

## HABs and Hypoxia Program Review Biographies

### Management and Steering Committee

Sean Corson, Director

*NCCOS Management*

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Sean Corson came to NOAA as a Knauss Sea Grant Fellow with the Office of National Marine Sanctuaries in 2001. In 2002 he moved to Hawai'i to join the team working on the establishment of Papāhānaumokuākea Marine National Monument and World Heritage Site. Sean held several positions there including sanctuary designation coordinator, field operations coordinator, and Deputy Superintendent. During his time in Hawai'i, Sean worked effectively with a wide variety of people from Native Hawaiian, commercial and recreational fishing, ecotourism, shipping, research, military, and management communities to establish an enduring marine protected area. He oversaw and participated in multiple deep and shallow water research

expeditions, and designed and implemented regulatory and permitting frameworks designed to address competing use challenges.

Sean moved to Annapolis, Maryland in 2008 to become the Deputy Director of the NOAA Chesapeake Bay Office, part of the Office of Habitat Conservation within the National Marine Fisheries Service. In that role he was responsible for the people, facilities, assets, budget execution, and daily operations of the office.

In 2019, Sean became the Director of the NOAA Chesapeake Bay Office, overseeing programs in oyster restoration, environmental observations, ecosystem science, environmental literacy, and climate. He represented NOAA in the Chesapeake Bay Program, a regional partnership spanning six states and the District of Columbia, working together to protect and restore the Chesapeake Bay.

Sean has an undergraduate degree in Environmental Studies and Biology from Hobart and William Smith Colleges and a Master of Forest Science from the Yale School of the Environment. Sean lives in Annapolis with his wife Denise and sons Nolan and Liam.

Margo Schulze-Haugen, Deputy Director  
*NCCOS Management*  
Email: [margo.schulze-haugen@noaa.gov](mailto:margo.schulze-haugen@noaa.gov)



Margo Schulze-Haugen has been the Deputy Director for NOS' National Centers for Coastal Science (NCCOS) since October 2018. Prior to coming to NCCOS, Schulze-Haugen had been the Chief of the Highly Migratory Species Management Division, in NMFS' Office of Sustainable Fisheries, since 2005. Schulze-Haugen received her Masters of Science in Fishery Biology from the University of Massachusetts at Amherst where she studied predator-prey interactions in the Connecticut River estuary. Schulze-Haugen graduated from Tufts University with a Bachelor of Science in Biology and English.

Mark Monaco, Ph.D., Senior Scientist  
*NCCOS Management and Steering Committee*  
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Dr. Mark E. Monaco is the Senior Scientist in NOAA/NOS National Centers for Coastal Ocean Science (NCCOS). The Senior Scientist supports critical functions of NCCOS's mission to deliver ecosystem science solutions for stewardship of the Nation's ocean and coastal resources in direct support of NOAA/NOS priorities, offices, and partners to sustain thriving coastal communities and ecosystems. Dr. Monaco has been a practicing scientist and

manager in the field of coastal and marine spatial ecology in support of ecosystem-based management (EBM) for over 40 years. He holds degrees from The Ohio State University in Fisheries Management (B.S.) and in Environmental Biology (M.S.) and his doctorate in Marine and Estuarine Ecology from the University of Maryland in 1995.

Previous positions include serving as the Director of NCCOS's Center for Coastal Monitoring & Assessment (2009-2016) and the Chief of the Marine Spatial Ecology Division (2017-2023). In those roles he led over 100 staff that conducted research, monitoring, and assessment on the distribution and quality of coastal habitats and the ecology of living marine resources to define and understand how habitats are changing in quantity and quality over space and time. The Division's efforts to support EBM focused on the coupling of natural and social sciences with governance structures. Dr. Monaco's current research interests address coral reef ecosystem ecology, ecological connectivity, the mapping of coastal habitats, defining and evaluating marine protected area boundaries, fish ecology, and integrated ecosystem assessments. In addition, his research portfolio includes evaluating the efficacy of marine protected areas and supporting the Federal agencies, US States, and Jurisdictions in developing marine spatial plans with emphasis on the siting of marine protected areas and ocean industries.

