Commemorating 10-years of GoMRI science in Louisiana
November 10, 2020 | 2 pm Central/3 pm Eastern
Live-streaming via Zoom and Facebook Live

About our speakers and panelists

Robert Twilley, Ph.D.
Louisiana Sea Grant – Louisiana State University

Dr. Robert Twilley has been a Distinguished Professor in Department of Oceanography and Coastal Sciences, College of Coast and Environment, at LSU since 2004, and served in several administrative capacities including Executive Director of Louisiana Sea Grant College Program (2012 to present), Associate Vice Chancellor of Research and Economic Development (2007-2010) and Director of the Wetland Biogeochemistry Institute (2004-2007). Dr. Twilley founded the LSU Coastal Sustainability Studio (2009). He is a leading national expert in coastal deltaic science and sustainability. He has worked on some of the largest ecosystem restoration efforts in the world including the Mississippi River Delta, Chesapeake Bay, Florida Everglades and mangrove conservation and restoration throughout the neotropics of Ecuador, Colombia, Venezuela and Mexico. He has published extensively on wetland ecology, global climate change and has been involved in developing ecosystem models coupled with engineering designs to forecast the rehabilitation of coastal and wetland ecosystems.

RDML Tim Gallaudet, Ph.D.
USN Ret., Assistant Secretary of Commerce for Oceans and Atmosphere
and Deputy NOAA Administrator

Rear Admiral Gallaudet is the Assistant Secretary of Commerce for Oceans and Atmosphere and Deputy Administrator of the National Oceanic and Atmospheric Administration (NOAA). From 2017-2019 he served as the Acting Undersecretary of Commerce for Oceans and Atmosphere and NOAA Administrator. Before these assignments, he served for 32 years in the US Navy, completing his service in 2017 as the Oceanographer of the Navy. In his current position, Rear Admiral Gallaudet leads NOAA's Blue Economy activities that advance marine transportation, sustainable seafood, ocean exploration and mapping, marine tourism and recreation, and coastal resilience. He also directs NOAA's support to the Administration's Indo-Pacific Strategy, oversees NOAA's Arctic research, operations, and engagement, and is leading the execution of the NOAA science and technology strategies for Artificial Intelligence, Unmanned Systems, 'Omics, Cloud, and Citizen Science. Rear Admiral Gallaudet has a bachelor's degree from the U.S. Naval Academy and a master's and doctorate degree from Scripps Institution of Oceanography, all in oceanography.

Rita Colwell, Ph.D.
GoMRI Research Board Chair

Dr. Rita Colwell has held many advisory positions in the U.S. Government, nonprofit science policy organizations, and private foundations, as well as in the international scientific research community. She is the GoMRI Research Board Chair, a nationally-respected scientist and educator, and has authored or co-authored 17 books and more than 750 scientific publications. She produced the award-winning film *Invisible Seas* and has served on editorial boards of numerous scientific journals. She is a Distinguished University Professor both at the University of Maryland at College Park and at Johns Hopkins University Bloomberg School of Public Health. Her interests are focused on global infectious diseases, water, and health. She is currently developing an international network to address emerging infectious diseases and water issues.

Chuck Wilson, Ph.D.
GoMRI Chief Scientific Officer

Dr. Charles "Chuck" A. Wilson serves as the GoMRI Chief Scientific Officer, which provides scientific and research advice and leadership to GoMRI. Dr. Wilson coordinates the work of the GoMRI Research Board, the GoMRI Administrative Unit, and the funded science projects to implement the research program. He also supports the Research Board's efforts to ensure the intellectual quality, research effectiveness, and scientific independence of the GoMRI research initiative. Dr. Wilson is a distinguished scientist and academic leader. Most recently he served as the Executive Director of the Louisiana Sea Grant College Program, and prior to that as the Vice Provost for Academic Affairs.

Laura Bowie
Gulf of Mexico Alliance

Ms. Laura Bowie serves as the Executive Director for the Gulf of Mexico Alliance, a partnership of the five Gulf states with the goal to significantly increase regional collaboration to enhance the ecological and economic health of the Gulf of Mexico. She began her career in Houston, Texas, at Texas Eastern Pipeline Company and served Continental Airlines as a Senior Manager in the Environmental Affairs Department. Since moving to Mississippi, she has supported local nonprofits spearheading watershed and grant programs. She holds a bachelor's degree in chemistry from Mississippi State University and a master's degree in environmental management from the University of Houston.

