

Professor	Department(s)	Centers and Research Units	Related to enviro./econ./soc.	Brief Description	Website
Alagona, Peter	History; Environmental Studies	Environmental Humanities Initiative (EHI)	enviro.	Dr. Alagona's research focuses on biological diversity and endangered species. His recently published book, titled "After the Grizzly: Endangered Species and the Politics of Place in California," explores the history of endangered species conservation in California and beyond. Professor Alagona is also involved in studying the history of the UC Natural Reserve System and its contributions to environmental science and management in a project titled "A Sanctuary for Science."	http://www.history.ucsb.edu/people/person.php?account_id=284
Alam, Ershadul	Chemical Engineering		enviro.	Dr. Alam has conducted research on lightweight structural materials, especially magnesium based, that if used, will cost less in terms of fuel, reducing CO2 emissions.	
Anderson, Sarah	Environmental Science & Management	Earth Research Institute (ERI)	enviro.; econ.; soc.	Dr. Anderson's research focuses on understanding how the political system affects and is affected by environmental issues. She often focuses on wildfire management as an example of the complex governance required for environmental problems.	http://fiesta.bren.ucsb.edu/~sanderson/
Armbruster-Sandoval, Ralph	Chicano Studies		econ.; soc. (sustainable purchasing)	Dr. Armbruster-Sandoval specializes in urban and racial studies. He is the author of Globalization and Cross-Border Labor Solidarity in the Americas: The Anti-Sweatshop Movement and the Struggle for Social Justice and is currently working on a book titled Starving for Justice: Hunger Strikes, Spectacular Speech, and the Struggle for Dignity.	http://www.chicst.ucsb.edu/people/ralph-armbruster-sandoval
Bamieh, Bassam	Mechanical Engineering	Center for Control, Dynamical Systems and Computations (CCDC); and Institute for Energy Efficiency (IEE)	enviro.	Dr. Bamieh's research is in the area of controls engineering, which underlies most automation technologies that make machines and processes smart and adaptive. He is currently working on the design of smart thermoacoustic energy conversion devices in which mechanical work is done by powerful pressure waves rather than pistons or turbines. These devices convert heat to acoustic power with relatively high efficiencies and almost no moving parts, and they are particularly suited to small-scale solar thermal power applications.	http://engineering.ucsb.edu/~bamieh/
Banerjee, Kaustav	Electrical and Computer Engineering	California NanoSystems Institute; Institute for Energy Efficiency (IEE)	enviro.	Dr. Banerjee is currently researching the physics, technology, and applications of low-dimensional nanomaterials (including graphene and other 2D materials) for next-generation green electronics, photonics, and bioelectronics. These nanomaterials can be used to design low power, low-loss, and ultra-energy efficient active and passive nanoelectronic devices. His group is innovating tunneling transistors, ultra-sensitive biosensors, interconnects and on-chip inductors uniquely enabled by 2D layered materials that can provide a new platform for next-generation energy-efficient computing, sensing, communication, and energy storage, and thereby accelerate emerging application paradigms such as the Internet of Things that promises unprecedented connectivity of people and information, and also lead to significantly lower carbon emissions.	http://nrl.ece.ucsb.edu/
Barandiaran, Javiera	Global Studies		enviro.; econ.; soc.	Dr. Barandiarán's research is focused on environmental politics. Dr. Barandiarán's book, <i>Science and Environment in Chile: The Politics of Expert Advice in a Neoliberal Democracy</i> (MIT Press, 2018) examines the consequences for environmental governance when the state lacks the capacity to produce an authoritative body of knowledge. Focusing on the experience of Chile after it transitioned from dictatorship to democracy, she examines a series of environmental conflicts in which the state tried to act as a "neutral broker" rather than the protector of the common good. She argues that this shift in the role of the state—occurring in other countries as well—is driven in part by the political ideology of neoliberalism, which favors market mechanisms and private initiatives over the actions of state agencies. Chile has not invested in environmental science labs, state agencies with in-house capacities, or an ancillary network of trusted scientific advisers—despite the growing complexity of environmental problems and increasing popular demand for more active environmental stewardship. Unlike a high modernist "empire" state with the scientific and technical capacity to undertake large-scale projects, Chile's model has been that of an "umpire" state that purchases scientific advice from markets. After describing the evolution of Chilean regulatory and scientific institutions during the transition Barandiarán describes four environmental crises that shook citizens' trust in government: the near-collapse of the farmed salmon industry when an epidemic killed millions of fish; pollution from a paper and pulp mill that killed off or forced out thousands of black-neck swans; a gold mine that threatened three glaciers; and five controversial mega-dams in Patagonia."	http://www.global.ucsb.edu/people/academic/javiera-barandiar%C3%A1n

Bazan, Guillermo	Chemistry & Biochemistry	Institute for Energy Efficiency (IEE); Center for Polymers and Organic Solids; Institute for Collaborative Biotechnologies; Mitsubishi Chemical Center for Advanced Materials; Center for Energy Efficient Materials; California NanoSystems Institute	enviro.	As winner of the Grand Challenges Explorations grant, Dr. Bazan has investigated semiconducting molecules that penetrate organism membranes. This research is used to convert wastewater into energy, a piece of technology which can help alleviate world sanitation problems. He has also pioneered the use of molecular and semiconducting polymers for the fabrication of organic solar cells using environmentally friendly methods.	http://www.chem.ucsb.edu/~bazangroup/
Bazerman, Charles	Education	Carsey-Wolf Center	enviro.; soc.	Dr. Bazerman is interested in the practice and teaching of writing, understood in a socio-historic context. Using socially based theories of genre, activity system, interaction, intertextuality, and cognitive development, he investigates the history of scientific writing, other forms of writing used in advancing technological projects, and the relation of writing to the development of disciplines of knowledge. Some of his studies involve the history and organization of environmental knowledge and communication. Most recently he has worked on how climate change knowledge enters into or is restricted within political representations and the deliberations of Congressional hearings.	http://education.ucsb.edu/bazerman/
Bergstrom, Ted	Economics	Institute for Energy Efficiency (IEE); Center for Polymers and Organic Solids; Institute for Collaborative Biotechnologies; Mitsubishi Chemical Center for Advanced Materials; Center for Energy Efficient Materials; California NanoSystems Institute	enviro.; econ.	Dr. Bergstrom's research includes work in resource economics. He has studied and continues to study such areas as using the market to control pollution, the externalities of pollution, and the effect of finite resources on the market.	http://www.econ.ucsb.edu/~tedb/
Bhavnani, Kum Kum	Sociology		enviro.; econ.; soc.	Dr. Bhavnani's documentary film "Nothing like Chocolate," offers a glimpse into the global chocolate industry, where there are allegations that enslaved children are used to harvest beans in Ivory Coast, which produces 40% of the world's cacao. "Nothing Like Chocolate" focuses on the Grenada Chocolate Company founded by Mott Green, as well as on an independent farmer, Nelice Stewart, who grows organic cocoa beans. Green (deceased June 2013) created a worker-owned cooperative which brings profits back to the working shareholders, who include the farmers and all factory workers at the company. The film discusses how solar power and ethical technology can create a sustainable, community-based business, and, therefore, can undermine global unethical practices.	http://www.soc.ucsb.edu/faculty/kum-kum-bhavnani
Blanchette, Carol		Marine Science Institute (MSI); Natural Reserve System; Valentine Eastern Sierra Reserve	enviro.; econ.	Dr. Blanchette's research focuses mainly on marine ecology. Her main areas of study include an examination of how certain species adapt to ocean acidification as CO2 emissions increase, the ecological responses to climate change, and sustainable fisheries management.	http://msi.ucsb.edu/people/research-scientists/carol-blanchette-0
Blumenthal, Daniel	Electrical and Computer Engineering	California NanoSystems Institute; Terabit Optical Ethernet Center; National Academy of Inventors; Institute for Energy Efficiency (IEE)	enviro.	Dr. Blumenthal heads the Optical Communication and Photonic Integration (OCPI) Group (ocpi.ece.ucsb.edu) and is Director of the Terabit Optical Ethernet Center (TOEC). He is a co-founder of Packet Photonics, Inc and Calient Networks and holds 22 US patents. He has published over 410 papers in the areas of optical communications and networks, optical packet switching, ultra-low Loss waveguide (ULLW) platform and devices, low-noise and linewidth lasers, integrated optical gyros, ultrafast optical signal processing, photonic integration in InP, SiPh/InP and silicon photonic and nano-photonic device technologies and is co-author of Tunable Laser Diodes and Related Optical Sources (New York: IEEE-Wiley, 2005). Dr. Blumenthal is a Fellow of the National Academy of Inventors (NAI), Fellow of the IEEE, and Fellow of the Optical Society of America (OSA). He has served on the Board of Directors for National LambdaRail (NLR) and as an elected member of the Internet2 Architecture Advisory Council.	http://engineering.ucsb.edu/faculty/profile/138
Bookhagen, Bodo	Geography	Earth Research Institute (ERI)	enviro.	Dr. Bookhagen's research is involved with mass transport on the Earth Surface and includes phenomena such as erosion, landslides, floods, and glaciers. He focuses on identifying spatial and temporal patterns that are often linked to climate changes. For example, heavy rainfall events after intense wildfires can increase erosion and the removal of the fertile soil layer. Dr. Bookhagen uses spatial technology (lidar, satellite data) to map and predict erosion and rainfall. A large component of his work includes measurements and sample collection in the field.	http://geog.ucsb.edu/~bodo/

Booth, Derek	Environmental Science & Management	Earth Research Institute (ERI)	enviro.; soc.	Dr. Booth's recent projects span the fields of watershed assessment and planning, stormwater management, and stream restoration. Previously, he was a research professor in the departments of Civil & Environmental Engineering and Earth & Space Sciences at the University of Washington; he retains an active position as affiliate professor in both departments. He is presently the Senior Editor of the international scientific journal Quaternary Research.	https://www.bren.ucsb.edu/people/Faculty/derek_booth.htm
Bowers, John	Electrical and Computer Engineering	Institute for Energy Efficiency (IEE); Solid State Lighting and Energy Electronics Center (SSLEeC); California NanoSystems Institute	enviro.; soc.	Dr. Bowers' research team created an LED lamp that is solar-powered, cost-effective, and highly efficient. The circuit of the lamp is designed so as to provide triple the output of a normal AA battery. This design was transferred to a nonprofit, Unite to Light. Manufactured lamps were shipped to Ghana in 2010 at a cost of \$7 per lamp, roughly the amount a family in Ghana would spend on kerosene for 2 months. Unite to Light has sent 95,000 such lights to people in need of a sustainable light source. The research group has since delivered thousands of solar powered cell phone charger lights. Dr. Bowers' research also includes work on more efficient silicon photonic transceivers, thermoelectric materials for waste heat recovery and on concentrated photovoltaic devices for more efficient solar power.	http://optoelectronics.ece.ucsb.edu/profile/john-bowers
Brenner, Mary	Education		enviro.; soc.	Dr. Brenner is currently running an afterschool program at the Goleta Boys and Girls Club in collaboration with Professor Richard Duran. The program teaches Civic Engagement in Environmental issues to children in grades K-8. She was previously involved in running and researching a summer educational program for local students that taught environmental stewardship.	https://education.ucsb.edu/research-faculty/bio?first=Mary&last=Brenner
Brewer, Forrest	Electrical and Computer Engineering; Chemical Engineering	California NanoSystems Institute	enviro.	Dr. Brewer is currently working on low-power signal processing systems based on 1-bit serial data-flow. These systems allow the construction of micro-power digital signal processing systems for use in e.g. hearing aids or MEMs devices. Ostensibly, they can reduce the power needed used in signal processing by 80-90% and the total power by 35-50% for audio-rate systems. This could lead to substantial reduction of the use of primary batteries in such applications. Dr. Brewer is also building stable IOT clocks and timing circuits for applications like LiDAR.	http://engineering.ucsb.edu/faculty/profile/91
Brooks, Andrew		University of California Natural Reserve System; Marine Science Institute (MSI); Coastal Research Center; United States National Science Foundation's Moorea Coral Reef Long-Term Ecological Research Site (MCR LTER); Coral Reef Ecological Observatory Network (CREON)	enviro.	Dr. Brooks is a population and community ecologist with training in fisheries ecology. His primary research focuses on community dynamics of marine fishes and the relationship between community and habitat diversity in coral reef fishes. He has also done work on temperate, rocky reef communities. As the director of the UC Natural Reserve System's Carpinteria Salt Marsh Reserve, he supports and leads research on the ecology, conservation and restoration of coastal wetlands.	http://cmap.msi.ucsb.edu/people/andrew-j.-brooks
Brzezinski, Mark	Ecology, Evolution, & Marine Biology	Marine Science Institute (MSI); Center for Interdisciplinary Research in Fluids	enviro.	Dr. Brzezinski's research focuses on marine phytoplankton, oceanography, and climate change science. He is currently working on projects related to effects of high CO2 conditions on organic matter, the effect of wave energy on kelp forest ecosystems, and the maintenance of species diversity.	https://www.eemb.ucsb.edu/people/faculty/brzezinski
Bullo, Francesco	Mechanical Engineering	Center for Control, Dynamical Systems, and Computation (CCDC); Institute for Collaborative Biotechnologies	enviro.	Dr. Bullo has investigated efficient methods to improve the functioning of our power grid. His work involves how to suppress energy-consuming inter-area oscillations and how to integrate increasing percentages of renewable energy into the current grid.	https://me.ucsb.edu/people/francesco-bullo
Buntaine, Mark	Environmental Science & Management	Earth Research Institute (ERI)	enviro.; econ.; soc.	Dr. Buntaine's research investigates the sources of effective environmental policy in developing countries, with an emphasis on the targeting and impact of foreign aid. Although many of the world's most significant environmental problems occur in developing countries, the implementation of environmental policies is often challenging because of inadequate resources and poor governance.	http://www.bren.ucsb.edu/people/faculty/mark_buntaine.htm
Buratto, Steven	Chemistry & Biochemistry	Institute for Terahertz Science and Technology; Institute for Energy Efficiency (IEE); California NanoSystems Institute	enviro.	Dr. Buratto has conducted research which looks at the polymer films present in LEDs by using near-field optical spectroscopy and near-field scanning microscopy. Looking at these films provides direct insight into the functioning/performance of these devices. The films affect such factors as carrier generation, transport, and device lifetime. He has additionally researched proton-exchange membrane fuel cells. These fuel cells provide efficient power with a low environmental impact by generating electricity from chemical energy.	http://www.chem.ucsb.edu/burattogroup/

Burbank, Doug	Earth Science	Earth Research Institute (ERI)	enviro.	Dr. Burbank studies tectonic geomorphology and surface processes. Working with the Earth Research Institute, Burbank's research areas include earth evolution, earth systems science, and natural hazards. His current research projects include analyzing the climate and tectonic controls on growth of the Puna Plateau in the Andes of NW Argentina, changes in Andean erosion rates over the past 5 million years, and the interactions of tectonics, erosion, and climate in shaping the Himalaya, Pamir, and Tien Shan mountains in Asia.	http://www.geol.ucsb.edu/faculty/burbank
Callander, Davon	Molecular, Cellular, and Developmental Biology		enviro.	Dr. Callander studies how environmental stress affects organismal physiology. Understanding stressors and how animals respond to them can inform policy, conservation, and sustainability.	
Campo, Juan	Religious Studies; Jewish Studies		enviro.; soc.	Dr. Campo is currently researching modern mass pilgrimages. One aspect of this topic is the impacts millions of pilgrims and pilgrimage infrastructures have on the local environments in Mecca, Guadalupe (Mexico City), and Sabarimala (South India). He has presented his findings at conferences in Germany, Singapore, and New York. His work on this subject will be included in a book about these pilgrimages in the contexts of modernity.	http://www.religion.ucsb.edu/people/faculty/juan-e-campo/
Carlson, Craig	Ecology, Evolution, & Marine Biology	Marine Science Institute (MSI); Bermuda Institute of Ocean Science	enviro.	Dr. Carlson's research focuses on microbial oceanography. More specifically, his research focuses on the role marine microbes play in the cycling of elements through oceanic dissolved organic matter. The applications of this research will help to understand how microbial processes affect the production and consumption of organic matter within the oceanic carbon cycle.	https://www.eemb.ucsb.edu/people/faculty/carlson
Carvalho, Leila	Geography	Earth Research Institute (ERI)	enviro.	Dr. Carvalho's research interests are in regional and large-scale climate variability and modeling global climate change, and scaling processes in geophysics. More specifically, she researches the characteristics of Monsoon Systems and how these characteristics will be modified in future scenarios of climate change. Dr. Carvalho also looks at the pattern of increased precipitation rates in various regions around the world and investigates windstorms in Santa Barbara.	http://www.icess.ucsb.edu/clivac/
Caselle, Jennifer		Marine Science Institute (MSI); Partnership for Interdisciplinary Studies of Coastal Oceans (PISCO); Palmyra Atoll Research Consortium (PARC)	enviro.	Dr. Caselle's research is broadly focused on marine conservation and reef ecology. She currently works in both coral reef and kelp forest ecosystems, studying community dynamics, recruitment and larval dispersal, and movement patterns of fishes. She also manages a large-scale field-based monitoring program of kelp forests in the California ecosystem with the goal of assessing long-term changes due to climate and anthropogenic impacts.	http://msi.ucsb.edu/people/research-scientists/jenn-caselle
Caylor, Kelly	Geography	Earth Research Institute (ERI)	enviro.	Dr. Caylor's research addresses the coupled feedbacks between terrestrial vegetation and surface hydrological dynamics, with a focus on the causes and consequences of spatial patterns in plants and their accompanying root systems within water-limited landscapes. The research approach integrates theoretical development, field observations, and simulation modeling to develop new insight into the complex ecohydrological controls on water balance in water-limited landscapes. Dr. Caylor examines these topics at a number of spatial and temporal scales; from patch-level experimental and observational work to regional-scale investigations that rely heavily on numerical modeling and the application of remote sensing technologies.	https://www.eri.ucsb.edu/people/kelly-caylor
Chabinyk, Michael	Materials	Production & Storage Solutions Group; Institute for Energy Efficiency (IEE); Mitsubishi Chemical Center for Advanced Materials (MC-CAM); Materials Research Laboratory; California NanoSystems Institute	enviro.	Dr. Chabinyk studies materials for energy conversion. Some of his specific focuses include organic semiconductors and hybrid inorganic materials for energy conversion.	http://www.materials.ucsb.edu/recruitment/Faculty/chatinyc/chabinyk.php
Chadwick, Oliver	Geography; Environmental Studies		enviro.	Dr. Chadwick's research relates soils to ecology and earth system science. He has studied how humans prior to the Industrial Revolution and development of industrial nitrogen fixation manage their natural ecosystems and agricultural systems sustainably. He also looks at how humans impact the environment through extracting nutrients from it for agriculture and industry and then, in some cases, concentrating them or spreading them to return them to the natural environment.	http://geog.ucsb.edu/pedology/

