



OPC SCIENCE ADVISORY TEAM

Introducing the new vision and new members

Since 2008, the OPC Science Advisory Team (SAT) has provided an essential scientific backbone for informing critical ocean and coastal policies in California—from the nation’s first microplastics strategy to sea level rise adaptation science guidance. To meet our coastline’s increasingly complex and interdisciplinary challenges, the SAT design has been updated to a reimagined model for how science informs public decision-making.

Designed for a rapidly changing ocean, the SAT goes beyond traditional advisory roles to serve as a dynamic bridge between cutting-edge science, knowledge, and policy action. It brings together leading experts while actively connecting to a broader, evolving network of knowledge across disciplines, sectors, and communities. By pairing deep expertise and a wider institutional or geographic perspective with a forward-looking lens, the SAT helps anticipate emerging challenges and opportunities—ensuring California’s ocean policies are not only grounded in the best available science, but also shaped by what’s on the horizon.

The following individuals have been invited to bring their own deep expertise and to represent strategic bridges between OPC and the broader knowledge held within their respective institutions and geographical regions.

SCIENCE INSTITUTION MEMBERS

The SAT will consist of California-based scientific institutions with missions to advance science and a dedication to public service, research or practical portfolios relevant to OPC's mission and strategic priorities, and a designated representative to meaningfully engage on behalf of the institution and the diverse networks to which it belongs.

Scripps Institution of Oceanography, University of California, San Diego

Scripps Institution of Oceanography at UC San Diego is a premier center for global earth science research and education. Scripps scientists work to understand and protect the planet by investigating our oceans, Earth, and atmosphere to find solutions to our greatest environmental challenges. With an annual operating budget of \$304 million, a fleet of four academic research vessels, the Birch Aquarium, and one of the world's longest research piers, Scripps leads research in climate change impacts and adaptation, resilience to hazards, conservation and biodiversity, oceans and human health, national security, and developing innovative technology to observe the planet. Scripps education programs include graduate education serving 350 doctoral and master's students, as well as seven undergraduate majors that serve nearly 900 students and teach courses to more than 7,000 UC San Diego students.

Scripps Institution of Oceanography Representative: Meenakshi Wadhwa, Director



Dr. Meenakshi Wadhwa is Director of Scripps Institution of Oceanography at UC San Diego, as well as Vice Chancellor for Marine Sciences, and Dean of the School of Marine, Earth and Atmospheric Sciences. Dr. Wadhwa also holds the Charles F. Kennel Director's Endowed Chair. She received her doctorate in Earth and Planetary Sciences from Washington University in St. Louis, and her master's and bachelor's degrees in geology from

Panjab University in Chandigarh, India.

Schatz Energy Research Center, Cal Poly Humboldt

The Schatz Energy Research Center at Cal Poly Humboldt is a leader in applied research and project development for clean and renewable energy. The Schatz Center is committed to addressing climate change and improving human and ecosystem health through work that supports clean energy, climate-resilience, equity, and justice. With a team of about 50 faculty, staff, and students engaged in research related to clean and renewable energy, the Schatz Center's research portfolio includes microgrid development, off-grid solar product testing, offshore wind research, sustainable transportation design, carbon life cycle and land use studies, and planning and policy analysis for clean energy deployments around the globe.

Schatz Energy Research Center Representative: Arne Jacobson, Director



Dr. Arne Jacobson is Director of the Schatz Energy Research Center and Professor in the School of Engineering at California State Polytechnic University, Humboldt (Cal Poly Humboldt). Dr. Jacobson has a Ph.D. from the Energy and Resources Group at the University of California, Berkeley, a master's degree in Environmental Resources Engineering from Humboldt State University, and a bachelor's degree in Physics from Earlham College.

Marine Science Institute, UC Santa Barbara

The Marine Science Institute (MSI) at the University of California, Santa Barbara (UCSB) ranks internationally as a leader in ocean and environmental research. MSI is committed to fostering innovative and significant research, to promoting effective stewardship, and to sharing the exciting discoveries of the world's oceans. MSI administers and supports research projects involving faculty, professional researchers, technical staff, graduate students, and undergraduate students from 14 disciplines working on marine, coastal zone, and freshwater research; marine policy studies; and educational outreach in marine science. MSI also manages seven of the 32 Natural Reserve sites in the University of California system; these protected natural lands are available for university level instruction, research and public outreach. Over \$120 million in research and grant money annually supports these activities.

Marine Science Institute Representative: Rebecca Vega Thurber, Director



Dr. Rebecca Vega Thurber is the Director of the Marine Science Institute at UC Santa Barbara and a Professor of Ecology, Evolution, and Marine Biology. Dr. Vega Thurber graduated from UC Santa Cruz, in 1999, with dual degrees in Marine Biology and Molecular, Cellular, & Developmental Biology. She received her PhD from Stanford University in Biological Sciences.

