department of City & Regional Planning
John D. Radke	city and regional planning, database design and construction, geographic information systems, landscape architecture and environmental planning, pattern recognition computational morphology, spatial analysis	Department of City & Regional Planning, Landscape Architecture & Environmental Planning
<u>Michael</u> Southworth	analysis, city and regional planning, design, design of public space, environmental planning, landscape architecture, management, morphology of the post-industrial city	Department of City & Regional Planning, Landscape Architecture & Environmental Planning
Norman Abrahamson	civil and environmental engineering, earthquake ground motions, spectral attenuation relations	Department of Civil and Environmental Engineering
Lisa Alvarez- Cohen	biodegradation of environmental contaminants, biological hazardous waste treatment, bioremediation of groundwater pollutants such as PCE, BTEX, DCA, DCE, Dioxane, environmental microbiology, fire-fighting foams, metagenomics, microbial carbon cycling, molecular tools for microbial ecology, MTBE, NDMA, PBDEs, PFOA, PFOS, TCA, TCE, VC	Department of Civil and Environmental Engineering
Abolhassan Astaneh-Asl	blast protection, bridges, composite structures, connections in steel structures, progressive collapse, seismic design, Steel structures	Department of Civil and Environmental Engineering
Robert G. Bea	construction, decommissioning, design, human and organizational factors, maintenance, ocean engineered systems, operations, quality assurance, quality control, reliability, risk assessment, risk management	Department of Civil and Environmental Engineering
<u>Fotini Chow</u>	atmospheric boundary layer flow, coupled land-atmosphere modeling, environmental fluid mechanics, flow over complex terrain, large-eddy simulation, turbulence modeling, urban dispersion modeling, wind energy applications	Department of Civil and Environmental Engineering
Armen Der Kiureghian	earthquake engineering, random vibrations, risk analysis, structural reliability	Department of Civil and Environmental Engineering
John A. Dracup	hydroclimatology, surface water hydrology, water resources systems	Department of Civil and Environmental Engineering
Ashok Gadgil	buildings energy efficiency, developing countries, drinking water, energy efficiency, fuel-efficient stoves, indoor air quality	Department of Civil and Environmental Engineering

Robert Harley	air pollution, air quality, atmospheric chemistry, diesel, emission inventory, gasoline, motor vehicle emissions, ozone, photochemical air quality modeling, sustainable transportation	Department of Civil and Environmental Engineering
Slawomir W. Hermanowicz	biofilms, biological processes for water quality, membrane processes, physical sustainability, water quality management, water reuse	Department of Civil and Environmental Engineering
Alexander J. Horne	behavior of pollutants in an aqueous environment, water pollution	<u>Department of Civil and</u> <u>Environmental Engineering</u>
Arpad Horvath	biofuels, construction, energy, environmental management, green design, infrastructure systems, LCA, life cycle assessment, sustainability, transportation, water	Department of Civil and Environmental Engineering
James R. Hunt	environmental data management, quantification of contaminant transport processes in natural and altered environments, water resources	Department of Civil and Environmental Engineering
David Jenkins	biological wastewater treatment, wastewater chemistry, water chemistry	Department of Civil and Environmental Engineering
<u>Samer</u> Madanat	transportation infrastructure management, transportation sustainability, transportation systems analysis	Department of Civil and Environmental Engineering
Povindar K. Mehta	admixtures, aggregates, cements, composite materials, concrete, industrial waste management and waste reuse	Department of Civil and Environmental Engineering
Jack P. Moehle	earthquake engineering, high-rise buildings, laboratory testing, lifeline systems, performance-based earthquake engineering, rehabilitation (retrofitting), reinforced concrete, structural engineering	Department of Civil and Environmental Engineering
William W. Nazaroff	aerosols, bioaerosol dynamics, control techniques, environmental tobacco smoke, exposure analysis, indoor air quality, pollutant-surface interactions, semivolatile organic compounds, source characterization, transport/mixing phenomena	Department of Civil and Environmental Engineering
Kara L. Nelson	appropriate technologies, detection and inactivation of pathogens in water and sludge, natural systems for water, wastewater treatment	Department of Civil and Environmental Engineering