Chattopadhyay, Swati	History of Art and Architecture		enviro.; soc.	Dr. Chattopadhyay is Professor in the Department of History of Art and Architecture at the University of California, Santa Barbara. She is the author of <i>Representing Calcutta: Modernity, Nationalism, and the Colonial Uncanny</i> (Routledge, 2005), <i>Unlearning the City: Infrastructure in a New Optical Field</i> (Minnesota, 2012), the co-editor (with Jeremy White) of <i>City Halls and Civic Materialism: Towards a Global History of Urban Public Space</i> (Taylor and Francis, 2014) and <i>Critical Approaches to Contemporary Architecture</i> (Taylor and Francis, forthcoming). She received a Guggenheim Fellowship in 2015-16 for conducting research on her book project, <i>Nature's Infrastructure: British Empire and the Making of the Gangetic Plains, 1760-1880</i> .	http://www.arthistory.ucsb.edu/people/swati-chattopadhyay
Chmelka, Bradley	Chemical Engineering	Materials Research Laboratory; Institute for Collaborative Biotechnologies; Institute for Energy Efficiency (IEE)	enviro.	Dr. Chmelka's research seeks analyze, understand and control the atomic-level processes that govern syntheses, processing, and the resulting macroscopic properties of heterogeneous materials for energy and environmental applications. His interests include zeolite catalysts for hydrocarbon conversions or automobile pollution mitigation, electrochemical materials for fuel cells, solid-state phosphors and organic photovoltaic materials for lighting, and low-CO2-footprint structural solids.	http://www.chemenr.ucsb.edu/people/faculty_d.php?id=16
Chong, Fred	Computer Science	Computing Solutions Group at the Institute for Energy Efficiency (IEE); The Greenscale Center for Energy-Efficient Computing	enviro.	As the Director of the Greenscale Center for Energy-Efficient Computing, Dr. Chong's research includes Life Cycle Analysis (LCA) of information technologies. This method of analysis can be applied to computing strategies in order to gauge their environmental impact and energy efficiency. He also studies emerging technologies for energy-proportional computation. Energy-proportional computation saves computer server energy as well as increasing real-time use efficiency as computing workload varies.	http://www.cs.ucsb.edu/~chong/
Church, Richard	Geography	Earth Research Institute (ERI)	enviro.	Dr. Church specializes in the analysis of problems defined over space and time, including logistics and transportation, location theory, water resource systems, and urban and environmental systems using and developing new techniques in Operations Research, GIS, Decision Theory, and Heuristics. He has published over 250 papers and research reports in a variety of fields, including Geography, Transportation, Location Science, Environmental Engineering, Operations Research, and Water Resources.	geog.ucsb.edu/~forest
Clark, Jordan	Earth Science; Environmental Studies	Earth Research Institute (ERI); MSI	enviro.	Dr. Clark's research focuses on topics in the field of aqueous geochemistry. By analyzing anthropogenic and natural tracers in bodies of water, Dr. Clark is able to study how flow patterns affect the quality of water, the transfer of water, and gas exchange across the air-water interface. His current research projects include the chemical evolution of shallow groundwater, groundwater flow near managed aquifer recharge sites, stream/ground water interactions, and groundwater flow in the upper ocean crust on the flank of the Juan de Fuca Ridge. In the past, he has also examined the fate of methane near shallow hydrocarbon seeps.	http://www.geol.ucsb.edu/faculty/jfclark/
Clarke, Keith	Geography	National Center for Geographic Information and Analysis	enviro.	Dr. Clarke is the author of the SLEUTH land use change model and has overseen a large number of applications and led adaptations and improvements of the model. The model is increasingly used in sustainability planning, in Iran, Turkey, India, Brazil, China, and elsewhere. The model is open source and supported via online discussion forums.	http://geog.ucsb.edu/~kclarke/
Clemencon, Raymond	Global Studies		enviro.; econ.; soc.	Dr. Clemencon's policy research has focused on international climate negotiations and the Paris Agreement, international organizations, sustainable development, and globalization. Currently, he is examining how different countries define and try to operationalize the concept of sustainable development and the political processes that determine the allocation of funds for climate change through multilateral mechanisms like the Green Climate Fund and the GEF and the World Bank. Dr. Clemencon is interested in the political opportunity structures that determine a country's ability to provide leadership in the climate negotiations.	http://www.soc.ucsb.edu/faculty/raymond-clemencon
Cleveland, David	Environmental Studies		enviro.; econ.; soc.	Dr. Cleveland's research has been on small-scale, sustainable agrifood systems, including human population dynamics, plant breeding and conservation of crop genetic diversity, local and scientific knowledge, and collaboration between farmers and scientists. He has worked with small-scale farmers in West Africa, Mexico, Pakistan, California, and Indian country (Hopi and Zuni). He is currently researching the potential for food system localization and diet change to improve health, reduce greenhouse gas emissions, and promote food and climate justice, in Santa Barbara County, in California, and globally. His latest book is <i>Balancing on a Planet: The future of food and agriculture</i> (2014, U of California).	http://es.ucsb.edu/faculty/cleveland/

Coldren, Larry	Electrical and Computer Engineering	Electronics & Photonics Solutions Group; Institute for Energy Efficiency (IEE); The Optoelectronics Technology Center; The Solid-State Energy & Lighting Center; The Interdisciplinary Center for Wide Bandgap Semiconductors; The California NanoSystems Institute; American Institute for Manufacturing-Photonics (AIM-Photonics)	enviro.	Dr. Coldren has worked to develop new photonic integrated circuit (PIC), as well as vertical-cavity surface-emitting laser (VCSEL) technology. This technology has many applications. It can be used in laser printers and biological tissue analysis, and it is widely used in fiber optics. Fiber optics is a field that focuses on transmitting information by sending light pulses through an optical fiber. As a member of the Electronics and Photonics Solutions Group at the Institute for Energy Efficiency, Dr. Coldren has worked to make these devices high-speed and efficient.	http://www.ece.ucsb.edu/Faculty/Coldren/
Collins, Peter	Ecology, Evolution, & Marine Biology	Center for Marine Environmental Research and Innovative Technology (MERIT)	enviro.	Dr. Collins' research emphasis is the study of mechanisms regulating the reproduction and development in vertebrate animal models, comparative reproductive endocrinology and fertility, reproductive physiology in teleosts, endocrine regulation of viviparity, evaluation of candidate species for mariculture, marine teleost larval rearing technology, and the development of novel microparticulate diets for marine larvae.	https://www.eemb.ucsb.edu/people/faculty/collins
Cook, Elizabeth	English; Comparative Literature	The Environmental Humanities Initiative (EHI); The Literature & Environment Research Cluster; The Early Modern Center Research Cluster	enviro.; soc.	Dr. Cook's current research explores early modern writing about forests and trees, considering the shifting and sometimes colliding concepts of value and the history of environmental ethics. In her current project, "Talking Trees in Long 18th-Century British Literature," she examines the simultaneous development of silviculture and silviphilia -- often radically opposed ways of valuing trees that are still with us today -- during the eighteenth century. Her work argues that this history of contradictory attitudes toward the environment can help us understand how we respond to and address critical environmental issues today.	http://www.english.ucsb.edu/people/cook-e-heckendorff
Cooper, Scott	Ecology, Evolution, & Marine Biology	Marine Science Institute (MSI)	enviro.	Dr. Cooper's research has been centered on the factors that determine the abundances and distributions of aquatic organisms. Past research foci have included the impacts of acid deposition, livestock grazing, pollution, climate change, exotic species, and native species loss on freshwater ecosystems. Currently, much of his work revolves around the effects of land use changes, fire, and forestry practices on streams in California, and on the ecology and conservation of steelhead populations in southern California.	https://www.eemb.ucsb.edu/people/faculty/cooper
Costello, Christopher	Environmental Science & Management	National Bureau of Economic Research; Earth Research Institute (ERI)	enviro.; econ.	Dr. Costello's research focuses on natural resource management and property rights under uncertainty, with a particular emphasis on information, its value, and its effect on management decisions. He studies how to design and evaluate the performance of markets for environmental goods; specifically, he concentrates on sustainable fisheries and environmental markets.	http://fiesta.bren.ucsb.edu/~costello/
Culver,Carolynn		Marine Science Institute (MSI)	enviro.; econ.	Dr. Culver's research interests include understanding the life history characteristics and population dynamics of aquatic organisms and applying this information to improve management of non-native invasive species and fisheries resources and to enhance culture technologies of marine species. She also is evaluating ways to assist the state with management of fisheries resources, through collaborative fisheries research to collect field data and promote its integration into the management process.	http://msi.ucsb.edu/people/research-scientists/carolynn-culver
D'Antonio, Carla	Ecology, Evolution & Marine Biology	Cheadle Center for Biodiversity and Ecological Restoration (CCBER); Earth Research Institute (ERI)	enviro.	Dr. D'Antonio's research is primarily focused on factors driving changes in ecosystem structure and functioning. She evaluates how species, communities, and ecosystem processes are responding to human-altered fire regimes, species invasions, nitrogen deposition, and climatic fluctuations, including drought. Through her research, she seeks to provide a scientific basis for the management and restoration of ecosystems and for predicting how species composition will change under current and future stressors.	https://www.eemb.ucsb.edu/people/faculty/dantonio
Davis, Frank	Environmental Science & Management	Biogeography Lab; National Research Council Committee on Science for EPA's Future; National Research Council Board on Environmental Studies and Toxicology; National Research Council Committee for the Independent Scientific Review of the Everglades Restoration Program	enviro.	Dr. Davis brings conservation science and geographical analysis to bear in land use planning and the conservation of wild species. His research focuses on the landscape ecology of California plant communities; the design of protected-area networks; rangeland and farmland conservation; and the biological implications of regional climate change.	http://www.biogeog.ucsb.edu/

Dawson, Daniel		Natural Reserve System; Valentine Eastern Sierra Reserve; Marine Science Institute (MSI)	enviro.	Dr. Dawson has recently completed the design and construction of the first "net zero energy" building in the University of CA. The Page Center, a 2700 sq. ft. classroom/lecture hall was completed May 30, 2016 at the Sierra Nevada Aquatic Research Laboratory located near Mammoth Lakes, CA. The building employs ground source heating and cooling using heat pump technology. The electric load of the system, as well as the domestic electrical load is met by a grid-tie, roof mounted photovoltaic system. Funding was provided by a grant of State Bond Funds (Prop. 84) from the CA Wildlife Conservation Board as well as private funds.	http://msi.ucsb.edu/people/research-scientists/daniel-dawson
Den Baars, Steven	Materials	Solid State Lighting and Energy Electronics Center (SSLEEC); Interdisciplinary Center for Wide Band-Gap Semiconductors; Center for Energy Efficient Materials; Institute for Energy Efficiency (IEE)	enviro.	Dr. Baars' research interests include growth of wide-bandgap semiconductors and their application to Blue LEDs, lasers, and high power electronic devices. His research is used for the fabrication of new semiconductor devices. This research is important to the development of more energy-efficient lighting. LED Lighting is 9 times more efficient than incandescent bulbs, has the potential to save more than \$40Billion in annual energy savings per year, as estimated by the Department of Energy (DOE).	http://www.materials.ucsb.edu/LINKS/PROFdenbaars/html
Deschenes, Olivier	Economics	National Bureau of Economic Research; Institute for the Study of Labor; Broom Center for Demography; Earth Research Institute (ERI)	enviro.; econ.; soc.	Dr. Deschênes' research focuses on economic and health impacts of global climate change, adaptation to climate change, and the relationship between energy markets and labor markets. More specifically, his current projects include the impacts of climate change in India and the effect of electricity prices on the labor market. He also is currently studying the role of the diffusion of residential air conditioning in reducing heat-related mortality in the United States.	http://www.econ.ucsb.edu/~olivier/
Dickey, Tommy	Geography		enviro.	Dr. Dickey studies interdisciplinary oceanographic and environmental problems. He has researched air-sea interactions, coastal processes, pollution, and ocean technology, among other things. He recently analyzed ocean eddies in southern California, as well as creating an overview of sea state conditions and air-sea fluxes associated with the Office of Naval Research's Radiance in a Dynamic Ocean (RaDyO) field program. Through his research, Dr. Dickey has helped to launch key multi-platform observational networks to model and monitor global climate change and coastal pollution.	http://www.opl.ucsb.edu/tommy/
Ding, Quinghua	Geography	Earth Research Institute (ERI)	enviro.	Dr. Ding worked on developing an isotope-enabled global climate model and understanding the recent climate change in the Arctic and Antarctic from the perspective of climate dynamics. He found that the recent warming trend in the Arctic and Antarctic is partly attributed to a tropical SST-related natural variability. He joined the Polar Science Center in 2014 and accepted a faculty position at UCSB in 2016. For future research, his focus is on exploring polar-lower latitude connection in the past 1000 years by using atmosphere-ocean-ice fully coupled GCM, isotope-enabled GCM and paleo-climate proxy data. The ultimate goal is to provide more reliable future projections of the polar climate response to anthropogenic climate forcing.	http://geog.ucsb.edu/~qinghua/
Doherty, Michael	Chemical Engineering		enviro.	Dr. Doherty's research group is investigating a new way of capturing CO2 from stack gases which converts gaseous CO2 at atmospheric pressure into cement. This is done through a solution-phase reactive precipitation process which transforms gaseous CO2 into calcium carbonate crystals.	https://www.chemengr.ucsb.edu/people/michael-doherty
Donelan, James	English	Writing Program	enviro.; econ.; soc.	Dr. Donelan conducts research into pedagogical issues related to sustainability, including remote teaching. In addition, he has recently begun a project to examine the relationship between Research I universities and their communities through community writing, with a particular focus on how this relationship affects local economies and local sustainability initiatives.	http://www.writing.ucsb.edu/people/james-donelan
Dozier, Jeff	Environmental Science & Management	Earth Research Institute (ERI)	enviro.	Dr. Dozier's research interests are in the fields of snow hydrology, earth system science, remote sensing, and information systems. His current research projects include analyzing snow-climate interactions and snow runoff. He is researching snowmelt runoff estimates in High Asia, where a billion people depend on snow and ice melt for their water resources.	http://www.bren.ucsb.edu/people/Faculty/jeff_dozier.htm
Dudley, Tom		Marine Science Institute (MSI)	enviro.	Dr. Dudley examines the effects of non-native, invasive species in aquatic and riparian ecosystems, the mechanisms underlying invasion success and plant-herbivore interactions, and the restoration of invaded ecosystems for biodiversity enhancement and improved ecosystem function.	http://rivrlab.msi.ucsb.edu/peoplepages/dudley.php