Coastal Marine Sciences Institute, UC Davis

The UC Davis Coastal and Marine Sciences Institute (CMSI) is uniquely positioned to foster solutions to the challenges facing coastal California. CMSI's mission is to serve society by advancing collaborative, use-inspired cross-disciplinary research on the most pressing challenges in the sustainability of coastal ocean systems; supporting science-informed management of coastal and ocean resources through proactive, two-way dialogue with decision-makers; and training diverse and creative innovators in coastal and marine science and policy who are prepared to meet the evolving environmental, economic and social challenges and opportunities of our time. CMSI's world-class research and educational facilities on the coast of northern California, Bodega Marine Laboratory and the Bodega Marine Reserve. CMSI offers an interdisciplinary Marine & Coastal Science Undergraduate Major, a minor in Oceanography, and graduate research opportunities with mentorship from faculty on campus and at the Bodega Marine Laboratory.

Coastal Marine Sciences Institute Representative: Andrea Alfaro, Director



Dr. Andrea Alfaro is the Director of the Coastal and Marine Sciences Institute (CMSI) and a Professor in the Department of Animal Science at the University of California, Davis. Dr. Alfaro received her bachelor's degree in wildlife and fisheries biology from UC Davis, a master's in biology from the California State University, Northridge, and a doctorate in environmental and marine science from the University of Auckland.

Central & Northern California Ocean Observing System, Monterey Bay Aquarium Research Institute

Central & Northern California Ocean Observing System (CeNCOOS), headquartered at the Monterey Bay Aquarium Research Institute (MBARI) is a US Government-accredited, regional source for high-quality data, integrated information, and diverse expertise to inform wise and sustainable use of the ocean off Central and Northern California. The CeNCOOS collaborative engages numerous investigators and technical experts, students, and institutions. CeNCOOS systems and capabilities are evolving to provide real-time and forecasted information on harmful algal blooms, to advance integrated assessment tools for Marine Protected Areas (MPAs), and a growing set of biogeochemical and biological datastreams. Ongoing MBARI research programs range across autonomous and remotely operated vehicle systems, control technologies, ocean physics, chemistry, geology, biology, ocean instrumentation, and information management. CeNCOOS's data catalog continues to grow, facilitating access to over 1,000 observational and model data sets for the region, including a growing set of biogeochemical and biological data. Users of CeNCOOS and MBARI data and information products include scientists, resource managers, decision-makers, students, and engaged citizens who participate in the continual improvement of the system to best meet society's needs.

Central & Northern California Ocean Observing System Representative: Henry Ruhl, CeNCOOS Director



Dr. Henry Ruhl is the Director of Central & Northern California Ocean Observing System (CeNCOOS) and earned his PhD in Marine Biology from Scripps Institution of Oceanography.

TRIBAL SCIENCE REPRESENTATIVES

The SAT will maintain four geographically-determined Tribal Science seats, to provide connection to expertise in Traditional Ecological Knowledges across California. The tribal seats are representatives of the following geographic regions of California:

- North Coast – California/Oregon border to Mattole River
- North Central Coast – Mattole River to Golden Gate Bridge
- Central Coast – Golden Gate Bridge to Point Conception
- South Coast – Point Conception to US/Mexico border

North Coast: Kevin McKernan, Director, Marine Department, Yurok Tribe



Kevin McKernan is the Marine Director of the Yurok Tribe, and a Relief Captain for Cal Poly Humboldt's R/V North Wind as a US Coast Guard Licensed Captain. He has 25 years of experience in natural resource management leadership at state, regional, Tribal and non-profit agencies throughout California. He previously served on the North Coast Regional Stakeholder Group of the MLPA and also on the Dungeness Crab Task Force. Mr. McKernan holds a

Bachelor's degree in Natural Resources Management and Policy from Humboldt State University (now Cal Poly Humboldt).

North Central Coast: *to be confirmed*

Central Coast: Eva Pagaling, Co-Founder and Board President of Ocean Origins ORG



Eva Pagaling is a community member of the Santa Ynez Band of Chumash Indians and the Yakama Nation, and has Filipina ancestry from both family lineages. She serves as the Chumash Community seat representative for the Channel Islands National Marine Sanctuary. She is also the Board President and Co-Founder of the nonprofit Ocean Origins ORG. Ocean Origins' mission centers on empowering Indigenous communities by supporting their management of marine resources and upholding ancestral cultural practices and ecological knowledge. They establish meaningful partnerships rooted in Indigenous marine stewardship and a reciprocal relationship with the land and waters, also extending their services to other organizations with shared values and goals.

South Coast: *to be confirmed*