

Stanford

Ocean Experts

Click on names for more info. For assistance in locating these researchers, contact

- Nicole Kravec: nkravec@stanford.edu or (415) 825-0584
- Christine H. Black: christine.harrison@stanford.edu or (650) 725-8240



[Jim Leape](#)

Expertise: Climate Change, Ecosystem Services, Environmental Law & Policy, Fisheries, Marine Technology, Market-Based Conservation, Ocean Risk, Science Communication, Sustainable Development

Jim Leape is the William and Eva Price Senior Fellow in the Stanford Woods Institute for the Environment and co-director of the Stanford Center for Ocean Solutions. From 2005 to 2014, he served as Director General of WWF International and leader of the global WWF Network, active in more than 100 countries, where he worked with government, business and civil society leaders on a wide range of issues, including climate change, marine conservation, forest protection, water resources management and sustainability in global commodity markets.

Contact: jleape@stanford.edu, (650) 498-0916



[Fiorenza Micheli](#)

Expertise: Climate Change, Coral Reefs, Ecosystem Management, Fisheries, Marine Biology & Ecology, Marine Management & Marine Protected Areas, Ocean Acidification, Ocean Risk

Fiorenza Micheli is a Stanford Professor of Biological sciences, David & Lucile Packard Professor in Marine Sciences, Senior Fellow at the Stanford Woods Institute for the Environment and co-director of the Stanford Center for Ocean Solutions. Micheli's research focuses on the processes and interactions shaping coastal marine communities and incorporating this understanding in the management and conservation of marine ecosystems.

Contact: micheli@stanford.edu, (831) 655-6250



Larry Crowder

Expertise: Marine Management & Marine Protected Areas, Coral Reefs, Marine Technology, Ocean Acidification

Larry Crowder is the Edward F. Ricketts Provostial Professor of Marine Ecology and Conservation at Stanford Hopkins Marine Station and a senior fellow at the Stanford Woods Institute for the Environment. Crowder's research centers on predation and food web interactions, mechanisms underlying recruitment variation in fishes, population and food web modeling in conservation biology, and interdisciplinary approaches to marine conservation.

Contact: larry.crowder@stanford.edu, (831) 655-6217



Stephen Palumbi

Expertise: Climate Change, Coastal Adaptation, Coral Reefs, Ecosystem Health, Marine Biology & Ecology, Ocean Acidification, Ocean Risk, Science Communication

Stephen Palumbi is the Jane and Marshall Steel Jr. Professor in Marine Sciences at Stanford Hopkins Marine Station and Senior Fellow at the Woods Institute for the Environment. Palumbi's work mostly focuses on the genomics of marine organisms and basic evolutionary questions that can be applied to practical solutions to preserve and protect the diverse life in the sea. His most recent work on corals in American Samoa has identified populations more resilient to heat stress and is working on the finding a way to apply their strategies to other corals.

Contact: spalumbi@stanford.edu, (831) 655-6210



Rob Dunbar

Expertise: Coral Reefs, Climate Change, Marine Ecology, Biogeochemistry

Rob Dunbar is the W.M. Keck Professor in the School of Earth, Energy and Environmental Sciences and Senior Fellow at the Woods Institute for the Environment. Dunbar's research and teaching interests include Climate Dynamics, Oceanography, Marine Ecology, and Biogeochemistry. His research group studies global environmental change with a focus on air-sea interactions, tropical marine ecosystems, polar climate, and biogeochemistry.

Contact: dunbar@stanford.edu, (650) 725-6830



Stephen Monismith

Expertise: Coral Reefs, Engineering, Fluid Dynamics

Stephen Monismith is the Obayashi Professor in the School of Engineering at Stanford University. Monismith's research in environmental and geophysical fluid dynamics involves the application of fluid mechanics principles to the analysis of flow processes operating in rivers, lakes, estuaries and the oceans, with a particular interest in the ecological impacts of those flows. His current research includes studies of estuarine hydrodynamics and mixing processes, flows over coral reefs and on the inner shelf, turbulence in density stratified fluids, and physical-biological interactions in phytoplankton and benthic systems.

Contact: monismith@stanford.edu, (650) 723-4764



[Jeff Koseff](#)

Expertise: Ocean Plastics, Fluid Dynamics, Environmental Fluid Mechanics, Physical Oceanography

Jeff Koseff is the founding co-director of the Stanford Woods Institute for the Environment and an expert in the interdisciplinary domain of environmental fluid mechanics. His research falls in the interdisciplinary domain of environmental fluid mechanics and focuses on the interaction between physical and biological systems in natural aquatic environments. Current research activities are in the general area of environmental fluid mechanics and focus on: turbulence and internal wave dynamics in stratified flows, transport and mixing in estuarine systems, phytoplankton dynamics in estuarine systems, coral reef, sea-grass and kelp-forest hydrodynamics, and the role of natural systems in coastal protection. Most recently he has begun to focus on the interaction between gravity currents and breaking internal waves in the near-coastal environment, and the transport of marine microplastics.

Contact: koseff@stanford.edu, (650) 736-2363



[Nick Ouellette](#)

Expertise: Ocean Plastics, Physical Oceanography, Fluid Dynamics

Nick Ouellette is an Associate Professor of Civil and Environmental Engineering at Stanford University. Ouellette is broadly interested in the behavior of complex systems far from equilibrium. In particular, a running theme in his research is dynamical self-organization. He seeks both to understand the physical principles that govern the spontaneous emergence of low-dimensional structure in high-dimensional systems and to harness this self-organization for engineering applications. His current research includes studies of turbulent flows in two and three dimensions, in both simple and complex fluids; the transport of inertial, anisotropic, and active particles in turbulence; the erosion of granular beds by fluid flows and subsequent sediment transport; and quantitative measurements of collective behavior in insect swarms and other animal groups.

Contact: nto@stanford.edu, (650) 723-4860