Dugan, Jenifer		Marine Science Institute (MSI)	enviro.	Dr. Dugan's research as a coastal marine ecologist involves studying basic questions concerning the influence of environmental and anthropogenic drivers on community and population dynamics of marine animals across a diversity of shorelines, latitudes, and time scales. She investigates ecological connectivity, marine conservation and restoration, responses to and recovery from disturbance, species interactions, historical ecology, and the physical and biological drivers of community structure and function in coastal ecosystems. Her collaborations with coastal managers to conduct more applied studies have increased our understanding of the ecological impacts and implications of widespread human alterations of the coast, including urban development, shoreline armoring, beach grooming, oil spills, and climate change, and have provided new insights into intertidal recovery dynamics, restoration approaches, and adaptation strategies.	http://msi.ucsb.edu/people/research-scientists/jenny-dugan
Dunne, Thomas	Environmental Science & Management	Earth Research Institute (ERI)	enviro.	Dr. Dunne's research has focused on issues related to natural hazards and resource management. He conducts field and theoretical studies of drainage-basin, hillslope, and fluvial geomorphology, and in the application of hydrology, sediment transport, and geomorphology to landscape management and hazard analysis. He is now studying how physical and biological processes interact to create and maintain habitat for fish and food sources in the Merced River, CA and the origin of debris flow hazards represented by the 2018 destruction in Montecito, CA	http://www.bren.ucsb.edu/people/Faculty/thomas_dunne.htm
Eisenhower, Bryan	Mechanical Engineering	Center for Energy Efficient Design (CEED)	enviro.	Dr. Eisenhower's research has two main thrusts: 1) tools for data analysis, aggregation, and visualization of building performance data, and 2) methodologies to enhance design and operations of buildings, using model-based engineering. Buildings generate enormous amounts of data that are rarely studied. By creating algorithms that can precipitate key features of their performance, faulty equipment and suboptimal performance can be identified and addressed. Similarly, by improving models used for building design, optimized design and operational strategies can be identified. Dr. Eisenhower's research is creating new ways to analyze building data and use engineering models leading to high performance building designs.	http://engineering.ucsb.edu/~bryane/index.html
El Abbadi, Amr	Computer Science	Energy-Aware Computation Group; Institute for Energy Efficiency (IEE)	enviro.; econ.; soc.	Dr. El Abbadi is currently interested in addressing the question of how claims about the environmental performance of products can be made and evaluated without requiring disclosure of confidential data. In particular, he has been exploring with Dr. Kuczynski on how to develop techniques to preserve the data privacy of life cycle assessment (LCA), while also enabling validation and meaningful interpretation of results. In general, Dr. El Abbadi's work has helped to optimize database techniques which improve performance while boosting fault-tolerance and preserving data privacy.	http://www.cs.ucsb.edu/~amr/
Elver, Hilal	Global Studies	Resnick Food Law and Public Policy Program at University of California, Los Angeles; United Nations Special Rapporteur on the Right to Food	enviro.	Dr. Elver is a Special Rapporteur on the Right to Food, part of the UN Human Rights Council. She has presented to the UN General Assembly on "Conflict situation, hunger and right to food" and to the UN Human Rights Council, on "Natural disasters, extreme weather events and hunger". She also published two books: Headscarf Controversy: Secularism and Freedom of Religion and Reimagining Climate Change, which she co-edited. Dr. Elver is also working on UN Sustainable Development Goals (2030 Agenda), focusing on food systems, food security and nutrition, climate change, and human rights.	http://www.orfaleacenter.ucsb.edu/person/hilal-elver/
Figuroa, Teresa	Feminist Studies		enviro.; econ.; soc.	Dr. Figuroa's research focuses on political economy of globalization, transnational latinas, rural enclaves, and gender and labor.	http://www.femst.ucsb.edu/people/teresa-figuroa
Fleishman, Erica	Environmental Science & Management	Earth Research Institute (ERI)	enviro.	Dr. Fleishman's research focuses on applications of environmental science to management of public and private lands in the western United States. Her research explains and projects the responses of animals to changes in land cover, land use, and climate. By using predictive modeling and geospatial analysis, her research aims to develop scientifically reliable, cost-effective approaches for understanding the distribution of assemblages and species and underlying mechanisms.	http://www.eri.ucsb.edu/people/erica-fleishman
Florsheim, Joan		Earth Research Institute (ERI)	enviro.	Dr. Florsheim's research focuses on sediment dynamics in fluvial systems and emphasizes interactions between geomorphic processes, climate, humans, and ecosystems. Current investigations include a field study to understand long and short-term recovery of chaparral environments in southern California following wildfire and a modeling investigation to further floodplain restoration.	http://www.eri.ucsb.edu/people/joan-florsheim
Foran, John	Sociology		enviro.; econ.; soc.	Dr. John Foran's current area of focus and interest include the climate crisis, 21st-century movements for radical social change, and sustainable development for 'building better futures	http://www.soc.ucsb.edu/faculty/john-foran

Ford, Anabel		Meso- American Research Center; Institute for Social, Behavioral and Economic Research	enviro.; econ.; soc.	Dr Ford's archaeological field and laboratory work has concentrated in the upper Belize River area and El Pilar, and has both basic and applied components. Working on the development of complexity and land use and land cover change, data have been collected on settlement patterns and household collections. Finding a major Maya center, El Pilar, has led to studies of conservation and development of the Maya forest working towards the preservation of the cultural heritage in context of the natural environment. Community and protected area development plays a role in the field projects. Results have impacted the interpretation of sustainability in the tropics today.	http://www.anth.ucsb.edu/people/anabel-ford
Ford, Peter	Chemistry & Biochemistry		enviro.	Dr. Ford's research has encompassed topics related to the photochemistry, catalytic reactions and mechanisms of transition metal complexes. These interests are currently reflected in studies related to (i) quantitative reactions of coordinated nitrogen oxides relevant to mammalian biology (ii) the photochemical delivery of small molecule bioregulatory molecules to physiological targets and (iii) the conversion of renewable biomass feedstocks to chemicals and fuels using catalysts based on Earth-abundant elements.	http://www.chem.ucsb.edu/fordgroup
Foster, Kimberly (formerly Turner, Kimberly)	Mechanical Engineering	Institute for Collaborative Biotechnologies; California NanoSystems Institute; Institute for Energy Efficiency (IEE)	enviro.	Dr. Foster's research interests include the development of synthetic adhesives that make use of large arrays of micrometer and submicron hierarchical polymer fibers for climbing robots by mimicking the fibers on gecko feet.	http://engineering.ucsb.edu/~tmems/
Fredrickson, Glenn	Materials; Chemical Engineering	Mitsubishi Chemical Center for Advanced Materials (MC-CAM); Complex Fluids Design Consortium (CFDC); Institute for Collaborative Biotechnologies; Materials Research Laboratory; California NanoSystems Institute	enviro.	Dr. Fredrickson conducts research that involves designing specialty block copolymers used to advance lithography strategies to shrink the dimensions of microelectronic devices. He works to make these devices faster and more energy-efficient.	http://www.chemengr.ucsb.edu/people/faculty_d.php?id=25
Frew, James	Environmental Science & Management	Earth Research Institute (ERI)	enviro.	Dr. Frew's research interests lie in the field of environmental informatics, and information management. Subsets of this include remote sensing, image processing, massive distributed data systems, digital libraries, computational provenance, science data archives, and array databases. He currently advises the UCSB Library on research data curation, and has research funding for data citation (NSF) and satellite image databases (Intel Corp.)	http://eil.bren.ucsb.edu/~frew/
Funk, Chris	Geography	Climate Hazard Group (CHG)	enviro.; econ.; soc.	As a founding member of the UCSB Climate Hazard Group, Dr. Funk's research has focused on drought monitoring, drought prediction, and the evaluation of long-term trends in climate and food security. Recently, Dr. Funk has worked to implement improved methods of monitoring trends and predicting droughts, primarily in Sub-Saharan African communities. This monitoring and predicting is done by using satellites to track precipitation patterns that can be linked to long-term trends. Dr. Funk's research allows African officials to make sustainable decisions concerning community development and future food security.	http://chg.geog.ucsb.edu/people/chris-funk/
Gaines, Steve	Environmental Science & Management; Ecology, Evolution, & Marine Biology		enviro.; econ.	Dr. Gaines' research addresses a broad range of issues in ecology, sustainable fisheries, conservation biology, and climate change. More specifically, he focuses on how different populations respond to climate variation, as well as on the design elements that enhance both conservation and fisheries management. Dr. Gaines also studies exotic species patterns and biodiversity.	https://www.eemb.ucsb.edu/people/faculty/gaines
Gardner, Colin	Art; History of Art and Architecture	Adjunct faculty San Diego State University	enviro.; soc.	Dr. Colin Gardner's current research explores the ways in which dissolving the Kantian dialectic structure between man, art, and world in favor of an anti-speciesist structure of assemblage, connectivity, and relationality between aesthetics, creativity, and machinic subjectivity can produce a new vision for a more ethical and ecologically sustainable world. His work brings together issues of accountability, affect, and ecosophy as revolutions through all media, focusing specifically on art, film, installation, and text, thereby opening the human to more ethical relations with the world. He is currently co-editing an anthology for Bloomsbury entitled "Ecosophical Aesthetics" which is due in 2018.	http://www.arts.ucsb.edu/gardner/
Gautier, Catherine	Geography	The Institute for Computational Earth System Sciences (ICESS)	enviro.; soc.	Dr. Gautier's research interests include global radiation and water, El Niño, and earth system science education. She looks at the science of climate change and earth system sciences using computer science. Dr. Gautier has examined global warming from different perspectives and has considered how the debate surrounding this concern has played a role in education.	http://www.geog.ucsb.edu/~gautier

Gee, Quentin	Environmental Studies		enviro.; soc.	Dr. Gee is interested issues in energy, food systems, climate change, and ethics. For instance, he is currently working on research involving energy and climate impacts associated with heat pumps, and has recently published work on the health resulting climate impacts associated with plant-based diets. He has also written on policy and ethical matters regarding the rights of organizations of people (as opposed to rights of the people themselves).	http://www.es.ucsb.edu/people/quentin-gee
Geyer, Roland	Environmental Science & Management	Earth Research Institute (ERI)	enviro.; econ.	Dr. Geyer's research focuses on industrial ecology. His research interests include the life cycle of manufactured goods and the environmental and economic potential of reuse and recycling activities. His overarching research goal is to help develop the science and knowledge necessary to reduce the environmental impact from industrial production and consumption.	http://www.esm.ucsb.edu/people/Faculty/roland_geyer.htm
Gibou, Frederic	Mechanical Engineering; Computer Science	Institute for Energy Efficiency (IEE); Center for Control, Dynamical Systems and Computation (CCDC); Center for Energy Efficiency Design (CEED); Greenscale Center for Energy-Efficient Computing	enviro.	Dr. Gibou's research focuses on the design and applications of high resolution computational methods. These are used in materials science in the study of solidification processes used in the energy sector, as well as in the study of fluid motion applied to flows at the micro and the nanoscale levels. Applications include the study of flows in porous media, including those in oil reservoirs or in porous electrodes of supercapacitors. Dr. Gibou's work has helped develop models enabling the understanding of the charging of supercapacitors. Gibou is part of a MURI (Multi-University Research Initiative) team that is developing physics-based computational approach for predicting multiphase flows with high fidelity, with a focus on understanding cavitation in a turbulent environment. When considering that bubbles are responsible for a large loss in propulsion efficiency and that about 90 percent of the world's goods are transported by sea, any progress on ships' efficiency will translate into significant reduction of our energy consumption.	http://www.engr.ucsb.edu/~fgibou/Home.html
Gilbert, John	Computer Science	Greenscale Center for Energy-Efficient Computing; Institute for Energy Efficiency (IEE)	enviro.	Dr. Gilbert works with the Greenscale Center for Energy-Efficient Cooling to develop solutions to the rapidly increasing cost of powering data centers around the world. His research in high-performance computing and engineering is applied to cooling technologies for energy-efficient computational facilities by developing efficient numerical algorithms for computationally modeling airflows on supercomputers.	http://www.cs.ucsb.edu/~gilbert/
Goddard, Jeff		Marine Science Institute (MSI)	enviro.	Dr. Goddard's research is centered on the natural history and systematics of intertidal invertebrates, especially nudibranch sea slugs and their prey. He uses historical data sets of abundance and museum records, combined with new sampling, to examine long-term changes in the fauna of the northeast Pacific Ocean, especially changes in distribution and abundance related to both climate change and the explosive human population growth of southern California in the last half of the 20th century.	http://msi.ucsb.edu/people/research-scientists/jeff-goddard
Gordon, Michael	Chemical Engineering	Institute for Collaborative Biotechnologies	enviro.	Dr. Gordon's research focuses on the synthesis and characterization of nanoscale materials, as well as the development of scanning probe microscopy (SPM) methods for optical, electrical, and mechanical interrogation of nanoscale systems found in different venues, such as material science, microelectronics, catalysis, and biology. His work with various materials in nanoscale materials involves spectroscopy of organic semiconductors for organic light emitting diode and photovoltaic applications.	https://www.chemengr.ucsb.edu/people/michael-gordon
Gossard, Arthur	Materials; Electrical and Computer Engineering	Institute for Energy Efficiency (IEE)	enviro.	A member of the Institute for Energy Efficiency, Dr. Gossard contributes to research on molecular beam epitaxial grow of quantum dot structures for high efficiency lasers on silicon substrates and on semiconductor computer chips.	http://engineering.ucsb.edu/faculty/profile/169
Goulias, Kostas	Geography		enviro.	Dr. Goulias' research interests include sustainable and green transportation, as well as human-environment relations. His models and simulations track fuel consumption and pollutants emitted (greenhouse emissions). He has also studied non-motorized transportation, hybrid-electric vehicles, and air pollution control program evaluation.	http://www.geog.ucsb.edu/geotrans/publications.php
Graves, Greg	Environmental Studies; History	Carsey-Wolf Center	enviro.; soc.	Dr. Graves' research interests include public history, California history, environmental history, and U.S. history. He specializes in federal water resources development and resource allocation. His publications include Pursuing Excellence in Water Planning and Policy Analysis: A History of the U.S. Army Corps of Engineers Institute for Water Resources; From These Beginnings: A Biographical Approach to American History; and "The Rhetoric of Opposition: Anti-conservation and the Early Forest Reserves," in Journal of the West.	http://www.history.ucsb.edu/people/person.php?account_id=88
Gurven, Michael	Anthropology		enviro.; soc.	Dr. Gurven's research focuses on the effect of ecological and social factors on the development of behavior, psychology, and physiology. His research group incorporates insights and perspectives from behavioral ecology, life history theory, biodemography, and human biology to provide a unique research environment for explaining human diversity. In recent publications, Dr. Gurven has shown that native Bolivians have the healthiest hearts free of heart disease, and that intestinal infections might have protective effects on cardiovascular health. Dr. Gurven also recently helped develop and test the relationship between socioecological complexity and personality covariation across various societies.	http://www.anth.ucsb.edu/faculty/gurven/

Halpern, Benjamin		Marine Science Institute (MSI)	enviro.	Dr. Halpern focuses his research at the interface between marine ecology and conservation biology. His research has addressed a broad range of questions that span local to global scales, including spatial population dynamics, trophic interactions in community ecology, and the interface between ecology and human dynamics, all with the ultimate aim to inform and facilitate conservation and resource management efforts in marine systems.	http://msi.ucsb.edu/people/faculty/benjamin-halpern
Hampton, Stephanie		National Center for Ecological Analysis and Synthesis (NCEAS); Marine Science Institute (MSI)	enviro.	Dr. Hampton's research interests range from basic research in aquatic science using statistical analysis of large databases to broader applications of empirical evidence in environmental issues and policy. Currently, her research is largely focused on understanding the effects of climate dynamics on the planktonic base of the food web in Lake Baikal, Siberia.	http://msi.ucsb.edu/people/research-scientists/stephanie-hampton
Han, Hahrie	Political Science	Center for Social Solutions to Environmental Problems	enviro.; soc.	Dr. Han specializes in the politics of environmental and social policy, focusing particularly on the role that civic associations play in mobilizing participation in politics and policy advocacy. Her recently published book, <i>How Organizations Develop Activists: Civic Associations and Leadership in the 21st Century</i> (Oxford University Press 2014) examines the strategies that the most effective civic associations use to engage activists and develop civic leaders in health and environmental politics.	http://www.polsci.ucsb.edu/people/hahrie-han
Hannah, Lee	Environmental Science & Management	Earth Research Institute (ESI); The Betty and Gordon Moore Center for Science	enviro.	As Senior Fellow in Climate Change Biology at Conservation International's (CI) Center for Applied Biodiversity Science, Dr. Hannah examines the role of climate change in conservation planning. His research models climate impacts on species in California and, with the National Botanical Institute in Cape Town, South Africa, models biotic change resulting from global warming in biodiversity hot spots.	http://www.bren.ucsb.edu/people/Faculty/lee_hannah.htm
Hanrahan, Michael	Environmental Science & Management	Carsey-Wolf Center; Earth Media Lab	enviro.; soc.	Dr. Hanrahan is the founder and lead producer of Earth Media Lab, an organization that provides professional film production training with the goal of communicating environmental problems such as climate change, pollution, and resource issues. He is a filmmaker and has produced films for clients such as National Geographic, The Nature Conservancy, and NOAA. Hanrahan collaborated on a series of short films documenting the 2010 Deepwater Horizon oil spill and its biological impact in the Gulf of Mexico. He worked on another film documenting restoration work on Santa Cruz Island.	http://www.cdgr.ucsb.edu/people/michael-hanrahan
Harthorn, Barbara	Feminist Studies	University of California Center for Environmental Implications of Nanotechnology (UC CEIN); Center for Nanotechnology in Society; Earth Research Institute (ERI)	enviro.; soc.	Dr. Harthorn is a medical anthropologist and risk perception researcher. Her research broadly examines culture and health, health inequality, and technological risk and perception; in particular she is studying the intersections of socially constructed risk with gender, ethnicity/race, and other categories of difference. She was Director and Principal Investigator from 2005-2017 of the National Science Foundation Center for Nanotechnology in Society at UCSB. This center was dedicated to studying the societal implications of emerging nanotechnologies and other potentially disruptive technologies. In the past 3.5 years she and her group have been studying public risk perceptions in the US and UK regarding unconventional oil and gas extraction (aka fracking). Recent publications have appeared in <i>Nature Energy</i> , <i>Global Environmental Change</i> , and <i>WIREs Climate Change</i> , among other journals. Her work is published in a variety of social science, medical care, public health, environmental science and technology, technology and society, and science journals. She is editor (with John Mohr) of <i>The Social Life of Nanotechnology</i> (2012) and (with Laury Oaks) of <i>Risk, Culture, and Health Inequality: Shifting Perceptions of Danger and Blame</i> (2003).	http://www.cns.ucsb.edu/people/barbara-herr-harthorn/
Hastings, Sean	Environmental Science & Management		enviro.	Dr. Hasting's research focuses on ocean policy and management. He is working on developing best fishing practices to reduce the loss of fishing gear to maintain ocean health and healthy ocean related economies. His other research interest is the Blue Whale and Blue Skies Act, which involves incentive based approaches to slow down large container ships along California's coast. Slower ships reduce the threat of ship strikes on endangered whales, reduce emissions of air pollutants that are hazards to human health, and reduce ocean noise impacts on ocean life.	
Hawker, Craig	Materials	Institute for Multi-scale Materials Studies; Institute for Collaborative Biotechnologies; Mitsubishi Chemical Center for Advanced Materials (MC-CAM); International Center for Materials Research; Center for Nanomedicine; California NanoSystems Institute; Center for Nanotechnology in Society	enviro.	As director of the Material Research Lab at UCSB, Dr. Hawker has overseen research that unlocks the valuable polymers held in plastic food packages so as to use them to benefit society. His lab is working to transform polyactide plastics into specialty chemicals commonly used by industrial and food manufacturers. Dr. Hawker's team hopes to recycle plastics into a material equally as valuable and useful.	http://hawkergroup.mrl.ucsb.edu/

