

Evolution of the National Oceanographic Research Fleet

Committee

Ronald K. Kiss

Co-Chair

Ronald Kiss is President Emeritus of Webb Institute, a private four-year college providing B.S. degrees in naval architecture and marine engineering. Prior to joining Webb Institute, he was vice president of SYNTEK assisting the U.S. Navy on the Joint Navy/Defense Advanced Research Projects Agency arsenal ship program and the Navy's aircraft carrier and surface combatant programs. He served as deputy assistant secretary of the Navy for ship programs in the Office of the Assistant Secretary of the Navy (Research, Development and Acquisition) and as executive director of Amphibious, Auxiliary, Mine and Sealift Directorate at Naval Sea Systems Command. Mr. Kiss spent nearly 20 years with the Maritime Administration, culminating as Acting Associate Administrator for Shipbuilding and Ship Operations. Mr. Kiss is a former member of the Marine Board and served on the NRC Committee on the Assessment of U.S. Coast Guard Polar Icebreaker Roles and Future Needs. He holds a B.S. degree in naval architecture and marine engineering from Webb Institute, an M.S. in naval architecture from the University of California-Berkeley, and has participated in a number of postgraduate programs at institutions including Harvard University and the Massachusetts Institute of Technology.

Richard F. Pittenger

Co-Chair

Richard Pittenger has spent his career in naval and research oceanography. During his naval career, he served as Oceanographer of the Navy, Director of the Antisubmarine Warfare Program, and as the commander of Destroyer class warships. Upon retirement, Rear Admiral Pittenger came to Woods Hole Oceanographic Institution (WHOI), where he led the Marine Operations Division. While at WHOI, he oversaw the conversion of UNOLS vessels Knorr and Oceanus, the addition of R/V Atlantis, and the retirement of Atlantis II. RADM Pittenger has also worked closely with deep submergence vehicles, including the award of a grant to build a replacement for the Alvin manned submersible. RADM Pittenger served on the UNOLS Council from 1992-1998, and has been a member and vice-chair of NRC committees on naval research and acoustics. He earned his M.S. in physics, specializing in underwater acoustics, at the Naval Postgraduate School.

Francisco Chavez

Member

Francisco Chavez is a Senior Researcher in the Biological Oceanography Group at the Monterey Bay Aquarium Research Institute (MBARI). His current research focuses on biology and chemistry of the ocean in relation to global change; how climate, ocean physics, marine chemistry, and ocean ecosystems co-vary on global to meso scales; instrumentation and systems for long-term ocean observing; and satellite remote sensing. His current projects include studies in the equatorial Pacific, central California, and Peru. Dr. Chavez is the Associate Editor of Geophysical Research Letters, and is a member of the NSF Geosciences Advisory committee and the U.S. Joint Global Ocean Flux Study (JGOFS) time series oversight committee. Dr. Chavez received his Ph.D. in botany from Duke University in 1987.

Margo H. Edwards

Member

Margo Edwards is a Senior Research Scientist and Director of the Hawaii Mapping Research Group with the Hawaii Institute of Geophysics and Planetology at the University of Hawaii at Manoa. Her current scientific research focuses on bathymetric and sidescan sonar mapping of the Arctic Basin and the use of high resolution photographic and acoustic data to map the East Pacific Rise mid-ocean ridge. Dr. Edwards was recently appointed to the Scientific Ice Expedition Science Advisory Committee, a collaborative project between the U.S. Navy and civilian scientists for geological and environmental research in the Arctic Ocean. She has served as the Chair of the UNOLS Arctic Icebreaker Coordinating Committee from 2004-2007 and on the NRC Committee on Designing an Arctic Observing Network. Dr. Edwards earned her Ph.D. in marine geology and geophysics from Columbia University in 1992.

Rana A. Fine

Member

Rana Fine is a Professor of Marine and Atmospheric Chemistry at the University of Miami's Rosenstiel School of Marine and Atmospheric Science. Her current research objective is to better understand the role of the oceans in climate change, occurring on time scales of up to decades. She is interested in the physical processes that determine the oceans' capacity to take up atmospheric constituents such as carbon dioxide, especially through air-sea interactions and ocean mixing. She was the Elected President of the Ocean Sciences Section of the American Geophysical Union from 1996-1998, and served on the WOCE Scientific Steering Committee. Dr. Fine is a former member of the Ocean Studies Board and has served on several NRC committees related to oceanography. She received her Ph.D. from the University of Miami in 1975.