Yoram Rubin	contaminant transport, geostatistics, hydrogeology, risk assessment	<u>Department of Civil and</u> <u>Environmental Engineering</u>
David L. Sedlak	engineered treatment wetlands, fate and transport of and transformation of chemicals in the aquatic environment, urban water infrastructure, water reuse and water recycling	Department of Civil and Environmental Engineering
Raymond B. Seed	geotechnical earthquake engineering, performance of dams, slope stability, soil/structure interaction, waste fills	Department of Civil and Environmental Engineering
Nicholas Sitar	geotechnical earthquake engineering, groundwater remediation, rock erosion, seismic earth pressure, seismic slope stability, wireless sensors	Department of Civil and Environmental Engineering
Jerome F. Thomas	applied chemistry: air, corrosion, water	Department of Civil and Environmental Engineering
Sally E. Thompson	arid and semi-arid watersheds and ecosystems, Ecohydrology, nonlinear dynamics, pattern formation, plant physiology, spatial ecology, surface hydrology, water resource sustainability	Department of Civil and Environmental Engineering
<u>Iris D.</u> Tommelein	adative leadership, building information modeling BIM, civil infrastructure systems, construction process engineering, design management, integrated project delivery IPD, lean construction, lean production, life-cycle engineering, megaproject delivery, supply-chain management, sustainability, virtual design and construction VDC.	Department of Civil and Environmental Engineering
Richard Allen	seismology earthquakes earthquake hazard mitigation earth structure tomography natural hazards	Department of Earth and Planetary Science
James K. B. Bishop	aquatic chemistry, Carbon Explorer, Carbon Flux Explorer., chemical oceanography, land - ocean biogeochemistry, marine biogeochemistry, ocean carbon cycle dynamics, ocean sensors and autonomous observing systems, remote sensing	Department of Earth and Planetary Science

George H. Brimhall	earth and planetary sciences, geology, mineral exploration science, non-renewable resource issues, ore-forming processes, photo-voltaic semi-conductor resources	Department of Earth and Planetary Science
James Kirchner	biogeochemistry, earth and planetary sciences, evolutionary ecology, geomorphology, watershed hydrology & geochemistry	Department of Earth and Planetary Science
Chi-Yuen Wang	earth & planetary science	Department of Earth and Planetary Science
lnez Fung	ecosystem scienes, environmental policy, global change	Department of Earth and Planetary Science, Department of Environmental Science, Policy & Management
Kurt M. Cuffey	climate, climate history, continuum mechanics, geographical thought, geomorphology, glaciers, glaciology, stable isotopes	Department of Earth and Planetary Science, Department of Geography
Lynn Ingram	California climate change, earth and planetary science, geochemical data, geography, geology, geophysics, paleoclimate, paleoclimatic and paleo-environmental reconstruction in aquatic environments using sedimentological, paleontological, paleosalinity, shellmounds, stratigraphy with strontium isotopes	Department of Earth and Planetary Science, Department of Geography
Edward Miguel	Africa, civil conflict, development economics, education, ethnic divisions, health, human capital, pre-analysis plans, social capital, war, water.	Department of Economics
Reginald H. Barrett	environmental science, human impact on wildlife, introduced species, land use planning, policy & management, species and land use ecology, terrestrial vertebrates, tule elk, wild pigs	Department of Environmental Science, Policy & Management
John J. Battles	adaptive management, carbon ecology and storage, community ecology, ecological integrity, ecosystem dynamics, forest ecology, forest inventory and analysis, forestry, Hubbard Brook, northern forest, Sierra Nevada, tree demography	Department of Environmental Science, Policy & Management
Justin S. Brashares	conservation, ecology, management	Department of Environmental Science, Policy & Management
Stephanie Carlson	conservation biology, evolutionary ecology, fish ecology, freshwater ecology, northern California rivers, Pacific salmon, stream ecology	Department of Environmental Science, Policy & Management
Claudia Carr	economics, environmental policy, environmental science, labor management & policy, water resource	Department of Environmental Science, Policy & Management
Ignacio Chapela	agriculture, biotechnology, environmental science, microbial biology, policy and management	Department of Environmental Science, Policy & Management