Hayton, Trevor	Chemistry & Biochemistry		enviro.	Dr. Hayton works with his research group on projects involving the synthesis and characterization of new inorganic and organometallic molecules and nanomaterials. A major goal of this work is to develop greater predictability within inorganic synthesis, with a focus on directed synthesis. These new materials are needed for a diverse variety of applications, including catalysis and nuclear waste clean-up.	http://www.chem.ucsb.edu/people/faculty/hayton/
Heeger, Alan	Physics	Center for Nanomedicine; California NanoSystems Institute	enviro.	Dr. Heeger, a Nobel Prize Laureate, researches the technology of semiconducting and metallic polymers. Part of his research has focused on low cost, thin, flexible solar cells. Dr. Heeger has discovered a way to make solar cell materials soluble. This solar cell "liquid-ink" can be printed like a newspaper at very low cost, revolutionizing the solar cell manufacturing process.	http://www.mrl.ucsb.edu/mrl/faculty/heeger.html
Heilmayr, Robert	Environmental Studies	Earth Research Institute (ERI)	enviro.; econ.; soc.	Dr. Heilmayr's research combines approaches from economics, geography and ecology to explore the way society uses and governs natural resources. His focuses include reduction in deforestation through nonstate governance, impacts of plantation forestry, and land use change in Chile. He uses a combination of theoretical microeconomic models and remote sensing to explore the impact of plantation forest expansion on natural ecosystems. Dr. Heilmayr's current research focus is on the impact of nonstate policies to end deforestation.	http://www.es.ucsb.edu/people/robert-heilmayr
Herbst, David		Marine Science Institute (MSI)	enviro.; soc.	Dr. Herbst's research involves studies of salt lake ecosystems and the ecology and physiology of aquatic invertebrates and algae. In addition, his research extends to spring ecosystems and streams. Dr. Herbst's past projects include studies of sediment deposition and its effects on benthic invertebrates, establishing a monitoring network to detect the effects of climate change on mountain stream hydrobiology, and investigations of the impacts of a variety of disturbance stressors on stream community ecology, including livestock grazing and management, forest use practices, acid mine drainage, introduced invasive species (Trout, New Zealand Mud Snails), roads and erosion, and restoration of degraded habitats. The focus of many of these studies has been to provide a scientific foundation to inform management decisions by state and federal environmental and regulatory agencies.	http://msi.ucsb.edu/people/research-scientists/david-herbst
Hess, Laura		Earth Research Institute (ERI)	enviro.; econ.	Dr. Hess's research focuses on remote sensing, field, and modeling studies in order to quantify key drivers of land cover and land use change on the lower Amazon floodplain and to understand the relationship between land use change and sustainable fisheries.	http://www.eri.ucsb.edu/people/laura-hess
Hiltner, Ken	English		enviro.; soc.	Dr. Hiltner is a professor of English literature and Environmental Studies. He explores the history of literature and the relationship between literary history and our Earth in order to better understand how we arrived at our current environmental beliefs. Hiltner is active in examining environmental issues from various perspectives. He hosts a weekly podcast, the Environmental Humanities Podcast, where he conducts interviews with scholars and artists to discuss how environmental issues are taken up across the humanities. He also has given various talks, such as "Nature: How Much Does it Matter," "The Role of Our Past In Our Environmental Future," and "Environmental Criticism: What is at Stake?"	http://www.english.ucsb.edu/people-detail.asp?PersonID=266
Hoelle, Jeffrey	Anthropology	Environmental Humanities Center	enviro.; econ.; soc.	Dr. Hoelle is a cultural anthropologist interested in human-environment interactions. His research seeks to understand Amazonian livelihoods and land uses in relation to political and economic drivers, but also to expand the view through attention to cultural factors, such as ideals of work, nature, and masculinity, as well as food and landscape preferences. The goal is to understand why destructive environmental practices, particularly cattle raising, make sense from the perspective of different actors. Current research projects include: the cultural dimensions of beef and meat consumption; integrating culture into land use-land change frameworks, theory, and modeling; and the function and aesthetics of everyday forms of nature control and domination.	http://www.anth.ucsb.edu/people/jeffrey-hoelle
Hofmann, Gretchen	Ecology, Evolution, & Marine Biology	Center for the Study of Ocean Acidification and Ocean Change; Marine Science Institute (MSI)	enviro.	Dr. Gretchen Hofmann is a marine physiologist who studies the response of marine organisms to global change. The Hofmann lab uses integrated approaches to ask whether and how marine organisms can adapt to future ocean conditions. Dr. Hofmann and her students work in marine systems ranging from the Antarctic to California kelp forests. Dr. Hofmann is also a member of the Santa Barbara Coastal LTER, a research group that studies long-term ecology in kelp ecosystems.	http://www.lifesci.ucsb.edu/eemb/faculty/hofmann/
Holbrook, Sally	Ecology, Evolution, & Marine Biology	Marine Science Institute (MSI); Santa Barbara Coastal and Moorea Coral Reef Long Term Ecological Research	enviro.	Dr. Holbrook's research focuses on population dynamics, marine species interactions, and impacts on coral reef ecology. She is currently doing research on temporal patterns in reef communities by analyzing long-term trends in population abundance and species richness. This research is especially vital when looking at the adverse effects of climate change on marine ecosystems.	https://www.eemb.ucsb.edu/people/faculty/holbrook

Holden, Patricia	Environmental Science & Management	University of California Center for Environmental Implications of Nanotechnology (UC CEIN); State of California Water Resources Control Board (SWRCB); Earth Research Institute (ERI)	enviro.	Dr. Holden's research blends environmental engineering with soil microbiology. Her current research projects deal with the interactive effects of soil, water, and nutrients on bacterial processes, as well as coastal water quality in urban environments. She focuses on bacteria as both an agent of environmental restoration and of environmental degradation.	http://www.bren.ucsb.edu/people/Faculty/patricia_holden.htm
Homyak, Peter	Ecology, Evolution, & Marine Biology	Earth Research Institute (ERI)	enviro.	Dr. Homyak's research focuses on how humans have altered biogeochemical cycles and its effects on the environment. More specifically, his research examines the production of gaseous N emissions from soils and how they are influenced by dry-season processes. Because N emissions influence the chemistry of the lower atmosphere, he is interested in developing an understanding of important links between soil and atmospheric processes.	https://labs.eemb.ucsb.edu/schimmel/josh/Pete.html
Horst, Allison	Environmental Science & Management	University of California Center for Environmental Implications of Nanotechnology (UC CEIN)	enviro.	Dr. Horst studies the effects and interactions between engineered nanoparticles, specifically titanium dioxide, and environmental bacteria. Her research includes collecting growth data for bacteria exposed to nanoparticles, determining the mode of action by which nanoparticles intoxicate bacteria, and studying how association of nanoparticles with bacteria can alter the physical state of nanoparticles in aqueous media.	https://www.bren.ucsb.edu/people/Faculty/allison_horst
Israelachvili, Jacob	Chemical Engineering	Institute for Collaborative Biotechnologies; Materials Research Laboratory; California NanoSystems Institute	enviro.	Israelachvili's research is in the general area of intermolecular and inter-surface forces in colloidal, biological, complex fluid and materials systems. He uses the Surface Forces Apparatus (SFA) for directly measuring the forces between surfaces in liquids and vapors, and for studying other interfacial phenomena at the molecular through to the macro scale. Many other techniques are also used. Not only static (i.e., equilibrium) but also dynamic forces are being looked at, such as the 'micro' and 'nano' viscosities of ultra-thin liquid films (thin film rheology), molecular relaxation processes at surfaces and interfaces, adhesion and friction, lubrication and wear. In particular, Professor Israelachvili is currently studying the very short-range forces between surfaces in liquids and the relation between adhesion, friction, and the conformations of molecules at the surfaces and those trapped between two surfaces. Another area of activity is the development of new experimental techniques, especially for studying dynamic and time-dependent interactions for studying different materials and surfaces such as polymers, gels, inorganic materials, metals, metal oxides, ceramics, biological macromolecules (lipids, proteins, biopolymers, ligands and their receptors) and the interactions (adhesion, fusion and biolubrication) of both model and real biomembranes and biosurfaces (ex vivo). Electrochemical reactions are also being studied simultaneously with measurements of the (physical) interaction forces. The aim of these studies is to gain insights into the fundamental interactions in complex fluid, colloidal and biological systems that also have technological applications, for example, for creating biocompatible surfaces, developing new types of structured materials and soft biomaterials, and for the diagnosis of pathological membranes and tissues.	https://chemengr.ucsb.edu/people/jacob-israelachvili
Jacobs, Robert	Molecular, Cellular, and Developmental Biology; Ecology, Evolution, & Marine Biology	Marine Science Institute(MSI)	enviro.	Dr. Jacobs' research is oriented toward the study of cellular and molecular mechanisms of drug action. More specifically, one of his projects examines the harvest of marine organisms that are useful for medical and industrial purposes. This project looks at several oil and gas platforms in the Santa Barbara Channel to assess the issue of over-harvesting natural products. The research may reduce or eliminate the ecological impacts of harvesting marine organisms.	https://www.mcdb.ucsb.edu/people/faculty/jacobs
Jenkins, Chris	Film and Media Studies		enviro.; soc.	Dr. Jenkins is the Head of Production in the Department of Film and Media Studies and an independent filmmaker who specializes in international documentary productions about environmental, humanitarian, or cultural topics. He has been behind the lens of several feature length documentaries including Sierra Leone's Refugee All Stars, The Matador and Riverwebs. Riverwebs explores the work of stream ecologists who seek to understand the complex connections between streams and their riparian ecosystems. His most recent short film, called Lost Crops, follows a doctor and a botanist/humanitarian on a worldwide search for sustainable superfoods. Jenkins has also worked as the Director of Media for the Tropical Forest Group and the ParisAgreement.org, a website/media platform which provided up-to-the-minute information during the climate negotiations at the Paris Agreement (COP21).	http://www.filmandmedia.ucsb.edu/people/faculty/Jenkins/jenkins.html

Jevbratt, Lisa	Art	Carsey-Wolf Center	enviro.; soc.	Dr. Jevbratt is a professor in the art department. Her research and art is currently focusing on investigating human's relationship with animals and the natural environment. She is developing software that simulates how animals see, and she is teaches a yearly class in interspecies collaboration in the art department. She is leading a fiber arts project investigating invasive species on the Channel Islands and larger issues of conservation. The project is giving its audience-participants hands on experience with historical methods of textile production, raising questions about the sustainability of our current textile industry. Her work and teaching is continuously engaged with questions about sustainability though examining the relationships we create with other species and our shared environment.	http://artsite.arts.ucsb.edu/people/faculty/jevbratt.html
Jones, Charles	Geography	Earth Research Institute (ERI)	enviro.	Dr. Jones co-heads the Climate Variations and Change research group. His work is dedicated to achieving a better understanding of the Earth's present and future climates on different temporal and spatial scales. His research interests are in Dynamic Meteorology and Climate Sciences, and his research topics include the Madden-Julian Oscillation (MJO), predictability of extreme events (especially precipitation), monsoon systems, climate change, WRF regional modeling, and wildfires.	http://www.eri.ucsb.edu/people/charles-jones
Jones, Matthew		National Center for Ecological Analysis and Synthesis (NCEAS)	enviro.	Dr. Jones' research focuses on environmental informatics, including the management, integration, analysis, and modeling of heterogeneous environmental data. Recent projects have produced effective new techniques for information management and analysis, including metadata standards, data management software, and data analysis software, such as scientific workflow systems. Recent projects focus on Kepler, an open-source scientific workflow system that Jones co-founded with other researchers; DataONE, a global data repository aimed to promote access to data about life on earth and the environment; and SONet, an effort to achieve environmental data interoperability through semantic modeling of scientific observations.	http://msi.ucsb.edu/people/research-scientists/matthew-jones
Kappel, Carrie		Marine Science Institute (MSI)	enviro.; econ.; soc.	Dr. Kappel is a conservation biologist and community ecologist. Major themes of her work include quantifying the ways humans depend upon and impact marine species, habitats, and ecosystems; understanding the spatial distribution of ecological and human components of ecosystems in order to inform conservation and management; and developing ways to integrate biophysical and socioeconomic data to support environmental decision making in coastal ecosystems. Her research has been aimed at informing marine protected area design, ecosystem based management, and marine spatial planning.	http://sfg.msi.ucsb.edu/people/carrie-kappel/
Keller, Arturo	Environmental Science & Management	American Chemical Society; American Geophysical Union; Association of Environmental Engineering and Science Professors; Society for Environmental Toxicology and Chemistry; Earth Research Institute (ERI)	enviro.	Dr. Keller's research focuses on the sustainable use of chemicals and materials in our modern society by understanding and quantifying their potential impacts and by seeking ways to minimize impacts while achieving the benefits. He is particularly interested in emerging materials such as nanoparticles and biochemicals, for which little information is available. He also does work at large scales to design better management strategies for common chemicals such as fertilizers and pesticides.	http://www.bren.ucsb.edu/~keller
Keller, Edward	Earth Science; Environmental Studies	Geological Society of America; Earth Research Institute (ERI)	enviro.	Dr. Keller's research is divided into the study of stream processes and tectonic activities. More specifically, he focuses on river restoration management, environmental effects of channelization, and the impact of large debris on river systems. Dr. Keller recently started a long-term research project that looks at the hydrology and ecology of small coastal lagoons in southern California.	http://www.geol.ucsb.edu/faculty/keller/
Kendall, Bruce	Environmental Science & Management	Marine Science Institute (MSI); Earth Research Institute (ERI)	enviro.; econ.	Dr. Kendall applies the science of population ecology to the conservation of rare species and to the management of harvested populations. His research focuses on the causes of population fluctuation, the prediction of the extinction of rare species, and the effects of current-driven dispersal on marine fish species. He also studies the design of protected areas for biodiversity conservation and fisheries management and how to manage tradeoffs among multiple ecosystem services.	http://www.bren.ucsb.edu/people/Faculty/bruce_kendall.htm
Kim, Heejung	Psychological & Brain Sciences		enviro.; econ.; soc.	Dr. Kim's research examines how different social and biological factors, such as religion, social class, national culture, as well as genes, impact how individuals are motivated to engage in sustainability actions.	https://www.psych.ucsb.edu/people/faculty/kim
King, Jennifer	Geography	Earth Research Institute (ERI)	enviro.	Dr. King studies the interactions between soils, plants, and the atmosphere. Her research focuses on biogeochemical processes, which are those processes that cycle elements on Earth, and examines how these processes are influenced by natural and human-induced environmental changes. She recently investigated biogeochemical cycling of carbon, nitrogen, and phosphorus in urban households and how human decisions impact the fluxes of these elements. Current projects include examination of biotic and abiotic factors affecting the carbon cycle in California grasslands.	http://geog.ucsb.edu/~jyking/