David Kidwell, Competitive Research Program Director  
*NCCOS Management and Steering Committee*  
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David Kidwell joined NCCOS in 2007 as a Knauss Marine Policy Fellow and formerly managed the Effects of Sea Level Rise (ESLR) research program before taking over the director role for the entire Competitive Research Program portfolio. With over a decade of experience in managing coastal science projects, Kidwell promotes a collaborative science approach to product actionable products and results. He currently co-chairs the Interagency Working Group for

harmful algal blooms and hypoxia and remains active in NOAA-wide resilience activities. An ecologist by training, he received his M.S. in Marine, Estuarine, and Environmental Science from the University of Maryland. Prior to his time at NOAA, he worked with the U.S. Geological Survey conducting waterfowl and ecosystem quality research.

Lonnie Gonsalves, Ph.D., Stressor Detection and Impacts Division Chief  
*NCCOS Management and Steering Committee*  
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As Division Chief, Dr. Gonsalves leads strategic planning, resourcing, and coordination of an applied research and development portfolio spanning the core areas of 1) coastal contamination, 2) Harmful Algal Blooms and Hypoxia, 3) coral health and habitat quality, and 4) development of new technologies to advance stressor detection and observing capabilities. Lonnie also serves as the current Chair of the NOAA Line Office Transition Management Council (LOTMC) where he helps to drive successful transition of NOAA research and development into application, operations, commercialization, and other uses. Dr. Gonsalves is a member of the cross-NOAA community of Diversity, Equity, Inclusion, and Accessibility

Champions. He serves as the Co-Technical Monitor for the NOAA Center for Coastal and Marine Ecosystems and has led multiple cross-NOAA initiatives to drive DEIA through science and workforce recruitment efforts.

Mike Denson, Ph.D., Stressor Detection and Impacts Deputy Division Chief & Charleston Lab Director  
*NCCOS Management*  
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Dr. Michael Denson is the Director of the Hollings Marine Laboratory and Deputy Chief of the Stressor Detection and Impacts Division of NOS's National Centers for Coastal Ocean Science. Prior to coming to NCCOS, Dr. Denson served for a decade as the Director of the South Carolina Department of Natural Resources' Marine Resources Research Institute. Before becoming Director Dr. Denson conducted aquaculture and fisheries research on recreationally and commercially important fish species since 1993. Dr. Denson received an MS and Ph.D. from Clemson University, working on aquaculture and fisheries ecology questions. He received his Bachelor of Science degree in Marine Biology from Southampton College of Long Island University.

A.K. (Andrew) Leight, Ph.D., HAB Forecasting Branch Chief (Acting)  
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Leight leads projects that assess coastal habitat conditions and provide resource managers with information for decision making. He works with a broad team of stakeholders, including both federal and non-federal partners.

Leight received his Ph.D. in 2017 from the University of Maryland Center for Environmental Science and his Masters of Science from the University of Charleston, South Carolina, in 1993. He started with NOAA as a contract employee at the NCCOS lab in Charleston, SC in 1995 and accepted his current federal position at the Cooperative Oxford Laboratory in 2002.

Marc Suddleson, HAB Forecasting Branch Chief (Acting)  
*NCCOS Management*  
Email: marc.suddleson@noaa.gov



Suddleson is a senior NCCOS program manager who oversees a research portfolio worth on average \$2-3 million per year, developing new ocean sensors and forecasts to detect harmful algal blooms. These projects are successfully demonstrating ways to safeguard our seafood, document changing ocean conditions, and improve timely access to data that supports science-based decisions benefitting coastal management and society. He is currently the program manager of the MERHAB Competitive Research Program and co-manager of the HAB Event Response Program.

Suddleson has worked at NOAA for over 20 years. Since 2002, in his current position, he has promoted the development of new solutions to better manage coastal resources facing increasing threats from harmful algal blooms and other ocean-related phenomena. Suddleson is known for building strong state and regional partnerships between NOAA and other federal laboratories, academic institutions, management agencies, and industry which have led to significant science, technology and management breakthroughs. Suddleson has authored or contributed to both regional and national-scale strategic research plans that guide NCCOS science investments. From 2017-2019 Suddleson served as a member of the Federal Laboratory Consortium Executive Board. He is married with three children and lives in Silver Spring, Maryland.