Mary K. Firestone	environmental policy, environmental science, milcrobial biology, policy & management, soils, wildlife	Department of Environmental Science, Policy & Management
Louise P. Fortmann	community control, democratizing science, gender, participatory research, poverty, property, Science and Technology studies, society	Department of Environmental Science, Policy & Management
Douglas W. Fuerstenau	colloid chemistry to mineral/water systems; fine particle science, extraction of metals, extractive metallurgy; application of surface, flotation, mineral processing, pelletizing; hydrometallurg, technology; principles of comminution	Department of Environmental Science, Policy & Management
<u>Matteo</u> Garbelotto	forestry, microbial biology, plant biology, plant pathology ecosystem sciences, sudden oak death	Department of Environmental Science, Policy & Management
Wayne M. Getz	Africa, disease ecology, resource management, wildlife conservation	Department of Environmental Science, Policy & Management
Allen Goldstein	air pollution, atmospheric chemistry, biogeochemistry, environmental science, global change	Department of Environmental Science, Policy & Management
David H. Kavanaugh	Climate Change Science, phylogenetics, Systematic Entomology	Department of Environmental Science, Policy & Management
Carolyn Merchant	environmental history, ethics, philosophy	Department of Environmental Science, Policy & Management

Max Moritz	climate change, ecosystem resilience, fire ecology and management, landscape ecology, spatial modeling	Department of Environmental Science, Policy & Management
<u>Céline Pallud</u>	biogeochemical cycles, biogeochemistry, fate and transport of nutrients, iron reduction, littoral sediments, metals and contaminants, nitrate reduction, selenium kinetics of organic matter degradation, soil aggregates, soil and environmental biogeophysics, spatial variation in biogeochemical processes, sulfate reduction, wetland soils	Department of Environmental Science, Policy & Management
Jerry A. Powell	biodiversity, biosystematics, comparative biology, entomology, environmental science, microlepidoptera, morphology, moth rearing, moths	Department of Environmental Science, Policy & Management
<u>Vincent H.</u> Resh	ecology, monitoring, pollution, water resources, water-borne diseases	Department of Environmental Science, Policy & Management
Scott L. Stephens	environmental biology/ecology, fire, fire behavior, fire ecology, forestry, global change, soils, sudden oak death	Department of Environmental Science, Policy & Management
Neil Tsutsui	Argentine ants, chemical ecology, genetics, genomics, honey bees, insect behavior, pheromones	Department of Environmental Science, Policy & Management
Kipling Will	environmental science, health and nutrition, pest management, policy and management	Department of Environmental Science, Policy & Management
David L. Wood	forestry, microbial biology, pest management	Department of Environmental Science, Policy & Management
Rob York	forest dynamics, forest ecology, forest management, forest operations, forest regeneration, Giant sequoia, mixed conifer forest, silviculture	Department of Environmental Science, Policy & Management
John E. Casida	environmental science, insect biology, molecular toxicology, pest management, pesticides	Department of Environmental Science, Policy & Management, Department of Nutritional Sciences & Toxicology
John Chiang	climate change, climate dynamics, ocean-atmosphere interactions, paleoclimate	Department of Geography
Norman Miller	climate change impacts to sociology-economic and ecological sectors, hydroclimate modeling and assimilation and analysis	Department of Geography
Robert Rhew	atmospheric chemistry and composition, boreal forest, chaparral, coastal salt marsh, desert, geography, grassland, halogen biogeochemistry, stratospheric ozone depletion issues, terrestrial-atmosphere exchange of trace gases, tundra	Department of Geography
Nathan Sayre	climate change, community-based conservation, endangered species, environmental geography, environmental history, human-environment interactions, pastoralism, political ecology, ranching, range science and management, rangelands, scale, Southwestern US, suburbanization	Department of Geography
Richard A. Walker	California, capitalism, cities, class, economic geography, environment, geography, politics, race, regional development, resources, urbanism	Department of Geography
Michael J. Watts	Africa, development, geography, Islam, Marxian political economy, peasant societies, political ecology, political economy, social and and cultural theory, social movements, South Asia, U.S. agriculture	Department of Geography