Knapp, Denise	Geography	Santa Barbara Botanic Garden	enviro.	Dr. Knapp is a community ecologist who studies plant-invertebrate interactions to achieve habitat and species restoration. Her current work includes pollinator networks associated with rare plants, techniques to restore diverse native communities in areas invaded by crystalline iceplant on San Nicolas Island, and the re-building of soil, plant, plant litter, and arthropod ecological networks on Santa Rosa island.	http://www.es.ucsb.edu/people/denise-knapp
Krintz, Chandra	Computer Science	The Lab for Research on Adaptive Computing Environments (RACElab); Institute for Energy Efficiency (IEE)	enviro.; econ.; soc.	Dr. Chandra Krintz's research interests include programming support and adaptive optimization for cloud computing applications and systems, and techniques for efficient interoperation and integration of web services. Most recently, her focus has been on using these technologies to facilitate sustainability science and engineering for the domain of agriculture (SmartFarm). The project SmartFarm couples data from external sources with farm-local measurements and statistics, provides an interface into which custom analytics tools can be plugged and automatically deployed, and ensures that all data and analyses remain securely under the control of growers (not commercial vendors). SmartFarm enables growers to extract actionable insights from their data, to quantify the impact of their decisions and environmental changes, and to identify opportunities for increasing farming sustainability as well as productivity.	http://www.cs.ucsb.edu/~ckrintz/
Kryder, LeeAnne	Writing		enviro.; econ.; soc	Professor Kryder's research focuses on the rhetoric of environmental sustainability. In particular, she analyzes how American businesses address sustainability and considers how Writing Studies pedagogy can refine environmental awareness and assist students to engage with securing our common future. Her students conduct research to learn about sustainability concerns, then practice various writing strategies that can raise awareness and empower change.	http://www.writing.ucsb.edu/people/leeanne-kryder
Kuczynski, Brandon	Environmental Science & Management	Institute for Social, Behavioral and Economic Research (ISBER); Institute for Energy Efficiency (IEE)	enviro.; econ.; soc.	Dr. Kuczynski is a researcher and consultant in industrial ecology. His research focuses on methods and applications of life cycle assessment, with particular attention to the problems of data reuse, critical review, and transparency and reproducibility of study results. He is interested in the development of Web-based technologies for sharing product system models, and cryptographic techniques for protecting the privacy of confidential information during publication. He also studies the environmental implications of waste management, recycling, and extended producer responsibility.	http://iee.ucsb.edu/faculty/kuczynski
Kundu, Manasendu	Anthropology; Environmental Studies	Indian Institute of Engineering Science and Technology	enviro.; econ.; soc.	Dr. Kundu's research involves finding a farmer-friendly model of agricultural land acquisition (from the farmers) for industrial development in West Bengal state of India, his home state. Kundu's published work explores the nature and history of local government systems in the state. Currently, as a Visiting Faculty at the Indian Institute of Engineering Science and Technology, his interests also include promoting the practice of sustainable organic farming in West Bengal.	http://www.es.ucsb.edu/people/manasendu-manny-kundu
Kuris, Armand	Ecology, Evolution, & Marine Biology; Zoology	Marine Science Institute (MSI)	enviro.	Dr. Kuris' research goal is to reveal the role of infectious diseases in ecosystems. It examines how disease contributes substantially to the energetics of the ecosystem and substantially alters trophic relationships and the structure of food webs. His research looks at the biological control of exotic marine pests and biological control of human tropical diseases. This information about parasites is useful for assessing ecosystem function in wetlands.	https://www.msi.ucsb.edu/people/faculty/armand-kuris
Lafferty, Kevin	Ecology, Evolution, & Marine Biology	Marine Science Institute (MSI); United States Geological Survey (USGS)	enviro.; econ.	Dr. Lafferty's research mainly focuses on the ecology of parasites; however, his work also deals with conservation biology issues. Such research includes ways to further the protection and recovery of the endangered tidewater goby, black abalone, southern sea otter, and western snowy plover. In addition, Dr. Lafferty studies the effect of fishing on marine ecosystems (local estuaries, beaches, and kelp forests). In addition to being an adjunct faculty member at UCSB, he is also a Marine Ecologist for the USGS at the Channel Islands Field Station.	http://homes.msi.ucsb.edu/~lafferty/Kevin_Lafferty/About%20Me.html
Larsen, Ashley	Environmental Science & Management		enviro.; econ.; soc.	Dr. Larsen's research interests center on the ecology of managed systems. Her research incorporates theory from ecology, economics, and public health to better understand how to produce the necessary food and fiber for a growing population while maintaining healthy ecological and human communities. She seeks to provide novel understanding of ecological processes using a combination of econometric and GIS tools. Her current projects focus on understanding the landscape drivers of agricultural pests, as well as the human health consequences of pesticide exposure. She has contributed to highly interdisciplinary teams on a range of topics from Lyme disease to sustainable fisheries.	http://www.esm.ucsb.edu/people/Faculty/ashley_larsen.htm
Larue, Renan	French and Italian		enviro.; soc.	Dr. Larue conducts research on vegetarianism and veganism as well as all religious, anthropological, moral, medical and environmental debates surrounding these lifestyles throughout history.	http://www.frit.ucsb.edu/people/renan-larue

Lavallee, Daniel		Earth Research Institute (ERI)	enviro.	Dr. Lavallee's research has been focused on the study of nonlinear effects in seismology: first in the study of nonlinear soil dynamics and earthquake strong ground motion and second in the study of spatial complexity of earthquake slip or pre-stress distribution over the fault surface. A better understanding of earthquakes and tsunamis will help mitigating damage to the environment. A recent example is the situation in Japan after the 2011 Tohoku earthquake, especially regarding nuclear accidents.	http://www.eri.ucsb.edu/people/daniel-lavall%C3%A9
Lea, David	Earth Science	Marine Science Institute (MSI)	enviro.	Dr. Lea's research interests focus on global climate change, marine geochemistry and carbon cycle. He focuses on the study of past climate change in order to establish a context for future global warming. As part of an international working group called SENSETROP, Dr. Lea has compiled, harmonized, and synthesized proxy sea surface temperature data from the tropics during the Ice Ages to assess climate sensitivity. He is also examining how salinity and other factors affect the accuracy of paleotemperature proxies. Dr. Lea worked at the U.S. State Department in 2010-2011 as climate science advisor to the team negotiating what would eventually become the Paris Agreement (2015).	http://www.geol.ucsb.edu/people/david-lea
Lenihan, Hunter	Environmental Science & Management	Sustainable Aquaculture Research Center; Moorea Coral Reef Long Term Ecological Research; Santa Barbara Coastal Long Term Ecological Research	enviro.; econ.; soc.	Dr. Lenihan's primary research interests lie in population and community ecology, especially in connection with coral reefs, estuaries, marine fisheries management, habitat restoration, aquaculture, and ecotoxicology. He is working on projects that aim to enhance coral reef management and restoration, sustainable aquaculture, mitigating environmental harm caused by emerging chemicals, and managing coastal marine fisheries, for example those targeting sharks and invertebrates.	http://fiesta.bren.ucsb.edu/~lenihan/
Levi, Carlos	Materials; Mechanical Engineering	International Center for Materials Research; Materials Research Laboratory; Institute for Energy Efficiency (IEE); Pratt & Whitney Center of Excellence for High Temperature Composites; Honeywell-UCSB Alliance for Thermal Barrier Coatings	enviro.	The overarching theme of Dr. Levi's research is the fundamental understanding of microstructure evolution in inorganic materials during synthesis and subsequent service, and the application of this understanding to the design and synthesis of improved coatings, thin films, composites and monolithic systems, with emphasis on materials for more efficient energy and propulsion systems. Current areas of work include thermal and environmental barrier coatings for advanced gas turbine components with higher fuel efficiency and reduced environmental impact, fibers and environmentally robust matrices for ceramic matrix composites, novel high temperature alloys and multi-phase functional materials, all related to energy production systems.	http://www.materials.ucsb.edu/~levic/levi.html
Lewallen, Ann Elise	East Asian Languages & Cultural Studies		enviro.; soc.	Dr. Lewallen's research and teaching engages with critical indigenous studies, gender studies, multiculturalism, and environmental justice in the context of contemporary Japan and in Japan's transnational relations. As a cultural anthropologist, she is also concerned with research ethics and issues of knowledge construction in relation to indigenous and research host communities. Her current book project examines models of sustainable development and environmental justice within transnational citizen relations between Japan and India.	http://www.eastasian.ucsb.edu/home/faculty/ann-elise-lewallen/
Libecap, Gary	Environmental Science & Management; Economics	Earth Research Institute (ERI)	enviro.; econ.; soc.	Dr. Libecap's research interests include common pool resource problems and how property rights institutions (private, group) can or cannot address them. Current research addresses the demarcation of land, water rights, and water markets for water allocation and management, as well as the use of rights-based arrangements in fisheries.	http://www.bren.ucsb.edu/people/faculty/gary_libecap.htm
Lipshutz, Bruce	Chemistry & Biochemistry		enviro.	The Lipshutz Research Group at UCSB is committed to developing new green technologies that will transform the way in which organic synthesis will be performed. Their patent-pending technologies provide alternatives to the use of toxic and flammable organic solvents that constitute the vast majority of the organic waste created by the chemical enterprise today. Through the use of newly engineered "designer" surfactants, which are environmentally benign, many of the most commonly used organic reactions can now be run in water at room temperature.	http://www.chem.ucsb.edu/people/faculty/lipshutz/index.shtml
Lisiecki, Lorraine	Earth Science	Marine Science Institute (MSI)	enviro.	Dr. Lisiecki's research focuses on computational approaches to analyzing paleoclimate records. Through the analysis of climate system interactions such as glacial cycles, Dr. Lisiecki's work contributes to models that further understanding of how man-made changes may affect future climate.	http://lorraine-lisiecki.com/
Loaiciga, Hugo	Geography		enviro.	Dr. Loaiciga research focuses on the planing, design, and analysis of water resources systems, and on the computational aspects of surface water and groundwater hydrology. He currently researches (a) landslide occurrence caused by rainfall and earthquakes, (b) the determination of the safe yield for sustainable groundwater management, and (b) stormwater management in urban areas	http://geog.ucsb.edu/~hugo/
Love, Milton		Marine Science Institute (MSI)	enviro.	Dr. Love's research interests include restoration ecology of coastal marine environments, as well as evaluating the interface between environmental biology and resource management policy. Much of his recent research has focused on the impact of offshore oil and gas platforms on local ocean ecosystems.	http://www.msi.ucsb.edu/research/research-labs-msi/love-lab

Luyendyk, Bruce		Earth Research Institute (ERI)	enviro.	Dr. Luyendyk has studied the marine seep systems offshore of the UCSB campus. Other research interests include Antarctic climate evolution in which he participated in projects that aim to capture a record of some of the earth's global climate transitions.	http://www.geol.ucsb.edu/faculty/luyendyk
MacIntyre, Sally	Ecology, Evolution, & Marine Biology	Marine Science Institute (MSI); Earth Research Institute (ERI)	enviro.	Dr. MacIntyre's research investigates physical processes in lakes and the coastal zone and their biogeochemical and ecological consequences. Studies are ongoing in Arctic and Subarctic lakes, Mono Lake, CA, tropical lakes in East Africa and the Amazon Basin, and the waters of coastal California.	http://www.crseo.ucsb.edu/~sally/
Mackie, Diane	Psychological & Brain Sciences		enviro.; soc.	Dr. Mackie's research spans two distinctly different domains: intergroup relations (focusing on the affective, cognitive, and motivational processes by which group memberships influence people's thoughts, feelings, and behavior) and social influence (focusing on the affective, cognitive, and motivational processes by which peoples' attitudes and behavior are changed). Her study of the antecedents and consequences of attitudes and norms can be applied to sustainability relevant behaviors.	https://www.psych.ucsb.edu/people/faculty/mackie
Madhow, Upamanyu	Electrical and Computer Engineering	Center for Energy Efficiency Design (CEED); Institute for Collaborative Biotechnologies; Institute for Energy Efficiency (IEE)	enviro.	Dr. Madhow's ongoing research investigates the architecture of next generation wireless communication and sensor networks, with the goal of obtaining order of magnitude gains in energy efficiency.	http://www.ece.ucsb.edu/Faculty/Madhow/
Manalis, Melvyn	Environmental Studies	Economics and Policy Solutions Group	enviro.; econ.	Dr. Manalis's holds a PhD in Physics. His research interests surround the development of quantifiable sustainability measures, as well as integrated energy planning and industrial ecology. He is also a research professor in the Environmental Studies Program and associated with the Institute for Energy Efficiency. He continues to carry on research that integrates thermodynamic applications to coupling of human and natural systems, with the emphasis on information feedbacks between these systems. Priorities in this research are economic considerations within and the ethical commons alignment of human and natural systems.	http://www.es.ucsb.edu/people/academic/melvyn-s-manalis
Matthys, Eric	Mechanical Engineering	Production & Storage Solutions Group; Buildings & Design Solutions Group; Computing Solutions Group; Institute for Energy Efficiency (IEE)	enviro.	Dr. Matthys conducts Sustainability research, mostly in the Energy area. He is leading efforts in Solar Energy, especially on new Concentrated Solar Thermal approaches, as well as in Energy Efficiency projects, such as developing new technologies for HVAC systems for buildings and for ship propulsion .	http://www.me.ucsb.edu/~matthys/
Mazer, Susan	Ecology, Evolution, & Marine Biology	National Phenology Network; California Phenology Project	enviro.	Dr. Mazer's research involves detecting the mechanisms by which plants adapt to the ecological risks and opportunities that they encounter and exploring the genetic constraints that may limit the rate or degree of adaptation. Her central research goals are to determine genetic and environmental sources of variation in traits that affect individual fitness. Since 2011, as field director of the California Phenology Project (www.usanpn.org/cpp), she has designed and implemented phenological monitoring programs throughout the state, engaging students, national park staff, UC Natural Reserves, and citizen scientists in the study of how climate change is affecting the seasonal cycles of 30 California native plant species.	http://www.eemb.ucsb.edu/people/faculty/mazer
McCauley, Douglas	Ecology, Evolution, & Marine Biology	Earth Research Institute (ERI); Marine Science Institute (MSI)	enviro.	Dr. McCauley's research is directed at understanding how community structure influences ecosystem dynamics, in determining how ecosystems are interactively and energetically coupled to one another, and quantifying how humans perturb these dynamics and shape patterns of biodiversity. His lab engages these questions using tools from the disciplines of community ecology, biogeochemistry, spatial analysis, ecological modeling, conservation biology, and anthropology. An important aim of research in the McCauley Lab is to generate results that both advance the pure science of ecology and that can be of practical service to decision makers responsible for shaping the future of our environment.	https://www.eemb.ucsb.edu/people/faculty/mccauley
McClintock, Will		Marine Science Institute (MSI)	enviro.; econ.; soc.	Dr. McClintock leads a group of software developers and planners to develop and deploy applications for sustainable ocean management. Their flagship application, called SeaSketch (www.seasketch) is used in dozens of countries for collaborative, science-based marine spatial planning. The McClintock lab was also involved from 2004-2011 in the development of MarineMap, a web-based application used by stakeholders in the Marine Life Protection Act Initiative (MLPAI) for the design of California's network of marine protected areas. Their team also develops mobile and web applications for fisheries management in collaboration with The Nature Conservancy of California. Will is a Project Scientist at the UCSB Marine Science Institute, Senior Fellow at the National Center for Ecological Analysis and Synthesis and a member of the Marine Protected Areas Federal Advisory Committee.	http://msi.ucsb.edu/people/research-scientists/will-mcclintock

McFarland, Eric	Chemical Engineering	Institute for Energy Efficiency (IEE); Materials Research Laboratory; California NanoSystems Institute	enviro.	Dr. McFarland's research focuses on facilitating cost-effective and environmentally sustainable production of chemicals and fuels. He helps to investigate new conversion processes and issues related to technoeconomics and sustainability.	https://chemenqr.ucsb.edu/people/eric-mcfarland
McMeeking, Robert	Materials; Mechanical Engineering	Institute for Energy Efficiency; Center for Multifunctional Materials & Structures (CeMMaS); California NanoSystems Institute	enviro.	Dr. McMeeking undertakes research on lithium-ion batteries and solid oxide fuel cells with the aim of improving their energy capacity, increasing their ability to deliver high power, and, in the case of batteries, enabling them to be recharged rapidly. Both lithium-ion batteries and solid oxide fuel cells are important elements in the strategy to reduce carbon emissions, as energy generated by low carbon emission methods can be stored and transported in the batteries, and solid oxide fuel cells can use hydrogen as the fuel, thereby avoiding the production of carbon dioxide. Dr. McMeeking uses computational modeling of both system to identify improved microstructures and designs.	http://engineering.ucsb.edu/faculty/profile/204
Meiburg, Eckart	Mechanical Engineering	Center for Interdisciplinary Research in Fluids; Institute for Energy Efficiency (IEE)	enviro.	Dr. Meiburg investigates fluid flow problems in the atmosphere and the oceans, by means of large-scale computer simulations. In recent years, he has studied such problems as mixing of warm and cold water in the ocean, as well as the transport of sediment and biogenic particulate matter by oceanic currents. Understanding these processes is important for predicting the oceans' ability to absorb atmospheric carbon dioxide, which, in turn, represents a critical element in all climate models. Dr. Meiburg's research finds additional application in the development of energy-efficient heating and cooling strategies for buildings.	http://me.ucsb.edu/faculty/profile/205
Meinhart, Carl	Mechanical Engineering	Institute for Collaborative Biotechnologies; American Institute for Manufacturing Integrated Photonics (AIM Photonics)	enviro.	Dr. Meinhart's research group investigates fundamental fluid mechanics problems at the micro-scale and nano-scale, with special emphasis on transport issues in MEMS-based sensors for detection of specific biological molecules. His research allows the detection of highly sensitive and specific detection of trace chemicals through the combination of surface-enhanced Raman Spectroscopy with microfluidics. This research can be applied to energy efficient building systems design.	https://me.ucsb.edu/people/carl-meinhart
Melack, John	Ecology, Evolution, & Marine Biology; Environmental Science & Management	Marine Science Institute (MSI); Earth Research Institute (ERI)	enviro.	Dr. Melack researches ecological processes in lakes, wetlands, and streams, as well as the hydrological and biogeochemical aspects of catchments. His research combines state-of-the-art measurements, modeling, experiments, and remote sensing, and it examines ecological processes from the population to ecosystem levels. He has applied results of his research to assess impacts of atmospheric deposition on aquatic ecosystems, to evaluate ecological restoration efforts in California's Bay-Delta and in Mono Lake, and to determine greenhouse gas emissions from tropical reservoirs.	https://www.eemb.ucsb.edu/people/faculty/melack
Meng, Kyle	Environmental Science & Management	Earth Research Institute (ERI)	enviro.; econ.; soc.	Dr. Meng explores particular empirical settings selected to inform upon a world under anthropogenic climate change. Examples include examining the relationship between adverse local weather driven by the El Niño Southern Oscillation and the onset of civil wars in the tropics during recent decades; using betting markets to elicit beliefs over the cost of U.S. climate policy; and studying the development of 20th-century U.S. coal-fired electricity capacity to inform upon a future low-carbon energy transition.	http://www.kylemeng.com/
Metiu, Horia	Chemistry & Biochemistry	Institute for Terahertz Science and Technology; California NanoSystems Institute	enviro.	Dr. Metiu's research involves searching for new catalysts in order to convert CO ₂ and natural gas into useful chemicals. He is also involved with work that uses electrochemistry to find a good system for energy storage.	http://www.chem.ucsb.edu/people/faculty/metiu/
Mezic, Igor	Mechanical Engineering	California NanoSystems Institute; Institute for Energy Efficiency (IEE)	enviro.	Dr. Mezic's current research is centered on an operator-theoretic approach to analysis of nonlinear dynamical systems, applications in microfluidics and (bio)-nanotechnology. The research topics can be grouped as follows: 1) mixing and separation in fluids across the scales with applications ranging from microfluidic phenomena to oceanographic flows; 2) nano and micro-scale particle dynamics induced by dielectrophoresis and other electrokinetic phenomena, with applications to biotechnology; 3) multiscale dynamics of the Atomic Force Microscope, including interactions with biomolecules; and 4) dynamical systems theory of complex systems, including large-scale networked systems. In each of these topics, the research is characterized by pursuit of the key physical phenomena in a device or system, followed by the abstraction of the mathematical problem (or problems) associated with it. The loop is closed by applying the solution of the mathematical problem to explain the physical phenomena or design new concepts based on which devices can be built or improved.	http://industry.ucsb.edu/faculty/profile/175