Suddleson received his Masters in Marine Policy degree from the University of Delaware and his B.S. degree in Marine Science and Biology from the University of Miami.



John Ramsdell, Ph.D., HAB Monitoring and Reference Branch Chief  
*NCCOS Management and Steering Committee*  
Email: john.ramsdell@noaa.gov



Ramsdell manages the NCCOS Harmful Algal Bloom (HAB) Portfolio for Phytoplankton Monitoring, Detection Technologies, Analytical Methods/Reference Materials and Prevention/Control Technologies. He is the NOS Science Integrity Officer and NOAA lead with International Atomic Energy Agency to transfer nuclear technology to measure toxins to Member States in Africa, Asia, Latin America and Arabian Gulf.

Trained as an endocrinologist at University of California, San Francisco and toxicologist at Harvard University, Ramsdell joined the faculty of Medical University of South Carolina (MUSC) to conduct National Institutes of Health sponsored research on growth regulatory control of pituitary tumors. He changed fields in 1992 to develop a

Ph.D. Program on Marine Biomedical and Environmental Sciences for MUSC and a National Program on Marine Biotoxins and Harmful Algae for NOAA.

Ramsdell served as major advisor and mentor for two M.S., six Ph.D students, and four postdoctoral fellows. His laboratory investigated the toxicology of algal toxins and their metabolites on marine animal populations. The research paradigm monitors exposure, characterizes disposition and delineates impact on disease states through combination of clinical/field observations and laboratory animal models.

Contribution to scientific research includes 113 lead or senior author research/review articles, case definition for “Domoic Acid Epileptic Disease”, its origin at dendritic spines of olfactory granule cells and the brain pathways causing epilepsy and aggressive behavior.

Contribution to National HAB Planning includes invited testimony to House Government Reform and Oversight and Natural Resource Committees, Executive Editor of Harmful Algal Research and Response: A National Environmental Science Strategy 2005-2015 and a founding member of the National HAB Committee.

Shelby Bütz, Ph.D., Science Portfolio Manager  
*Steering Committee; Review Coordinator*  
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Dr. Shelby Bütz is the NCCOS Science Portfolio Manager and Coordinator for the Annual Science Reviews. Shelby previously worked for NOAA's Office for Coastal Management on the National Coastal Nonpoint Pollution Control Team and successfully approved five state coastal nonpoint pollution control programs. She also laid the groundwork for the National Coastal Zone Management Program Strategic Plan update. She was a Sea Grant Knauss Fellow in 2020, received her B.S. in Marine Science from Coastal Carolina University in 2013, her M.S. in Marine Science from the University of South Carolina (USC) in 2015 where she focused on marsh ecology and ecotoxicology, and her Doctorate in Environmental and Human Health Sciences from USC in 2019. Her research focused on the fate, behavior, and bio-uptake of nanomaterials in marsh systems, estuarine algae and oysters.

Alexandria Hounshell, Ph.D., Research Oceanographer

*Steering Committee*

Email: alexandria.hounshell@noaa.gov



Hounshell works with federal, state, and local scientists, academic partners and stakeholders to understand and predict harmful algal blooms in lakes and coastal regions around the U.S. Specifically, she uses environmental data, satellite remote sensing, and ecological modeling to understand and identify conditions that lead to harmful algal blooms.

Hounshell currently helps to maintain NCCOS' operational HAB forecasts, develop new HAB forecasts and models, and adapt emerging HAB monitoring techniques to advance HAB forecasting and modeling. She also works with stakeholders and end-users to communicate forecast results and ensure developed products meet their needs.

Hounshell holds a B.S. in Chemistry and Environmental Sciences from the University of Virginia where she studied carbonate chemistry. She then worked as a Staff Chemist at Mote Marine Laboratory where she assisted with a long-term water quality monitoring study in local bays, conducted long-term sensor deployments, and studied the biogeochemistry of *Karenia brevis* (red tide) blooms. Hounshell then received her Ph.D. from the University of North Carolina-Chapel Hill where she studied organic matter quantity and quality in freshwater and coastal systems. Prior to joining NCCOS, Hounshell was a postdoctoral scholar at Virginia Tech where she used ecosystem experiments, long-term water quality studies, and ecosystem models to understand changes in the carbon cycle due to climate change.