Harry N. Scheiber	American constitutional development, American legal history, federalism and state-federal relations, Law of the Sea (international law), ocean law and policy	Department of History
David Ackerly	adaptation, california biodiversity, climate change	Department of Integrative Biology
Anthony D. Barnosky	biogeography, climate change, conservation biology, ecology, evolution, extinction, global change, macroecology, mammals, paleobiology, paleoecology, paleontology	Department of Integrative Biology

Roy L. Caldwell	aggressive behavior, animal behavior, behavioral ecology, cephalopods, communication, coral reef restoration, crustaceans, ecology, evolution, Invertebrates, marine biology, mating systems, octopus, sensory ecology, stomatopods	Department of Integrative Biology
Thomas J. Carlson	Africa, Asia, ecology, ecosystem management, ethnobotany, ethnoecology, ethnoepidemiology, evolution of human disease, medicine, molecular biology, North America, nutritional ethnobotany, Pacific Islands, pharmacology, South America, systematics	Department of Integrative Biology
Todd Dawson	adaptations of plants, carbon, ecosystem processes, evolutionary plant ecology, nitrogen, physiological plant ecology, water	Department of Integrative Biology
William Lidicker	conservation biology, ecology, mammalogy	Department of Integrative Biology
Jere Lipps	Antarctic habitats, astrobiology, Charles Darwin, coral reef, ecology, evolution of marine biotas, molecular phylogenetics, paleoenvironments, paleontology, seismic histories	Department of Integrative Biology
Craig Moritz	demography, diversity of faunas, eastern South America, ecology, molecular evolution, northeastern Australia, rainforest biotas, western North America	Department of Integrative Biology
Thomas M. (Zack) Powell	aquatic ecology, climate, estuaries, fish, Invertebrates, lakes, ocean, oceanography, planktonic ecosystems, remote sensing	Department of Integrative Biology
Mary E. Power	acid mine drainage, food webs, freshwater ecology, northern California rivers, trophic dynamics, watersheds	Department of Integrative Biology
<u>David Wake</u>	evolutionary and conservation biology	Department of Integrative Biology
Donald P. Weston	bioaccumulation, deposit-feeding invertebrates, ecotoxicology, environmental effects of antibiotics, invertebrate ecology, management of contaminated sediments, pesticides, pollutant exposure	Department of Integrative Biology
Jungiao Wu	energy materials, nanotechnology, semiconductors	Department of Materials Science and Engineering
M. Reza Alam	Fluid Flow Control, Nonlinear Dynamical Systems, Nonlinear Wave Mechanics, Ocean and Coastal Waves Phenomena, ocean renewable energy, Ocean Renewable Energy (Wave, Theoretical Fluid Dynamics, Tide and Offshore Wind Energy)	Department of Mechanical Engineering
Francesco Borrelli	automotive control systems, distributed and robust constrained control, energy efficient buildings, manufacturing control systems, model predictive control.	Department of Mechanical Engineering
Van P. Carey	biothermodynamics, computer aided thermal design, mechanical engineering, microscale thermophysics, non-equilibirum thermodynamics, statistical thermodynamics, thermodynamic analysis of green manufacturing	Department of Mechanical Engineering
<u>David Dornfeld</u>	flexible/lean manufacturing systems, green and sustainable manufacturing, intelligent sensors and signal processing, mechanical engineering design, precision manufacturing processes, process modeling.	Department of Mechanical Engineering
Carlos Fernandez- Pello	biofuels, combustion, fire, heat transfer, ignition and fire spread, small scale energy generation, smoldering and flaming, wildland fire spotting	Department of Mechanical Engineering
<u>Michael</u> <u>Frenklach</u>	chemical kinetics; computer modeling; combustion chemistry; pollutant formation (NOx, diamond powders; interstellar dust formation, silicon carbide, soot); shock tube; chemical vapor deposition of diamond films; homogeneous nucleation of silicon	Department of Mechanical Engineering
Ralph Greif	bio heat transfer, buoyancy transport, cooling at the chip level, fuel cells, heat and mass transfer, laser surface interactions, materials processing, micro scale transport, nuclear reactor safety, phase change, reacting flows, semiconductor wafers	Department of Mechanical Engineering

Costas P. Grigoropoulos	energy systems and technology, heat transfer, laser materials processing, nano-manufacturing	Department of Mechanical Engineering
Patrick Pagni	fire modeling, fire physics, fire safety engineering, post earthquake fires	Department of Mechanical Engineering