Michaelsen, Joel	Geography	Climate Hazards Group (CHG); Earth Research Institute (ERI)	enviro.; econ.; soc.	Dr. Michaelsen's research focuses on analyzing climate variability and climate change using statistical modeling techniques. Along with the members of the Climate Hazards Group (CHG), he has worked on implementing improved methods of monitoring and predicting rainfall variations in Sub-Saharan Africa and Central America on seasonal and longer time scales. This monitoring and prediction is done by blending data from satellites, weather stations, and models. The primary objectives of the research are to: 1) provide African officials and relief agencies with early warning of developing drought conditions on seasonal time scales that could increase food insecurity; and 2) determine relationships between rainfall and larger atmospheric circulation and ocean temperature patterns that may help officials adapt rainfed agricultural systems to longer term changes in rainfall regimes associated with global warming.	http://geog.ucsb.edu/~joel/
Michelle O'Malley	Chemical Engineering; Bioengineering	Institute for Collaborative Biotechnologies; California NanoSystems Institute; Center for Bioengineering; Earth Research Institute (ERI)	enviro.	Dr. O'Malley directs a group that is working to develop renewable chemicals and biofuels from lignocellulose (plant waste).	https://chemengr.ucsb.edu/people/michelle-omalley
Mildenberger, Matto	Political Science		enviro.; econ.; soc.	Dr. Mildenberger's research explores the political drivers of policy inaction in the face of serious social and economic threats posed by global climate change. Straddling comparative political economy and political behavior, Mildenberger's work focusses on comparative climate policymaking and the dynamics of US climate opinion. His current book project compares the politics of carbon pricing across advanced economies, with a focus on the history of climate reforms in Australia, Norway and the United States. In addition, Matto co-leads the Environment and Energy Transitions (ENVENT) Lab in the Department of Political Science.	http://www.mattomildenberger.com/
Miller, Robert	Environmental Science & Management	Earth Research Institute (ERI); Marine Science Institute (MSI); University of California Center for Environmental Implications of Nanomaterials (UC CEIN)	enviro.	Dr. Miller's research involves benthic subtidal ecology, particularly community ecology and the role of primary producers and biodiversity in marine ecosystems. He leads the Santa Barbara Channel Marine Biodiversity Observation Network (SBCMBON) and is also involved in the Santa Barbara Coastal Long Term Ecological Research Program (SBC LTER).	http://msi.ucsb.edu/people/research-scientists/robert-miller
Mishra, Umesh	Electrical and Computer Engineering	Institute for Energy Efficiency (IEE); Center for Advanced Nitride Electronics Researchers; Solid State Lighting and Energy Center; Interdisciplinary Center for Wide Band-Gap Semiconductors; California NanoSystems Institute	enviro.	Dr. Mishra researches electronics and photonics. He recently led a project to develop a new semiconductor technology that enables highly efficient power conversion at low cost in motor drives, electric vehicles, and power grid applications.	http://my.ece.ucsb.edu/mishra/biography.htm
Moehlis, Jeffrey	Mechanical Engineering	Institute for Collaborative Biotechnologies; Institute for Energy Efficiency (IEE)	enviro.	Dr. Moehlis has an ongoing research project on energy harvesting, which involves converting vibrational energy into electrical energy. His other research areas include biological dynamics, control of neurons, networks, and dynamical systems.	http://www.me.ucsb.edu/~moehlis/
Morse, Daniel	Molecular, Cellular, and Developmental Biology	Institute for Collaborative Biotechnologies; Center for Nanomedicine; California NanoSystems Institute; Institute of Energy Efficiency (IEE)	enviro.	Dr. Morse and his group conduct research focused on biophotonics and biologically inspired photonic technologies to improve the efficiency of solar energy, light-emitting diodes and infrared detectors. Previously recognized for their innovation of "Silicon Biotechnology," the team's approach is focused on advantageous mechanisms they are discovering in biological systems and translating into practical new materials and engineering.	http://www.mcdb.ucsb.edu/people/faculty/morse
Moskovits, Martin	Chemistry & Biochemistry	Center for Energy Efficiency	enviro.	Dr. Moskovits' research interests falls into two broad categories: (i) plasmonics and surface-enhanced Raman spectroscopy (SERS) and (ii) nanowire synthesis and nanowire-based sensing. In plasmonics, he has two major goals: the first is to create plasmonic analogs of photovoltaics and photosynthetic systems. Recently, his research group produced the first device ever reported which uses the electrons resulting from the decay of plasmons in gold nanorods to reduce hydrogen ions in water and uses the positive charges left behind to oxidize water to oxygen gas. The device is a free running cell floating in water, with light as its sole energy source.	http://www.chem.ucsb.edu/moskovitsgroup/
Mulfinger, Jane	Art		enviro.; soc.	Dr. Mulfinger's art project at the Pasadena YWCA building exemplifies how art and sustainability go hand in hand. Dr. Mulfinger's installation, "Autonomy Is No Longer Possible or Interesting," features repurposed exercise bicycles that power LED lights in the buildings when used by visitors. By repurposing materials for her artwork, Dr. Mulfinger uses sustainable methods to create metaphors that enhance cultural/community awareness.	http://www.arts.ucsb.edu/faculty/mulfinger/

Myers, Monique		Marine Science Institute (MSI)	enviro.; soc.	Dr. Myers research interests include impacts to, benefits from, and conservation of coastal ecosystems. She has explored anthropogenic contaminants in coastal wetlands, remote sensing and community monitoring of coral reefs and impacts of marine protected areas. She is currently investigating ghost crabs as indicators of human impacts to sandy beaches and leading the Santa Barbara Area Coastal Ecosystem Vulnerability Assessment (SBA CEVA). To address the challenges climate change poses to coastal communities and ecosystems, Dr. Myers' work is aimed at providing tools and information to reduce impacts to our coasts and help plan for adaptation to inevitable changes. During the past four years, Myers has been working on sustainable coastal community topics, K-12 student/teacher watershed education and climate change outreach. To accomplish a diverse array of projects, Dr. Myers collaborates with a variety of government, nonprofit groups, university researchers, and other stakeholders. She also participates on advisory boards and committees and produces publications for her peers and the public.	http://ca-sgep.ucsd.edu/biographies/monique-myers
Nakamura, Shuji	Materials	Solid State Lighting and Energy Center (SSLEEC); Institute for Energy Efficiency (IEE)	enviro.	Dr. Nakamura's research interests include high efficiency, high power light emitting diodes (LEDs) for lighting and laser diodes (LDs). His discovery of p-type doping in Gallium Nitride (GaN), growth of first Indium Gallium Nitride (InGaN) and development of blue, green, and white LEDs and blue laser diodes (LDs) has enabled energy efficient lighting and displays.	http://www.materials.ucsb.edu/recruitment/Faculty/nakamura/nakamura.php
Nelson, Craig		Marine Science Institute (MSI)	enviro.	Dr. Nelson's research includes projects studying the microbiomes of humans and other animals and studying bacterial pathogens in natural water in the context of water quality.	http://msi.ucsb.edu/people/research-scientists/craig-nelson
Nguyen, Thuc-Quyen	Chemistry & Biochemistry	Center for Polymers and Organic Solids; Institute for Collaborative Biotechnologies; Institute for Terahertz Science and Technology; Mitsubishi Chemical Center for Advanced Materials (MC-CAM); Center for Energy Efficient Materials; California NanoSystems Institute	enviro.	Dr. Nguyen studies carbon-based materials for organic solar cell applications with an emphasis on nanoscale characterization, structure-property-performance relationships, and device physics. Organic solar cells have the potential to be a low cost, light-weight, and clean energy technology because they can be made from abundant materials and manufactured at room temperature from solution. Dr. Nguyen's lab aims to develop efficient semi-transparent organic solar cell devices for greenhouse and building installation.	http://www.chem.ucsb.edu/people/faculty/nguyen/
Nisbet, Roger	Ecology, Evolution, & Marine Biology	Marine Science Institute (MSI); University of California Center for Environmental Implications of Nanotechnology (UC CEIN); Earth Research Institute (ERI)	enviro.	Dr. Nisbet's research covers many areas of theoretical ecology. Much of his work is based on Dynamic Energy Budget (DEB) theory to describe the rates at which individual organisms assimilate and utilize energy. His research group develops new fundamental theory and applies it to environmental problems. Applications include ecotoxicology, coral biology, zooplankton ecology, and fish bioenergetics.	https://www.eemb.ucsb.edu/people/faculty/nisbet
Nkuiya, Bruno	Environmental Science & Management	Sustainable Fisheries Group; Marine Science Institute (MSI)	enviro.; econ.; soc.	Dr. Nkuiya is interested in multidisciplinary research on environmental and resource economics, and biology. Specifically, he collaborated with ecologists from the National Center of Ecological Analysis and Synthesis on the Ocean Tipping Points project, which is aimed at contributing to a sustainable use of marine resources prone to tipping points. He is the author of several economic papers dealing with fisheries or environmental management under unstable environments including political and climate regime shifts. He is currently working on optimal and strategic management of fish stocks or environmental resources under uncertain environmental conditions and various property rights structures.	http://sfg.msi.ucsb.edu/about-us/people/sfgteam/Bruno_Nkuiya
Odette, George	Mechanical Engineering	Center for Multifunctional Materials & Structures (CeMMaS); Institute for Energy Efficiency (IEE)	enviro.	Dr. Odette's research interests focus on developing materials for future fusion and fission energy systems that will improve safety and reduce waste issues. He also looks at materials issues related to the safety of the current fleet of light water nuclear reactors.	http://me.ucsb.edu/faculty/profile/168
Osherenko, Gail		Marine Science Institute (MSI)	enviro.; econ.; soc.	Dr. Osherenko's research focuses on coastal and ocean law and policy, including property rights and sea tenure, the public trust doctrine, marine spatial planning, and the California coastal management regime. She was a principal investigator in the NCEAS working group on Ocean Ecosystem-Based Management: the role of zoning. She has published extensively on co-management of natural resources and indigenous peoples in Siberia, the Northern Sea Route, Canada, and Alaska. She is currently exploring the use of film and media in environmental education and has had two films in the Santa Barbara International Film Festival, including "Dark Side of the Loon" (www.darksideoftheloon.com) and "Arctic Expedition" (www.FilmsfromtheNorth.com).	http://msi.ucsb.edu/people/research-scientists/gail-osherenko

Passow, Uta		Marine Science Institute (MSI); Earth Research Institute (ERI)	enviro.	Dr. Passow's research seeks to answer the question of "How does the response of organisms and ecosystems change the functioning of the biological pump in a changing world?" Her research tries to achieve a mechanistic understanding of organisms and processes which determine sedimentation rates in marine systems, now and in the future. Currently, Dr. Passow specifically investigates how the input of fossil carbon impacts the growth of autotrophic and heterotrophic microbes, aggregation rates, and the production and microbial degradation of organic carbon. Her research also explores the effects of ocean acidification on microbial degradation and on aggregation and the drivers of the large fluctuations in normal pH off coastal California.	http://msi.ucsb.edu/people/research-scientists/uta-passow
Peljhan, Marko	Art	Carsey-Wolf Center	enviro.; soc.	Dr. Peljhan's research focuses on art and technology. His recent projects involve the Makrolab, a project that focuses on telecommunications, migrations, and weather systems research in an intersection of art and science from 1997-2007, and he is currently coordinating the Arctic Perspective Initiative art/science/tactical media project which is focused on the global significance of the Arctic geopolitical, natural, and cultural spheres.	http://artsite.arts.ucsb.edu/people/faculty/peljhan.html
Pellow, David	Environmental Studies		enviro.; soc.	Dr. Pellow's research interests lie in the links between environmental and social justice, and has included several studies focused on specific communities facing environmental racism and environmental injustice. Dr. Pellow currently has several projects which cover the current environmental studies discourse and intersectionality in addition to environmental justice. He is working on a book that brings together five dozen scientists, social scientists, humanities scholars, and activists to present the histories of 60 key terms that have been used in the field of environmental studies. He is also working on a series of papers and a book focused on expanding the field of environmental justice studies to engage more seriously fields like Critical Race Theory, Feminist Theory and Gender/Sexuality Studies, Anarchist Theory, and Critical Animal Studies. Additionally, Pellow is researching the links among the U.S. prison system, ecosystem harm, impacts on communities of color and working class communities, and their implications for social and environmental justice movements.	http://www.es.ucsb.edu/people/david-n-pellow
Pennathur, Sumita	Mechanical Engineering	Institute for Collaborative Biotechnologies; Institute for Energy Efficiency; Center for Nanomedicine; California NanoSystems Institute;	enviro.	Dr. Pennathur measures, models, and predicts how fluids and molecules move. Specifically, she engineers nanotechnologies that harness the movement of fluids and ions within electric fields. Her lab has discovered and then employed the fundamentals of nanoscale electrokinetics to design novel rechargeable batteries; portable diagnostic devices; and low-power wearable biosensors.	http://enqr.ucsb.edu/~nanolab/index.html
Plantinga, Andrew		Earth Research Institute (ERI)	enviro.; econ.; soc.	Dr. Plantinga's research focuses on the economics of land use, climate change, and forests. Particular emphasis is given to the development of methods for econometrically modeling land-use decisions, the analysis of environmental policies that affect private land-use decisions, and the modeling of land development pressures. A current project, funded by the National Science Foundation, involves the development of econometric land-use models to support an integrated analysis of climate change and water scarcity in the Willamette Basin of Oregon. Additional work examines how urban growth controls affect property values and urbanization rates.	https://www.bren.ucsb.edu/people/Faculty/andrew_plantinga.htm
Plaxco, Kevin	Chemistry & Biochemistry	Institute for Collaborative Biotechnologies; Center for Bioengineering	enviro.	Dr. Plaxco's research primarily involves the study of biomolecular recognition. In recent years, researchers have developed folding-based sensors that are selective enough to be employed directly in blood, soil, cell lysates, and other grossly contaminated clinical and environmental samples. Because of their sensitivity, substantial background suppression, and operational convenience, these folding-based biosensors appear potentially well-suited for electronic, on-chip applications in pathogen detection, proteomics, metabolomics, and drug discovery. By supporting the low-cost, continuous monitoring of environmental pollutants, the technology could have significant implications in environmental quality control.	http://www.chem.ucsb.edu/people/kevin-w-plaxco
Pollock, Tresa	Materials	International Center for Materials Research; Center for Multifunctional Materials & Structures (CeMMaS); Materials Research Laboratory	enviro.	Dr. Pollock's research considers new L12-Containing Cobalt-Base Alloys. These new structural and functional materials enable a multiplicity of paths to improved efficiency in energy generation, storage, transmission and conversion. While alternative energy technologies are highly desirable, for the foreseeable future fossil fuels will be a primary energy source. This motivates discovery of new structural materials that can increase the operating temperatures within energy generation systems and provide critically needed improvements in the efficiency of power generation.	https://materials.ucsb.edu/people/faculty/tresa-pollock
Propen, Amy	Writing		enviro.; soc.	Dr. Propen's research interests include visual and material rhetorics, environmental and sustainability rhetorics, digital and posthuman rhetorics, rhetoric and technical communication as advocacy work, writing in the disciplines, classical and contemporary rhetorical theory, animal studies, human geography, critical cartographies, and critical GIS.	http://www.writing.ucsb.edu/people/amy-propen