David Scheurer, Ph.D., Oceanographer  
*Steering Committee*  
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Dr. David Scheurer is an oceanographer at NCCOS and the Deputy Director of the Competitive Research Program (CRP). With close to 20 years' experience within CRP, he has broad experience across all scientific program areas to include expertise in program planning, execution and transitioning research results into management application. Dr. Scheurer received his B.S. degree in marine biology from Florida Institute of Technology, an M.A. degree in environmental science at Johns Hopkins University and a Ph.D. degree in ecology from the Marine, Estuarine, and Environmental Science program at the University of Maryland.

Kaytee Pokrzywinski, Ph.D., Research Marine Biologist  
*Steering Committee*

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Kaytee Pokrzywinski is a Research Marine Biologist in the Harmful Algal Bloom Forecasting Branch at NOAA's National Centers for Coastal Ocean Science (NCCOS). Kaytee received her PhD in Marine Biosciences from the University of Delaware in 2014, with a specific focus on characterizing a novel, environmentally benign, bacterial algicide for the control of harmful dinoflagellates. Kaytee also holds a BS in Biology and Minor in Chemistry from the University of Wisconsin-Milwaukee. At NCCOS Kaytee is focused on novel HAB control strategies, hyperspectral discrimination of harmful algae species for remote sensing, as well as artificial intelligence and machine learning strategies for algal classification from microscope images. Prior to joining NCCOS in 2020, Kaytee served as a Research Biologist at the US Army Engineer Research and Development Center where she led interdisciplinary teams from diverse technical backgrounds in the areas of HAB monitoring, detection and management; water quality monitoring and historic data analysis; and algal biomaterials development. Her primary focus was on investigating novel detection and control methods for cyanobacteria, ranging from molecular and remote sensing-based detection approaches to chemical, physical, and biological cyanobacteria control strategies.

Nia Rene, Environmental Scientist  
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Rene is the Coordinator of the Aquaculture Phytoplankton Monitoring Network (AQPMN). The aquaculture branch of PMN enhances the Nation's ability to respond to the growing threat posed by HABs at aquaculture sites by creating working relationships between the aquaculture industry and marine biotoxin researchers.

Rene is a biogeochemist with research experience working on nature-based approaches to improve wastewater management and groundwater-surface water interactions in coastal systems. She completed a NOAA CESSRST master's fellowship at Brooklyn College of the City University of New York (CUNY) before becoming an Environmental Scientist with NCCOS's HAB Monitoring and Reference Branch at the Hollings Marine Laboratory in Charleston, SC. Rene has a BS in Chemistry from York College - CUNY and is a Ph.D. candidate in Earth and Environmental Sciences at The Graduate Center - CUNY.

## **NCCOS Presenters**

David Kidwell, Competitive Research Program Director

*Presenter*

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David Kidwell joined NCCOS in 2007 as a Knauss Marine Policy Fellow and formerly managed the Effects of Sea Level Rise (ESLR) research program before taking over the director role for the entire Competitive Research Program portfolio. With over a decade of experience in managing coastal science projects, Kidwell promotes a collaborative science approach to product actionable products and results. He currently co-chairs the Interagency Working Group for

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John Ramsdell, Ph.D., HAB Monitoring and Reference Branch Chief

*Presenter*

Email: john.ramsdell@noaa.gov



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Marc Suddleson, HAB Forecasting Branch Chief (Acting)

*Presenter*

Email: [marc.suddleson@noaa.gov](mailto:marc.suddleson@noaa.gov)



Suddleson is a senior NCCOS program manager who oversees a research portfolio worth on average \$2-3 million per year, developing new ocean sensors and forecasts to detect harmful algal blooms. These projects are successfully demonstrating ways to safeguard our seafood, document changing ocean conditions, and improve timely access to data that supports science-based decisions benefitting coastal management and society. He is currently the program manager of the MERHAB Competitive Research Program and co-manager of the HAB Event Response Program.