Robert F. Sawyer	air pollutant formation and control, combustion chemistry, health effects of air pollution, motor fuels, motor vehicle emissions, regulatory policy	Department of Mechanical Engineering
Ronald W. Yeung	green ships, Helmholtz resonance, hydromechanics, mathematical modeling, multi-hull flow physics, naval architecture, numerical fluid mechanics, ocean energy, ocean processes, offshore mechanics, separated flows, ship motion instabilities, stratified fluid flow, tank resonance, tidal energy, vortex-induced vibrations, wave-vorticity interaction	Department of Mechanical Engineering
Kameshwar Poolla	control, cybersecurity, estimation, integrated circuit design and manufacturing, modeling, renewable energy, smart grids	Department of Mechanical Engineering, Division of Electrical Engineering/EECS
lexander ilazer	design of fluorescent probes, environmental sciences, macromolecular complexes, natural resource management, photosynthetic systems, phycobiliproteins, protein structure-function relationships	Department of Molecular & Cell Biology
oonhong Ahn	environmental impact of severe accidents, mathematical safety assessment of deep geologic repository, radioactive waste management, transport of radionuclides in geologic formations	Department of Nuclear Engineering
Paul L. Chambré	analytical and numerical methods in neutron transport theory, analytical methods in radioactive waste management, applied mathematics, coupled thermal-hydraulic-neutronic reactor analysis, nuclear engineering, space-time reactor kinetics	Department of Nuclear Engineering
William E. Kastenberg	ethical issues in emerging technologies, nuclear reactor safety, risk assessment, risk management	Department of Nuclear Engineering
er F. Peterson	heat and mass transfer, multiphase transport, nuclear engineering, nuclear materials management, nuclear reactor design, radioactive waste, safety, thermal hydraulics	Department of Nuclear Engineering
George Chang	food safety, health and nutrition, microbial biology	Department of Nutritional Sciences & Toxicology
hris D. Vulpe	copper, ecotoxicogenomics, ecotoxicology, environmental, gene expression, genetics, genomics, iron, susceptibility, toxicology, water quality	Department of Nutritional Sciences & Toxicology
uford Price	climate research, evolution, glacial ice, metabolism, microbes, neutrino astrophysics, volcanism	Department of Physics
Arthur Rosenfeld	building technologies, building ventilation, compact fluorescent lamps, DoE-2 computer program for the energy design of buildings, electronic ballasts for fluorescent lamps, energy analysis, indoor environment, low-emissivity, physics, selective windows	<u>Department of Physics</u>
Anastasios Melis	bioenergy, biofuels, biophysics, enzymology, photosynthesis	Department of Plant and Microbial Biology
<u>chris</u> omerville	arabidopsis, biochemistry, bioenergy, biofuels, biotechnology, cell biology, cell walls, cellulose, cellulose synthase, polysaccharides	Department of Plant and Microbial Biology
lobert A. lagan	corporations, environmental law, labor law, labor relations	Department of Political Science
lison Post	infrastructure, regulation, water and sanitation Bayesian statistics, climate, functional data analysis, spatial	Department of Political Science
ari Kaufman	statistics	<u>Department of Statistics</u>
<u>li Javey</u>	energy, nanoelectronics, nanotechnology	Division of Electrical Engineering/EECS
Seth R. Sanders	electric machine design, high frequency power conversion circuits, nonlinear circuit theory, renewable energy, system theory	Division of Electrical Engineering/EECS

Costas J. Spanos	energy efficiency, integrated circuits, semiconductor manufacturing, sensors, smart buildings, solid-state devices	Division of Electrical Engineering/EECS
<u>Duncan</u> Callaway	and system analysis of energy technologies and their impact, modeling and control of aggregated storage devices, power management	Energy & Resources Group
<u>John Harte</u>	biodiversity, biogeochemistry, climate change, energy, environmental policy, environmental science, field manipulation experiments, global change, mathematical modeling, study of patterns in nature, theoretical ecology	Energy & Resources Group
<u>Daniel</u> <u>Kammen</u>	energy, environmental resource management, hazard assessment, methodological studies of forecasting, nuclear engineering, public policy, renewable energy technologies, resources, risk analysis as applied to global warming	Energy & Resources Group
Richard B. Norgaard	ecological economics, energy, energy economics, environmental epistemology, environmental problems challenging scientific understanding, globalization effects, policy process, resources, tropical forestry and agriculture, understanding of systems	Energy & Resources Group