Pulver, Simone	Environmental Studies	Earth Research Institute (ERI)	enviro.; econ.; soc.	Dr. Pulver's research focuses broadly on the intersection of economic action and environmental harm and seeks to integrate theoretical frameworks from economic and environmental sociology and global environmental politics. Specifically, she has led NSF-funded research projects investigating oil industry responses to climate change, climate politics in Mexico, and low carbon investments by firms in Brazil and India. She is currently directing two new projects; one that explores changes over time in the production of pollution in three manufacturing industries in the US and the other focusing on small business responses to uncertainty in climate adaptation.	http://www.science.ucsb.edu/faculty/profile/989
Pye, Lori	Environmental Studies	Viridis Institute	enviro.; soc.	Dr. Pye is an adjunct faculty member of UCSB's Environmental Studies Department and teaches ecopsychology and environmental ethics. Dr. Pye's contribution to the developing field of ecopsychology brings together the sciences and humanities through the examination of literature art, ecological, biological, and depth psychological principles essential to the idea of sustainability and flourishing in order to transform deeply rooted unconscious narratives that drive human practices, civic illiteracy, policies, and decisions about how we design and craft our world in both creative and destructive ways.	http://www.es.ucsb.edu/people/lecturer/lori-pye
Rappaport, Erika	History; Feminist Studies		enviro.; econ.; soc.	Dr. Rappaport's research considers the history of mass consumer society, with a particular focus on how large-scale businesses accrue cultural and political power. While her work initially focused on mass-retailing and the urban environment, her current project, <i>A Thirst for Empire: How Tea Shaped the Modern World</i> (Princeton University Press, 2017), examines the relationship between the global mass consumption and production of tea on agricultural labor, societies and environments in India, South and Southeast Asia and Africa. Her book examines tea's global history from three interconnected perspectives and she argues that tea was one of the first agricultural industries to use imperial power and resources to engage in and pay for consumer and trade advertising and political lobbying in many locations over a long period of time. The model that tea developed is still used today and is critical to understanding the role of politics and publicity in shaping the geographies, power dynamics and problems in the modern global economy.	http://www.history.ucsb.edu/faculty/erika-rappaport/
Rassweiler, Andrew		Marine Science Institute (MSI)	enviro.; econ.	Dr. Andrew Rassweiler is a marine ecologist who combines field experiments, data analysis, and mathematical modeling to address both basic and applied questions, mainly regarding temperate reef ecosystems. His work has been applied toward answering fishery management and marine conservation questions, using spatially explicit models to explore optimal fisheries management strategies and tradeoffs between achieving fishery and conservation goals. His models have been used in practical contexts as well, most notably in guiding the placement of marine protected areas as part of California's Marine Life Protection Act process. Although his expertise is in community ecology, he works closely with oceanographers, geographers, and economists to better understand the many abiotic factors influencing ecological dynamics.	http://msi.ucsb.edu/people/research-scientists/andrew-rassweiler
Reed, Dan		Earth Research Institute (ERI); Marine Science Institute (MSI)	enviro.; soc.	Dr. Reed is currently working on a mitigation project with The San Onofre Nuclear Generating Station (SONGS) Mitigation Monitoring Program designed to compensate for the adverse effects of a nuclear generation station on coastal resources. He is also the lead principal investigator with the Santa Barbara Coastal Long Term Ecological Research program which is one of 25 research sites in the US LTER Network funded by the National Science Foundation to obtain a predictive understanding of ecological phenomena over long temporal and large spatial scales with the goal of providing the scientific community, policy makers, and society with the knowledge necessary to conserve, protect, and manage the nation's ecosystems, their biodiversity, and the services they provide.	http://msi.ucsb.edu/people/research-scientists/dan-reed
Rice, Ronald	Communication; Environmental Science & Management		enviro.; soc.	Dr. Rice studies, among other topics, public communication campaigns, with some emphasis on environmental communication. In his most recent edition of "Public Communication Campaigns", he co-authored a chapter that applies principles of social marketing to communicating about ocean sustainability. That chapter focused on developing a strategic approach to designing and implementing messages about ocean sustainability issues, such as ocean pollution, warming, acidification, overfishing, and low oxygen levels. He has also published research on college campus water bottle usage, ocean sustainability literacy, news images about climate change, and uncertainty and controversy in climate change news. In 2015, Professor Rice co-organized a day-long conference on Sustainable Science Communication (see http://sustech.ucsb.edu/sustainable-science-communication-conference) and a post-conference International workshop on climate and sustainability campaigns (see http://www.comm.ucsb.edu/faculty/rice/ICA_Environmental_Communication_Post-Conference_2015.html).	http://www.comm.ucsb.edu/faculty/rice/ricelink.htm

Roberts, Dar	Geography	Southern California Wildfire Hazard Center; Earth Research Institute (ERI)	enviro.	Dr. Roberts' research interests include urban ecology and energy balance. He has studied sustainable land use through investigating the impacts of deforestation and pasture degradation and has mapped methane emissions across landscapes. His primary research tool is remote sensing.	https://www.eri.ucsb.edu/people/dar-roberts
Rodoplu, Volkan	Electrical and Computer Engineering	Computing Solutions Group; Electronics & Photonics Solutions Group; Institute for Energy Efficiency (IEE); Greenscale Center for Energy-Efficient Computing	enviro.	Dr. Rodoplu's research focuses on wireless communications and networking. As a member of the Greenscale Center for Energy-Efficient Computing at the Institute for Energy Efficiency, one of the goals of his research is to curb the energy consumption of wireless networks through the development of energy-efficient protocols.	http://www.ece.ucsb.edu/rodoplu/
Rodwell, Mark	Electrical and Computer Engineering	Electronics & Photonics Solutions Group; Institute for Energy Efficiency (IEE)	enviro.	Dr. Rodwell's research interests include extending the operations of electronics to the highest feasible frequencies. He also looks at communication systems and energy efficient semiconductor devices. His research group works to extend the operation of electronics to the highest feasible frequencies. Their research thus includes semiconductor devices (diodes and transistors), semiconductor fabrication process, circuit design, interconnects, instruments, and communications systems. Mark Rodwell's research focuses on extending the operation of electronics to the highest feasible frequencies. His research interests includes energy efficient semiconductor devices (diodes, transistors, photodiodes), semiconductor fabrication process, circuit design, interconnects, instruments, and communications systems. Particular interests include THz InP (indium phosphide) bipolar transistors, nm III-V MOSFETs (metal-oxide-semiconductor field-effect transistors) for both VLSI (very large scale integration) and THz (terahertz) applications, and IC (integrated circuit) design above 50 GHz (gigahertz) in both III-V and Silicon VLSI technologies.	http://www.ece.ucsb.edu/Faculty/rodwell/
Roehrdanz, Patrick	Environmental Science & Management	Earth Research Institute (ERI)	enviro.; econ.	Dr. Roehrdanz's research focuses on the global analysis of climate change impacts on wine production and conservation. More specifically, his research examines how climate change will impact the areas where wine grapes can be grown in the future. And as viticulture moves to cooler areas –by going north or to higher altitudes– it could intrude on habitat favored by caribou grizzly bears and other mountain species and have far-reaching implications for conservation. This research is a good test case for measuring the impacts of climate change refracted through agriculture.	https://www.eri.ucsb.edu/people/patrick-roehrdanz
Salzman, Jim	Environmental Science & Management		enviro.; econ.; soc.	Dr. Salzman's broad-ranging scholarship has addressed topics spanning drinking water, trade and environment conflicts, policy instrument design, and the legal and institutional issues in creating markets for ecosystem services. His most recent book, Drinking Water: A History, was praised as a "Recommended Read" by Scientific American and is in its third printing. His co-authored casebook, International Environmental Law and Policy, is in its 5th edition and the market leader with adoptions at over two hundred schools around the world.	http://ees.bren.ucsb.edu/people/Faculty/james_salzman.htm
Schimmel, Josh	Environmental Studies; Ecology, Evolution, & Marine Biology	University of California Center for Environmental Implications of Nanotechnology (UC CEIN); Earth Research Institute (ERI)	enviro.	Dr. Schimmel's research focuses on ecosystem and microbial ecology and their feedback on global climate. Specifically, his research looks at the role of soil microbes in controlling ecosystem scale processes through the linkages between plant and soil processes. Schimmel's research is particularly important when analyzing the effects of increased temperature and altered rainfall patterns and CO2 emissions on global climate. Major foci of Dr. Schimmel's research are on Arctic ecosystems, which store huge pools of organic carbon and are warming rapidly, and California grasslands and scrublands which experience regular droughts.	https://www.eemb.ucsb.edu/people/faculty/schimmel
Schmitt, Russell	Ecology, Evolution, & Marine Biology		enviro.	Dr. Schmitt's research interests include population and community ecology, applied ecology, consumer-resource interactions, marine invertebrates, and reef fishes. His current research in particular attempts to understand the processes that influence population size and species diversity. In addition, Schmitt looks at the application of ecological principles to the resolution of coastal marine environmental problems.	https://www.eemb.ucsb.edu/people/faculty/schmitt
Schuller, Jon	Electrical and Computer Engineering	Center for Polymers and Organic Solids; Center for Energy Efficient Materials; Materials Research Laboratory; California NanoSystems Institute	enviro.	The Schuller Lab conducts research that concerns novel physical phenomena that occur when light interacts with objects of subwavelength dimensions. The goal of the research is to create smaller, faster, and more efficient photonics technologies and ultimately lead to a future where optical properties are controlled and engineered at the atomic or molecular level. In a recent publication in Optics Press, the researchers in the Schuller Lab discussed the application of their research into morphology dependent light trapping in thin-film organic solar cells. Their research in this area can be used in the future in low-cost lightning and energy harvesting devices.	https://engineering.ucsb.edu/people/ion-schuller

Scott, Susannah	Chemical Engineering; Chemistry & Biochemistry	Mitsubishi Chemical Center for Advanced Materials (MC-CAM)	enviro.	As co-principal investigator of the Center for the Sustainable Use of Renewable Feedstocks (CenSURF), Dr. Scott has participated in projects that aim to promote sustainable practices in the chemical sciences. She has researched ways to synthesize organic compounds like ethylene from fixed sources of carbon dioxide. These synthesized products can be used as alternatives to nonrenewable fossil fuels.	http://www.chemengr.ucsb.edu/~ceweb/faculty/scott/
Segalman, Rachel	Chemical Engineering		enviro.	Dr. Segalman's research interests include investigating structure control over soft matter on a molecular scale through nanoscopic lengthscale for use in optimizing properties for applications ranging from energy (solar and thermal) to biomaterials. She works to understand the effects of structure on properties and function and to gain pattern control in these multidimensional problems. Segalman's research can be applied in developing materials for energy applications such as photovoltaics, fuel cells, and thermoelectrics.	https://www.mrl.ucsb.edu/people/faculty-downmi/rachel-segalman
Selkoe, Kim		National Center for Ecological Analysis and Synthesis (NCEAS); Marine Science Institute (MSI)	enviro.	Dr. Selkoe's primary research interests are split between three diverse topics: advancing scientific tools for ecosystem based management and marine spatial planning, multi-species approaches to understanding marine population connectivity with 'seascape' genetic techniques, and both studying and improving consumer access to local and sustainable seafood. She is currently a P.I. on two main projects: Ecosystem Thresholds and Indicators for Marine Spatial Planning (Moore Foundation, 2012-16) and Multispecies Connectivity of Hawaii Coral Reefs (National Science Foundation, 2013-2017), as well as additional projects to quantify the genetic effects of hatchery releases on wild fish populations and incorporate genetic diversity into strategies for biodiversity conservation and restoration. She is an adjunct professor the Bren School as well as an associate at UCSB's National Center for Ecological Analysis and Synthesis and Marine Science Institute, and the Hawaii Institute of Marine Biology. Selkoe has also conducted underwater fieldwork in nearshore reef environments of Morocco, Sardinia, and the Solomon Islands as part of a continuing research project to understand how community structure changes along gradients of human impact.	http://msi.ucsb.edu/people/research-scientists/kim-selkoe
Seltmann, Katja		Cheadle Center for Biodiversity & Ecological Restoration (CCBER); Earth Research Institute (ERI)	enviro.	Dr. Seltmann, the Director of the Cheadle Center for Biodiversity and Ecological Restoration, focuses on understanding biodiversity. She uses natural history collection data and field work to understand how our native insects, including pollinators, are supported by using native plants in our low-water restored areas.	https://www.eri.ucsb.edu/people/katja-seltmann-0
Seshadri, Ram	Chemistry & Biochemistry	Lighting Solutions Group; Production & Storage Solutions Group; Institute for Energy Efficiency (IEE); Institute for Multi- scale Materials Studies; Solid State Lighting and Energy Electronics Center (SSLEEC); Interdisciplinary Center for Wide Band-Gap Semiconductors; Mitsubishi Chemical Center for Advanced Materials (MC-CAM); Materials Research Laboratory	enviro.	Dr. Seshadri researches functional inorganic materials with applications in energy conversion, energy storage, and information technology. A primary goal of the research is greater efficiency in energy conversion and storage and the recovery of waste heat. In and of themselves, these are expected to significantly minimize the impact of energy technologies on the environment. In addition, his research addresses resource availability and life-cycle issues, in attempts to ensure that future energy technologies are not based on scarce or polluting elements.(Original: Ram Seshadri's research encompasses a number of areas in the chemistry of inorganic materials, including new ways of preparing materials, seeking clues from nature on how to make new high-performance materials, magnetism in inorganic solids, chemical patterning of inorganic materials on large (micrometer) length scales, and using first principles electronic structure calculations to predict new material properties. In addition to his focus on magnetism, polar materials, and porosity, Seshadri is increasingly investigating materials for heterogeneous catalysis and for applications in solid-state lighting (semiconductors, phosphors , etc.). He also extensively researches functional (particularly oxide) nanomaterials.)	http://www.chem.ucsb.edu/people/faculty/seshadri/index.shtml
Sherman, David	Psychological & Brain Sciences		enviro.; soc.	Dr. Sherman's research primarily centers on how people respond to and cope with threatening events. His research extends to understanding the psychological and social barriers to sustainability and how to overcome them.	https://www.psych.ucsb.edu/people/faculty/sherman
Sherwood, Timothy	Computer Science	Computing Solutions Group; Institute for Energy Efficiency (IEE); Greenscale Center for Energy-Efficient Computing	enviro.	Dr. Sherwood's research is in the area of computer architecture. He has worked to develop techniques that provide a powerful new way to inspect and control the digital world and shed light on energy efficiency. (From IEE website: Timothy Sherwood's research is in the area of computer architecture, specifically in the development of novel high throughput hardware and software methods by which systems can be monitored and analyzed. Such techniques provide a powerful new way to inspect and control the digital world: they shed light on energy efficiency and performance anomalies, uncover software bugs, and help secure critical systems against attack.)	http://www.cs.ucsb.edu/~sherwood/
Shewry, Teresa	English	Carsey-Wolf Institute	enviro.; soc.	Dr. Shewry's research interests include pacific rim cultures, environmental studies, and oceans and water. She is the director of Literature and the Environment at UCSB. Her recent publications include "Possible Ecologies: Literature, Nature, and Hope in the Pacific" and "Environmental Criticism for the Twenty-First Century." Her book, Hope at Sea: Possible Ecologies in Oceanic Literature (University of Minnesota Press, 2015), explores hope in the context of environmental change in the Pacific.	http://www.english.ucsb.edu/people/shewry-teresa