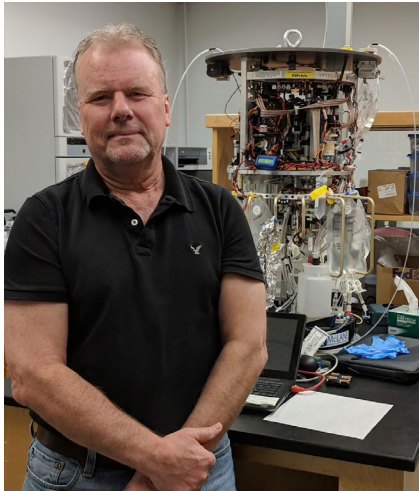
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Suddleson received his Masters in Marine Policy degree from the University of Delaware and his B.S. degree in Marine Science and Biology from the University of Miami.

Gregory Doucette, Ph.D., Research Oceanographer

*Presenter*

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Doucette serves as Program Lead for HAB Sensor Development in the Harmful Algal Bloom (HAB) Monitoring & Reference Branch. This effort focuses on developing and deploying field-portable and autonomous, in-situ sensor technologies to detect and measure HAB toxin levels in U.S. coastal waters, including the Great Lakes.

Doucette began his work on HABs as a post-doctoral researcher at the Woods Hole Oceanographic Institution (1989-92). He joined NOAA's Marine Biotoxins Program in Charleston, SC as a U.S. National Research Council Associate in 1992, and has held a Research Oceanographer position at NOAA's NCCOS Charleston Laboratory since 1999. His research on HABs has covered diverse topics, including algal toxin assay development, HAB ecophysiology, algicidal bacteria-HAB interactions, toxin trophic transfer, molecular probes for HAB species, and developing sensors for HAB toxin detection deployed on field-portable and uncrewed platforms. He has published over 115 peer-reviewed articles and more than a dozen book chapters across these subject areas. Doucette and two NOAA (NMFS, OAR) collaborators were recognized with DOC's Gold Medal (2018) and the Gears of Government Presidential Award (2019), "For pioneering advanced toxin sensor technology to protect U.S. communities..." and he along with several NOS colleagues received the NOAA Administrator's Award (2021), "For leadership envisioning the nation's first National Harmful Algal Bloom Observing Network."

Doucette received his B.Sc. in Biology from Bowling Green State University (OH) in 1979, his M.Sc. in Oceanography from Texas A&M University in 1982, and his Ph.D. in Botany from the University of British Columbia in 1989.

Shelly (Michelle) Tomlinson, Oceanographer

*Presenter*

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Tomlinson's current research focuses on the application of satellite derived ocean color sensors to detect, monitor and forecast the occurrence of harmful algal blooms. This work has supported the development and transition of several HAB forecast systems within NOAA.

Prior to working for NCCOS, Tomlinson spent 4 years at NESDIS' National Oceanographic Data Center where she archived and managed ECOHAB data. Since 2002, Tomlinson

has worked as an Oceanographer in what is now the Harmful Algal Bloom Forecasting Branch of SDI. Her first position at NCCOS had her develop the training manual and materials for the successful transition of the Florida HAB forecast system to operations. Since then, she has been involved in algorithm development for other HAB species around the country, including satellite imagery for freshwater cyanobacteria blooms as part of the CyAN project. She has been a member of the NOAA Dive Program since 2014. Tomlinson also acts as the Coastwatch East Coast Node manager, to provide useful satellite products to a wide range of users on the East Coast.

Tomlinson received her B.S. in Marine Science Biology from Southampton College of Long Island University (1995) and an M.S. in Oceanography from Old Dominion University (1998).

Sarah Pease, Ph.D., Physical Scientist / Program Manager

*Presenter*

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Pease is a Physical Scientist and Program Manager in the Competitive Research Program at NOAA's National Centers for Coastal Ocean Science. She serves as the Harmful Algal Bloom Event Response Coordinator and is a Program Manager for the Effects of Sea Level Rise (ESLR) Program.