<u>Isha Ray</u>	access to water for the rural and urban poor developing countries, common property resource management, energy, non-profit sector, on-farm water use, politics and economics of water, resources, sustainable rural development, transnational river conflicts	Energy & Resources Group
<u>Catherine</u> <u>Koshland</u>	air pollution, chlorinated hydrocarbons, control strategies in urban airsheds, energy, environmental human health, industrial ecology, mechanistic analyses of combustion products in flow reactors, metals, particulates, pollutant formation, resources	Energy & Resources Group, Goldman School of Public Policy
Barbara Allen- Diaz	biodiversity, grasslands, grazing, oak woodlands, plant ecology, rangeland ecology, rangeland management, water resources, wetlands	Environmental Science, Policy & Management
Miguel Altieri	agriculture, environmental science, pest management	Environmental Science, Policy & Management
Ronald G. Amundson	ecosystems, environmental history & ethics, environmental science, isotope biogeochemistry, pedology, soils, soilsbiogeochemistry	Environmental Science, Policy & Management
<u>Dennis</u> Baldocchi	biometeorology, biosphere-atmosphere trace gas fluxes and exchanges, environmental policy, plant canopy micrometeorology	Environmental Science, Policy & Management
<u>James W.</u> <u>Bartolome</u>	biodiversity, environmental science, fire, grasslands, grazing, mediterranean ecosystems, plant ecology, rangelands	Environmental Science, Policy & Management
Steven R. Beissinger	behavioral and population ecology, climate change, conservation biology, endangered species, environmental science, ornithology, wildlife	Environmental Science, Policy & Management
Richard S. Dodd	environmental policy, environmental science, forestry, plant biology, policy & management, wildlife	Environmental Science, Policy & Management
Sally K. Fairfax	environmental policy, environmental science, forestry, plant biology, policy & management, wildlife	Environmental Science, Policy & Management
Gordon W.	& management, environmental policy, environmental	Environmental Science, Policy &
Frankie Rosemary G.	evolution and conservation biology, insect biology, oceanic	Management Environmental Science, Policy &
Gillespie	islands, spiders, systematics environmental policy, forest economics, forestry, resource	Management Environmental Science, Policy &
J. Keith Gilless	economics, wildland fire	<u>Management</u>
Peng Gong	digital image analysis, ecological measurement, ecosystem modeling, environmental science, forests, remote sensing, sensors, spectral analysis	Environmental Science, Policy & Management
Andrew P. Gutierrez	agricultural ecosystems, environmental policy, environmental science, pest management, transgenic crops	Environmental Science, Policy & Management

<u>Lynn</u> <u>Huntsinger</u>	conservation biology, ecosystems, livestock, Native American history, natural resources, rangeland ecology and management	Environmental Science, Policy & Management
Nina Maggi Kelly	ecosystem sciences, forests, geoinformatics, participatory web, remote sensing, wetlands	Environmental Science, Policy & Management
<u>Isao Kubo</u>	agriculture, insect biology, pest management	Environmental Science, Policy & Management
John G. McColl	ecosystem sciences, forest soils, land management, nutrient cycling, soil science	Environmental Science, Policy & Management
Dale R. McCullough	environmental science, wildlife biology, wildlife management	Environmental Science, Policy & Management
William McKillop	forest economics, forest management, forest policy, forestry economics, timber supply	Environmental Science, Policy & Management
Nicholas J. Mills	biological control of insect pests, Cydia pomonella, ecology of insect parasitism, environmental science, griculture, Hyalopterus pruni, microbial biology, natural enemy biology, parasitoids, pest management	Environmental Science, Policy & Management
Katharine V. Milton	conservation, dietary ecology, digestive physiology, environmental science, host-parasite interactions, human ecology, primatology, tropical forests	Environmental Science, Policy & Management
Kevin L. O'Hara	environmental science, forest management, forest restoration, forestry, silviculture, stand dynamics	Environmental Science, Policy & Management
Kate O'Neill	ecological modernization theory, environmental movements, environmental politics and policy, globalization, hazardous waste, multilateral environmental agreements	Environmental Science, Policy & Management
<u>Dara O'Rourke</u>	consumers, environmental justice, globalization, information- based regulation, labor and environmental policy, supply chains, sustainability	Environmental Science, Policy & Management