Siegel, David	Geography	Earth Research Institute (ERI); Carsey-Wolf Center; Marine Science Institute (MSI)	enviro.	Dr. Siegel studies interdisciplinary marine science which couples physical, biological, optical, and biogeochemical processes. He has recently worked on collecting large scale ocean data by using ocean color variability from satellites. Differences in color can indicate distinguishing characteristics such as temperature and the overall biochemistry of the water. This data allows scientists to observe long-term trends and better understand the role oceans play in climate change as well as ascertain what marine ecosystems might look like in the future.	http://www.icess.ucsb.edu/~davey/
Simms, Alex	Earth Science	Earth Research Institute (ERI)	enviro.	Professor Simms' research focuses primarily on coastal systems. His studies use a wide variety of tools to study past depositional systems, including coring, high-resolution seismic data, GPR, and outcrop analysis to understand how past depositional systems have responded to sea level, climate, and tectonic changes. Modeling and investing the depositional systems allow us to further understand the environmental impact of climate change and tectonic forces.	http://www.geol.ucsb.edu/faculty/simms/
Smith, Eric	Political Science	Center for Social Solutions to Environmental Problems; Carsey-Wolf Institute	enviro.; soc.	Dr. Smith's work focuses on U.S. public opinion and political behavior regarding energy and environmental issues. He investigates, for example, public support for or opposition to renewable energy production facilities and offshore oil drilling. He is also working on the problem of how much people know about energy and environmental issues and why people accept or reject factual claims about energy and environmental issues by scientists.	http://www.polsci.ucsb.edu/faculty/smith/
Smith, Ray		Earth Research Institute (ERI)	enviro.	Dr. Smith's research includes remote sensing of oceans, physical and biological oceanography, primary production and bio-optical modeling in aquatic environments with emphasis on Antarctic ecosystems, marine resources, and Earth system sciences. He continues to work with UCSB's Institute for Computational Earth System Sciences.	http://www.geog.ucsb.edu/people/faculty/ray-smith.html
Soh, Hyongsok (Tom)	Mechanical Engineering; Materials	Institute for Collaborative Biotechnologies; California Nanosystems Institute; Center for Stem Cell Biology and Engineering	enviro.	Dr. Soh's lab develops advanced biosensors that are highly sensitive and specific with rapid results. Recently, his laboratory pioneered the development of real-time biosensors that can continuously measure specific biomolecules directly in living animals. Their study of integrated biosensors have many applications in medicine, defense, food safety, and environmental monitoring. (font and size of font difference)	https://www.icb.ucsb.edu/people/hyongsok-tom-soh
Sokolow, Susanne		Marine Science Institute (MSI)	enviro.; soc.	Dr. Sokolow's research is focused on infectious disease ecology. She is currently studying the potential for restoration of a native freshwater prawn species to act as a biological control agent for schistosomiasis, a human parasite. Her research focuses on the environmental and animal components of infectious disease. This research provides a multidisciplinary approach to infectious disease by combining fundamentals in biological science, experimental design, epidemiology, disease modeling, and global public health principles.	https://www.msi.ucsb.edu/people/research-scientists/susanne-sokolow
Speck, James	Materials	Lighting Solutions Group; Institute for Energy Efficiency (IEE); Solid State Lightening and Energy Electronics Center (SSLEEC); Interdisciplinary Center for Wide Band-Gap Semiconductors; Solid State Lighting & Energy Center; International Center for Materials Research; Center for Energy Efficient Materials; Materials Research Laboratory; California NanoSystems Institute	enviro.	Dr. Speck's research focuses on high efficiency solid state lighting. This lighting is expected to be 10-20 times more efficient than conventional incandescent and halogen lighting and 2-3 times more efficient than fluorescent lighting.	http://www.materials.ucsb.edu/recruitment/Faculty/speck.php
Steavu, Dominic	East Asian Languages & Cultural Studies		enviro.; soc.	Dr. Steavu's research focuses on Daoism and Buddhism in the medieval world. His work includes investigating how approaches to nature and the ethics of conservancy in classical East Asian traditions can help us elaborate contemporary strategies for sustainability.	http://www.eastasian.ucsb.edu/people/faculty/dominic-steavu/
Steigerwald, Douglas	Economics	Econometrics Research Group	enviro.; econ.; soc.	Dr. Steigerwald's research focuses on frontier econometric methods at the intersection of economics, environmental science, computer science, geography, and statistics. Currently, he is researching regional price behavior in Mexican maize markets. This research examines the resiliency of markets in the face of climate change and increasing market integration and the resultant implication for food security, livelihood change, and political security.	http://www.econ.ucsb.edu/~doug/
Stohl, Michael	Communication; Statistics	Carsey-Wolf Institute	enviro.; econ.; soc.	Dr. Stohl is current involved in a project entitled: Sustainability at the Crossroads: Examining the Vulnerability of New Zealand's Global Environmental Positioning. The research project aims to understand how interested parties, including NZ policy makers, media, and business leaders think about, frame, and prioritise environmental, social and economic sustainability issues and with what consequences.	http://www.comm.ucsb.edu/people/academic/michael-stohl

Stokes, Leah	Political Science		enviro.; econ.; soc.	Dr. Stokes' research primarily examines public policy, public opinion and political behavior in North America, with a focus on energy and the environment. Her most work examines expansion and retrenchment in renewable energy policies across US states, using qualitative and quantitative methods. Her work on energy and environmental policies has been published in Energy Policy, Environmental Science & Technology, and The American Journal of Political Science. She also researches international environmental negotiations, particularly the Minamata Convention on mercury and the climate change negotiations.	http://www.polsci.ucsb.edu/faculty/stokes/
Stonich, Susan	Anthropology		enviro.; econ.; soc.	Dr. Stonich currently co-directs a research project in the Mesoamerican Reef System funded by the National Oceanic and Atmospheric Administration (NOAA) Climate Program and is working with the National Shellfisheries Association, the World Wildlife Fund Mollusc Dialogue, and the NOAA Aquaculture and Habitat Conservation Program on a project to help determine standards on North American shellfish farming that are socially, economically, and environmentally sustainable. Her other research interests focus on the conflicts between economic development and environmental conservation efforts in coastal zones, environmental justice, and vulnerability and resilience to climate-related hazards and disasters.	http://www.anth.ucsb.edu/faculty/stonich/
Stratton, Elisa (Lisa)		Earth Research Institute (ERI); Cheadle Center for Biodiversity and Ecological Restoration (CCBER)	enviro.	Dr. Stratton has been the Director of Ecosystem Management for UCSB's Cheadle Center for Biodiversity and Ecological Restoration (CCBER) since 2005. As the manager of the campus lagoon and other open space areas on campus, she has been active in pursuing opportunities to improve water quality and provide habitat through bioswales and treatment wetlands. In conjunction with students, Dr. Stratton and CCBER conduct research on water quality, hydrology and biological diversity which provide evidence for the benefits of these features. Interpretive signs throughout campus and web site material make their work available to a broader audience. In particular, Dr. Stratton's projects are designed to be sustainable in the face of climate change and sea level rise.	http://www.es.ucsb.edu/people/lisa-stratton
Stucky, Galen		Institute for Energy Efficiency (IEE); Institute for Multi-scale Materials Studies; Mitsubishi Chemical Center for Advanced Materials (MC-CAM); Center for Energy Efficient Materials; Materials Research Laboratory; Center for Nanomedicine; California NanoSystems Institute; UC Center for Environmental Implications of Nanotechnology (UC CEIN); Earth Research Institute (ERI)	enviro.	Dr. Stucky's research interests include biosystem processes (e.g., blood clotting, cascade chemistry, and hemostasis) and the chemistry associated with the efficient use of energy resources. He has done research that furthers the development of energy storage systems, including the use of solar photocatalytic synthesis to make high energy density useful chemicals, and he has studied the conversion of methane to chemicals and fuels.	https://labs.chem.ucsb.edu/stucky/galen/stuckygroup/
Sweeney, Stuart	Geography	Institute for Social, Behavioral, and Economic Research	enviro.; econ.; soc.	Dr. Sweeney's research interests include applied statistics and spatial analysis, research methodology, demography, economic geography, and development studies. He recently conducted a study that looked at maize, one of the most economically and culturally important crops produced in Mexico. Dr. Sweeney discovered that changes in the production of this crop, caused by increased market integration and changes in irrigated land use, can impact consumption, livelihood, and food security. His most recent research has focused on how the California fisher (weasel) responds to variation in habitat in a managed forest. Unlike past research Sweeney and colleagues found that fishers can exist in patches of managed forest that were formerly thought to be devoid of the species.	http://www.geog.ucsb.edu/~sweeney/Sweeney/UCSB_GEOGRAPHY.html
Tague, Christina	Environmental Science & Management	Association of American Geographers; American Geophysical Union; Ecological Society of America; Earth Research Institute (ERI)	enviro.; econ.; soc.	Dr. Tague studies ecohydrology. Her work examines climate and land use change impacts in the terrestrial environment by combining observed data with computer-based spatial models. She is currently investigating the impacts of climate change on ecosystem services and water resources in mountain regions, including the Western US, the European Alps, the Pyrenees, and select locations in China. Her work also examines how forest management practices and land development or urbanization alters biogeochemical cycling and water availability for watersheds throughout the US.	https://www.bren.ucsb.edu/people/Faculty/christina_tague.htm
Theogarajan, Luke	Electrical and Computer Engineering	Institute for Energy Efficiency (IEE); Center for Bioengineering; California NanoSystems Institute	enviro.	Dr. Theogarajan does research related to the neural system and particularly to neural prosthetic devices. Neural prosthetic devices offer a way to restore functions lost due to neural damage. He is currently investigating the use of potassium ions rather than electrons to communicate with neural tissue as part of this new technology. This method has already proved to be safer and require lower power to function than the approach currently used.	http://engineering.ucsb.edu/faculty/profile/545

Tilman, David	Environmental Science & Management	Earth Research Institute (ERI)	enviro.; econ.; soc.	Dr. Tilman's research focuses on the causes, consequences, and conservation of Earth's biodiversity, and on how managed and natural ecosystems can sustainably meet human needs for food, energy, and ecosystem services. His current research explores ways to use biodiversity as a tool for biofuel production and climate stabilization through carbon sequestration. His work on sustainable agriculture and renewable energy has critically examined the full environmental, energetic and economic costs and benefits of grain crops, of current food-based biofuels, and of biofuels made from diverse mixtures of prairie grasses and other native plants growing on already-degraded lands.	https://www.bren.ucsb.edu/people/Faculty/david_tilman.htm
Valentine, Dave	Earth Science		enviro.	Dr. Valentine's current research projects include the study of the microbial weathering of hydrocarbon compounds released into marine environments as well as methods of environmental remediation and biofuel production. His research aims to achieve a better understanding of the distribution, evolution and activity of microbial communities and their interaction with chemicals present in their environment.	http://www.coastalresearchcenter.ucsb.edu/cmi/Valentine.html
Van De Walle, Chris	Materials	Solid State Lighting and Energy Electronics Center (SSLEEC); Institute for Energy Efficiency (IEE); Interdisciplinary Center for Wide Band-Gap Semiconductors; Materials Research Laboratory; California NanoSystems Institute	enviro.	Dr. Van de Walle's research covers a broad range of issues related to renewable energy and energy efficiency. He is engaged in fundamental studies of group-III nitride semiconductors, which are the key materials for solid-state lighting and also enable a new generation of high-efficiency solar cells. In addition, he investigates hydrogen storage materials and materials for fuel cells and coatings for smart energy-saving windows.	http://www.mrl.ucsb.edu/~vandewalle/
Van der Ven, Anton	Materials		enviro.	Dr. Van der Ven's research involves understanding and predicting equilibrium and non-equilibrium materials properties from first-principles. He combines electronic structure methods (density functional theory) with techniques from statistical mechanics to calculate thermodynamic and kinetic properties of new materials, including oxides and structures of assembled nanoparticles for battery and fuel cell components, metallic alloys, alloy surfaces for catalysis, and organic electronic materials.	https://vandervengroup.materials.ucsb.edu/
Waite, Herb	Chemistry & Biochemistry; Molecular, Cellular, and Developmental Biology	Marine Science Institute (MSI); Institute for Collaborative Biotechnologies; Materials Research Laboratory	enviro.	Dr. Waite's research centers around formulating a practical wet adhesive through understanding and implementing the fundamental design principles at multiple length scales of the bio-adhesive strategy practiced by marine mussel adhesive plaques, and gradient-engineered squid beaks.	https://www.mcdb.ucsb.edu/people/faculty/waite
Walker, Barbara		Office of Research; Research Development; Marine Science Institute (MSI)	enviro.; econ.; soc.	Dr. Walker's research focuses on political ecology and human-environment relationships related to marine and coastal resources in California, French Polynesia, and Ghana. In Ghana, her research explores the historical social and environmental antecedents of contemporary patterns of marine environmental conservation and use. In French Polynesia, her research addresses disparities among stakeholder perceptions of environmental and climate change and the challenges associated with translating multiple and often opposing perceptions into effective marine management and climate change adaptation policies. In California, Walker studies new alternative seafood marketing arrangements to understand why and how direct marketing programs are adopted by fishermen and whether these marketing arrangements might increase the sustainability of fisheries and coastal communities.	http://www.msi.ucsb.edu/people/research-scientists/barbara-l-e-walker
Walsh, Casey	Anthropology		enviro.; econ.; soc.	Dr. Walsh researches the anthropological political economy of the Mexico-US borderlands. During the last decade, he has studied the ways in which water, land, and labor have been organized to produce commodities in areas marked by aridity, especially northern Mexico and the southwestern United States. His work in this field has been documented in his publication, "Building the Borderlands." Professor Walsh is currently writing a book about mineral springs and water cultures in Mexico. His most recent project "Groundwater and Grapes in California's Central Coast" assesses expanding wine grape cultivation on groundwater management in Santa Barbara and San Luis Obispo Counties. Particular attention is given to the recent capitalization of the sector, the depletion of aquifers, and the ensuing creation and implementation of laws regulating groundwater in California. It situates the local social and environmental dimensions of the expansion of wine grape production within global markets and climate change.	http://www.anth.ucsb.edu/faculty/Walsh/Walsh.php
Wang, Yongqiang	Chemical Engineering	Institute for Collaborative Biotechnologies	enviro.	Dr. Wang works with Professor Frank Doyle on systems and control, wireless sensor networks, systems biology, and complex networks, among other interests. In October of 2012, he published a paper titled "Energy-efficient pulse-coupled synchronization strategy design for wireless sensor networks through reduced idle listening," that discusses significantly reducing the total energy consumption in a synchronization process by reducing idle listening by introducing a large refractory period in each oscillation period of the sensor.	https://www.icb.ucsb.edu/people/yongqiang-wang

Warner, Robert	Ecology, Evolution, & Marine Biology	Marine Science Institute (MSI)	enviro.	Dr. Warner's research includes behavioral and evolutionary ecology, as well as population biology. Most of his work focuses on coral reef fishes and the historical ecology of coastal marine populations. His current research is on conservation biology and the science of marine reserves.	https://www.eemb.ucsb.edu/people/faculty/warner
Washburn, Libe	Geography	Marine Science Institute (MSI)	enviro.	Dr. Washburn's research focuses on oceanographic studies to understand how ocean circulation processes affect marine communities in ocean environments. He is currently researching surface circulation patterns in the Santa Barbara Channel and investigating the importance of these flows for delivering larvae to nearshore habitats.	http://www.geog.ucsb.edu/~washburn/
Weisbuch, Claude		Center for Energy Efficient Materials; Solid State Lighting and Energy Electronics Center (SSLEEC); Interdisciplinary Center for Wide Bandgap Semiconductors; Institute for Energy Efficiency (IEE)	enviro.	Dr. Weisbuch's research involves semiconductors, physics, and LEDs. He and his team of researchers recently collaborated with scientists from other universities to identify what causes light emitting diodes (LEDs) to be less efficient at high drive currents, a phenomenon known as LED 'droop.' They showed that 'droop' is caused by Auger recombination, a process by which energetic electrons, instead of emitting light, collide with other electrons and lose their energy in the form of heat. Understanding the origin of droop will lead to more efficient and cheaper LEDs. They provide long-lasting, highly efficient light sources and could further lessen the US' total electricity use from the foreseen 40% decrease if LED lamps were to replace less efficient incandescent and fluorescent lights, and accelerate the situation.	http://industry.ucsb.edu/faculty/profile/187
Welter, Volker	History of Art and Architecture		enviro.; soc.	Dr. Welter's research includes the theory and history of sustainable architecture and how the environment and architecture are related. He studies the history and culture surrounding the development of techniques used in sustainable architecture, such as passive heating and cooling in buildings.	http://www.arthistory.ucsb.edu/people/volker-m-welter
Wolski, Richard	Computer Science	Building & Design Solutions Group; Computing Solutions Group; Institute for Energy Efficiency (IEE); Energy Efficiency Design; Greenscale Center for Energy-Efficient Computing; California NanoSystems Institute	enviro.	Dr. Wolski's research interests include cloud computing and large-scale high-performance distributed systems. His research includes the study of new power-aware resource management algorithms for data centers using private cloud technologies. He also makes his work available as open source through the Eucalyptus private cloud project. Eucalyptus has been used worldwide to optimize data centers through the adoption of a private cloud based IT.	http://www.cs.ucsb.edu/~rich/
Wudl, Fred	Chemistry & Biochemistry	Mitsubishi Chemical Center for Advanced Materials (MC-CAM); California NanoSystems Institute; Institute for Energy Efficiency (IEE)	enviro.	Dr. Wudl performs research on plastic solar cells. The goal of his work is to develop new materials and consider new concepts that improve the efficiency of solar cells.	http://www.chem.ucsb.edu/people/fred-wudl
Xie, Yuan	Electrical and Computer Engineering		enviro.	Dr. Xie's research includes the study of low power design and thermal-aware design techniques, both of which have the potential to increase the power-use efficiency of different computer systems.	http://www.ece.ucsb.edu/~yuanxie/
Young, Oran	Environmental Science & Management	Institute of Arctic Studies; International Human Dimensions Programme on Global Environmental Change; Carsey-Wolf Institute	enviro.; soc.;	Dr. Young specializes in institutional and international governance and environmental institutions. His research encompasses basic research, focusing on collective choice and social institutions, and applied research dealing with issues pertaining to international environmental governance and to the Arctic as an international region.	http://www.bren.ucsb.edu/people/Faculty/oran_young.htm
Yue, Patrick	Electrical and Computer Engineering	Institute for Energy Efficiency (IEE)	enviro.	Current and past projects: (1) Cell-Based RF Design in Scaled CMOS Technologies (2) Very Low Power, Adaptive Equalizer for High-Speed I/O's (3) On-wafer Wireless Testing (4) Low-power Wireless Bio-sensors (5) Fast-settling PLL's. On-wafer wireless testing with on-chip antenna. Ultra-low-power adaptive passive equalizer for >10 Gbps. Sub-circuit standard cell library for predictive analog design. Wireless power delivery interface circuits for bio-implants.	http://www.ece.ust.hk/ece.php/profile/facultydetail/eeepatrick
Zok, Francis	Materials	Institute for Multi-scale Materials Studies; Center for Multifunctional Materials & Structures (CeMMaS); Institute for Collaborative Biotechnologies	enviro.	Dr. Zok's research interests include advanced cooling concepts for hypersonic space vehicles and nanomechanics of biological materials. He has also conducted research which focuses on energy efficient production and storage as part of the Institute for Energy Efficiency Production & Storage Solutions Group.	https://materials.ucsb.edu/people/faculty/frank-w-zok