Nancy N. Rabalais

Member

Nancy Rabalais is Executive Director and Professor at the Louisiana Universities Marine Consortium. Dr. Rabalais' research includes the dynamics of hypoxic environments, interactions of large rivers with the coastal ocean, estuarine and coastal eutrophication, and environmental effects of habitat alterations and contaminants. Dr. Rabalais is an AAAS Fellow, an Aldo Leopold Leadership Program Fellow, a National Associate of the National Academies of Science, a past president of the Estuarine Research Federation, a vice chair of the Scientific Steering Committee of Land-Ocean Interactions in the Coastal Zone/International Geosphere-Biosphere Programme, a past chair of the NRC Ocean Studies Board, and a current member of the UNOLS Council. She received the 2002 Ketchum Award for coastal research from the Woods Hole Oceanographic Institution and shares the Blasker award with R. E. Turner. Dr. Rabalais received her Ph.D. in zoology from the University of Texas at Austin in 1983.

Eric Saltzman

Member

Eric Saltzman is a Professor in the Earth System Science School of Physical Sciences at the University of California, Irvine. Dr. Saltzman's research interests are in Atmospheric Chemistry, Biogeochemistry, and Air/Sea Exchange. His research abstract examines how biologically produced gases in the surface ocean have a major impact on global atmospheric cycling of elements such as sulfur, nitrogen, and carbon, and can play an important role in the global climate system. This research involves the development of analytical instruments for trace gas measurement, collection of field data using ships and aircraft, and the use of computer models to estimate rates of air/sea exchange and atmospheric reactions. Dr. Eric Saltzman obtained his Ph.D. from the Rosenstiel School of Marine and Atmospheric Science at the University of Miami in 1986.

James H. Swift

Member

James (Jim) Swift is a research oceanographer and academic administrator at the University of California, San Diego Scripps Institution of Oceanography (SIO). Dr. Swift has been on 28 blue water and icebreaker expeditions in the Atlantic, Pacific, Arctic, and Southern Oceans. His primary scientific interests are Arctic water masses and circulation, the global thermohaline circulation, and ocean measurement and interpretation. Dr. Swift is scientific advisor to the SIO Oceanographic Data Facility and coordinator for academic institutions involved in the U.S. Global Ocean Carbon and Repeat Hydrography program. He is also director of the international CLIVAR and Carbon Hydrographic Data Office. Dr. Swift was the founding chair of the UNOLS Arctic Icebreaker Coordinating Committee, which oversees science-related aspects of the construction and testing of the research icebreaker U.S. Coast Guard HEALY, and whose long-term mission includes promoting a productive and successful working relationship between the Coast Guard and the science community using icebreakers. He served as the committee Chair from 1996-2000. He served on the U.S. Antarctic Research Vessel Oversight Committee and is the former chair of the National Science Foundation Office of Polar Programs Advisory Committee. He received his Ph.D. in physical oceanography from the University of Washington.

William Wilcock

Member

William Wilcock is a Professor of Marine Geophysics in the School of Oceanography at the University of Washington. His research focuses on the use of seismic techniques to understand submarine volcanoes and mid-ocean ridge hydrothermal systems. Dr. Wilcock's current projects include the installation of a seafloor seismometer network and seismic tomography of the Endeavour Segment, Juan de Fuca Ridge and Deception Island, Antarctic Peninsula. He is actively involved in the development of the regional component of the Ocean Observatories Initiative, a cabled underwater research facility located in the Northeast Pacific Ocean. Dr. Wilcock has an interest in the development of seafloor cabled observatories, and is actively involved in research related to the NEPTUNE Project. Dr. Wilcock received his Ph.D. in marine geology and geophysics in 1992 from the MIT/WHOI Joint Program.

Dana R. Yoerger

Member

Dana Yoerger is a Senior Scientist of Applied Ocean Physics and Engineering at the Woods Hole Oceanographic Institution (WHOI). His research focuses on robotics, with a specialization in the design and operation of remotely operated and autonomous vehicles (ROVs and AUVs). His current work involves precise control, navigation and positioning of vehicles, and applying principals of automation to add capability and ease of use. Dr. Yoerger has worked on several ROV and AUV systems, including the Jason/Medea ROV, the Autonomous Benthic Explorer AUV, the Sentry AUV, and development of a hybrid ROV/AUV system. He has gone to sea on over 50 oceanographic expeditions, including the 1985 Titanic discovery cruise. Dr. Yoerger obtained his Ph.D. in mechanical engineering from Massachusetts Institute of Technology in 1982.