Pease began her career in science with New Hampshire's Department of Environmental Services where she worked for the Shellfish Program and the Clean Lakes Program, conducting shellfish and water quality monitoring. Pease later worked for the New Hampshire Fish & Game Department, monitoring endangered species for the Piping Plover Project, before pursuing graduate research at the Virginia Institute of Marine Science (VIMS). Her graduate research focused on the ecology of harmful algal blooms (HABs) and their impacts on oysters, collaborating closely with members of the Virginia oyster industry and the Virginia Department of Health. Before joining NCCOS, Pease worked in the U.S. Senate on marine policy and appropriations as a 2022 NOAA Knauss Legislative Fellow. Pease received her Bachelor of Science in Biology with a minor in Environment from McGill University in Canada, and received both her Master of Science and Doctor of Philosophy degrees in Marine Science from William & Mary (VIMS).

Tod Leighfield, Chemist  
*Presenter*

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Leighfield is a chemist in the HAB Monitoring & Reference Branch at NOAA's NCCOS Hollings Marine Laboratory. He develops and applies detection products that empower communities to effectively monitor toxins produced during harmful algal blooms. His work is focused on the development of detection techniques and toxicological investigations for a variety of marine biotoxins associated with algal blooms, and has participated in multiple epidemiological investigations resulting from the impacts of harmful algal blooms to both wildlife and humans. Leighfield has led the development of environmental monitoring programs for HABs and their toxins both domestically and internationally.

Alexandria Hounshell, Ph.D., Research Oceanographer

*Presenter*

Email: alexandria.hounshell@noaa.gov



Hounshell works with federal, state, and local scientists, academic partners and stakeholders to understand and predict harmful algal blooms in lakes and coastal regions around the US. Specifically, she uses environmental data, satellite remote sensing, and ecological modeling to understand and identify conditions that lead to harmful algal blooms.

Hounshell currently helps to maintain NCCOS' operational HAB forecasts, develop new HAB forecasts and models, and adapt emerging HAB monitoring techniques to advance HAB forecasting and modeling. She also works with stakeholders and end-users to communicate forecast results and ensure developed products meet their needs.

Hounshell holds a B.S. in Chemistry and Environmental Sciences from the University of Virginia where she studied carbonate chemistry. She then worked as a Staff Chemist at Mote Marine Laboratory where she assisted with a long-term water quality monitoring study in local bays, conducted long-term sensor deployments, and studied the biogeochemistry of *Karenia brevis* (red tide) blooms. Hounshell then received her Ph.D. from the University of North Carolina-Chapel Hill where she studied organic matter quantity and quality in freshwater and coastal systems. Prior to joining NCCOS, Hounshell was a postdoctoral scholar at Virginia Tech where she used ecosystem experiments, long-term water quality studies, and ecosystem models to understand changes in the carbon cycle due to climate change.

David Scheurer, Ph.D., Oceanographer

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Dr. David Scheurer is an oceanographer at NCCOS and the Deputy Director of the Competitive Research Program (CRP). With close to 20 years' experience within CRP, he has broad experience across all scientific program areas to include expertise in program planning, execution and transitioning research results into management application. Dr. Scheurer received his B.S. degree in marine biology from Florida Institute of Technology, an M.A. degree in environmental science at Johns Hopkins University and a Ph.D. degree in ecology from the Marine, Estuarine, and Environmental

Science program at the University of Maryland.

Felix Martinez, Ph.D., Program Manager

*Presenter*

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Martinez is responsible for developing, implementing and managing competitive research programs focused on addressing issues that hinder the holistic management of coastal ecosystems and developing methodology to prevent, control and mitigate harmful algal blooms.

At the University of Puerto Rico, Martinez's Master's focused on the reproductive biology of hermaphroditic coral reef fishes,

Martinez received formal training in all four core areas of Oceanography, those being Biological, Chemical, Physical and Geological. After his M.S. Martinez worked as a research manager for StarKist Tuna for almost 4 years before returning to graduate school. He then moved on to conduct and complete his doctoral dissertation at Ohio State University. At OSU, he worked on the behavioral ecology of larval coral reef fishes. As a Ph.D. student, Martinez taught courses in Limnology, Plankton Biology, Aquatic Biology, Fisheries Ecology, and Antarctic Ecology and Policy.