Nancy Lee Peluso	environmental policy, environmental sociology, environmental studies, forestry, geopolitics of resource control, political ecology, resource management and policy, rural development	Environmental Science, Policy & Management
Matthew Potts	bioeconomics, biological reserve design, mathematical and theoretical ecology, modeling of coupled human-natural systems, spatial ecology, sustainable forest management, tropical ecology	Environmental Science, Policy & Management
<u>George</u> <u>Roderick</u>	biodiversity, climate change, conservation, invasive species, population genetics	Environmental Science, Policy & Management
Whendee Silver	biogeochemistry, climate change, ecosystem ecology, global change, greenhouse gases, management, rangelands, soils, tropical forestry	Environmental Science, Policy & Management
David Winickoff	bioethics, biotechnology, constitutional law, international law, scientific ethics, technology and society, university technology transfer	Environmental Science, Policy & Management
<u>Lee Friedman</u>	climate change, criminal justice, economic organization, environmental markets, public policy, school finance, utility regulation	Goldman School of Public Policy
<u>Margaret</u> <u>Taylor</u>	climate change, engineering, environmental management, environmental markets, environmental policy, intellectual property, international R&D policy, organizational behavior/learning, public policy, regulation, technological innovation, technology policy	Goldman School of Public Policy
Sara Beckman	business, environmental supply chain management, innovation, management, operations strategy, product development	<u>Haas School of Business</u>
<u>Severin</u> <u>Borenstein</u>	airline competition, applied microeconomics, electricity deregulation, energy markets, industrial organization, market pricing & mp; competition	Haas School of Business
<u>Christine</u> <u>Rosen</u>	American business history, corporate environmental management industrial ecology, history of pollution regulation, new developments in corporate environmental management	Haas School of Business

<u>Catherine</u> <u>Wolfram</u>	climate change, energy and environmental markets, energy efficiency, regulation of business	Haas School of Business
Walter Hood	citizen participation, community development, design of architecture and landscape, environmental planning, landscape architecture, landscape design, urban design	<u>Landscape Architecture &amp;</u> <u>Environmental Planning</u>
<u>Linda Jewell</u>	environmental planning, landscape architecture, landscapes and structures, on-site design decisions, site planning, sustainable construction, urban design	Landscape Architecture & Environmental Planning
G. Mathias Kondolf	ecological restoration, environmental geology, environmental impact assessment, environmental planning, fluvial geomorphology, hydrology, landscape architecture, riparian zone management	Landscape Architecture & Environmental Planning
Joe R. McBride	urban forestry	<u>Landscape Architecture &amp;</u> <u>Environmental Planning</u>
<u>Marcia</u> <u>McNally</u>	activism and collaboration, citizen participation, decision making tools, environmental planning, landscape architecture, neighborhood landscape as training ground, planning and decision making	Landscape Architecture & Environmental Planning
Judith Stilgenbauer	emergent urbanism, green infrastructure, landscape architecture, planting design, process-driven design, urban landscape design	Landscape Architecture & Environmental Planning
Michael Pollan	agriculture, cooking, environment, food, gardening, journalism, nutrition, obesity, science	School of Journalism
Patricia Buffler	cancer epidemiology, childhood cancers, environmental health, molecular epidemiology, public health	School of Public Health
S. Katharine Hammond	environmental health sciences, public health	School of Public Health
James Robinson	environmental health sciences, health policy and management, health services and policy analysis, public health	School of Public Health
James Seward	environmental health sciences, public health	School of Public Health
Allan Smith	biostatistics, environmental health sciences, epidemiology, public health	School of Public Health
Kirk R. Smith	air pollution, climate change, environmental health science, international health, public health	School of Public Health
Robert Spear	environmental health science, public health	School of Public Health
<u>Ira Tager</u>	aging, biostatistics, environmental health sciences, epidemiology, maternal & child health, public health	School of Public Health

Total # faculty members # doing sustainability research