Martinez received his Bachelor degree in Biology and a Master's degree in Marine Science from the University of Puerto Rico at Mayaguez. He completed his doctoral dissertation at Ohio State University



Peter Moeller, Ph.D., Research Chemist

*Presenter*

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Moeller's research is focused on water safety and security. His team is researching scalable technologies dealing with contaminated water mitigation and remediation. Currently, they are focused on NBOT technology, which uses ozone impregnated nanobubbles to help control algal blooms, destroy waterborne toxins and contaminants, and remove excess nutrients.

Mankato State University B.Sc. Triple Major 1983  
Chemistry, Biochemistry Biology

UCSD M.S. 1985, Organic Chem, NMR

UCSD Ph. D. 1987, Organic Chem, NMR

Australian National University International Fellow 1987-  
1990, Natural Products, synthesis.

University of British Columbia (NSERC Fellow) 1990-1992, NMR, Synthesis, Natural Products.

Kaytee Pokrzywinski, Ph.D., Research Marine Biologist

*Presenter*

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Kaytee Pokrzywinski is a Research Marine Biologist in the Harmful Algal Bloom Forecasting Branch at NOAA's National Centers for Coastal Ocean Science (NCCOS). Kaytee received her PhD in Marine Biosciences from the University of Delaware in 2014, with a specific focus on characterizing a novel, environmentally benign, bacterial algicide for the control of harmful dinoflagellates. Kaytee also holds a BS in Biology and Minor in Chemistry from the University of Wisconsin-Milwaukee. At NCCOS Kaytee is focused on novel HAB control strategies, hyperspectral discrimination of harmful algae species for remote sensing, as well as artificial intelligence and machine learning strategies for algal classification from microscope images. Prior to joining NCCOS in 2020, Kaytee served as a Research Biologist at the US Army Engineer Research and Development Center where she led interdisciplinary teams from diverse technical backgrounds in the areas of HAB monitoring, detection and management; water quality monitoring and historic data analysis; and algal biomaterials development. Her primary focus was on investigating novel detection and control methods for cyanobacteria, ranging from molecular and remote sensing-based detection approaches to chemical, physical, and biological cyanobacteria control strategies.

Maggie Broadwater, Ph.D., Program Manager

*Presenter*

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Broadwater is a Program Manager in the NCCOS Competitive Research Program (CRP). As part of the CRP's Harmful Algal Blooms (HABs) team, she manages projects across the ECOHAB, MERHAB, PCMHAB, and HAB event response funding programs.

Broadwater worked as a research scientist in the Marine Forensics and Marine Biotoxins Programs in Charleston, SC before joining the Competitive Research Program's Harmful Algal Blooms team in 2018. Her experience includes lipid chemistry, machine learning and bioinformatics approaches for data analysis, toxin detection using bioassays and analytical methods, and evaluating the effects of algal blooms and marine toxins

in the coastal environment. She currently serves as a NOAA advisor to the Interstate Shellfish Sanitation Conference's Laboratory and Biotoxins Committees and represents the U.S. on the IOC's Intergovernmental Panel for Harmful Algal Blooms.

Broadwater earned a Bachelor of Science degree in Biochemistry from the College of Charleston and Master of Science and Doctor of Philosophy degrees from the Medical University of South Carolina.

Margaret M. (Peg) Brady, NOAA Fisheries Office of Science & Technology

*Panel Facilitator*

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Margaret M. (Peg) Brady is the Coordinator of NOAA Fisheries Ecosystem and Habitat Science Programs. Peg served as NOAA's senior policy liaison to the National Invasive Species Council and Aquatic Nuisance Species Task Force and chaired the Interagency NOP EBM Interagency Work Group. She served as the NOAA Fisheries Strategic Planning Chief and the White House's CEQ Deputy Director for Ocean & Coastal Policy. Before joining NOAA Peg served as the Assistant Secretary in the Massachusetts Executive Office of Environmental Affairs and Director of the MA Coastal Zone Management Program. Peg holds Bachelor and Master of Science degrees from University of Rhode Island. Peg is one of the founding members of the NOAA Facilitation Network.