Debra S. Benoit, M.Ed.
GoMRI Research Board member/Nicholls State University

Ms. Debi Benoit serves as the director of Nicholls State University's Office of Research and Sponsored Programs in Thibodaux, LA. She is responsible for managing the university's research initiatives including development, grants, contracts, compliance, intellectual property and technology transfer. Benoit also acts as a liaison between the university and government and industry in support of economic development.

Benoit began her career at Nicholls in 2003 after having served as grant writer for 41 schools in the Terrebonne Parish School System. In 1992, she and Pamela DuPont invented and patented the SafteyNet™ Medical Protective Garment, still used today by medical professionals in Louisiana hospitals. Benoit has served as a federal grant reviewer for the U.S. Department of Education since 1998, state program evaluator for the Louisiana Board of Elementary and Secondary Education, chair of the BESE Advisory Board and executive director of the Assumption Education Foundation. She is past state leadership Vice Chair for the Louisiana Center for Women and Government and was recently elected to the Terrebonne Parish School Board – the first female elected to the nine-member board in 16 years.

Richard Shaw, Ph.D.
GoMRI Research Board/Louisiana State University

Dr. Richard Shaw is Associate Dean of the School of the Coast and Environment and a professor within the Department of Oceanography and Coastal Sciences at Louisiana State University. Dr. Shaw has also held a number of other administrative positions at LSU including Interim Dean and was the Director of LSU's Coastal Fisheries Institute for over 18 years and has also served on a number of campus-wide committees. Dr. Shaw served on the Gulf States Marine Fisheries Commission's SEAMAP Plankton Workgroup for over 16 years. Recently, he served as one of four members of LSU's Oil Spill Steering Committee that oversaw the review and awarding of over $10 million in BP research funds that came to LSU soon after the Deepwater Horizon oil spill.

He is a well-known fisheries oceanographer whose research interests have focused on ichthyoplankton taxonomy and ecology, and the growth, mortality, habitat requirements, and transport and recruitment mechanisms of larval and juvenile fish on the continental shelf and within estuaries, and fisheries and global climatic change. He has published over 125 papers in refereed scientific journals, book chapters, and technical reports on the early life history stages of fishes. As a teaching professor, Dr. Shaw has developed several graduate-level courses and still teaches three classes, annually.

Melissa Finucane, Ph.D.
RAND Corporation/Consortium for Resilient Gulf Communities (CRGC)

Dr. Melissa Finucane is a senior social and behavioral scientist at the RAND Corporation. Also a senior fellow at the East-West Center in Honolulu, Hawai'i, her interdisciplinary and policy-oriented research focuses on understanding the human dimensions of environmental health risks.

She is director of the Consortium for Resilient Gulf Communities, funded by the Gulf of Mexico Research Initiative. This integrated program of research and outreach aims to assess and address community impacts from the Deepwater Horizon oil spill.

Finucane is co-investigator with the NOAA-funded Mid-Atlantic Regional Integrated Sciences and Assessments (MARISA) program, which aims to support decisionmakers in the U.S. Mid-Atlantic states to adapt to the impacts of climate variability and change. MARISA addresses climate-sensitive issues such as flooding, fresh water management, coastal infrastructure, transport, and agriculture.

Finucane's NSF-funded research examines the perceptions of and responses to COVID-19 among different demographic groups. She also has examined relationships among large-scale changes (e.g., impacts of the changing climate or modernization), perceptions of and decisions about environmental and health risks, and community resilience.

She received her Ph.D. in psychology from the University of Western Australia and has more than 20 years of experience working with many different communities around the world.

Vijay John, Ph.D.
Tulane University/Consortium for the Molecular Engineering of Dispersant Systems (C-MEDS)

Dr. Vijay John works in the highly interdisciplinary area of chemical self-assembly leading to the development of new nanostructured materials with wide functionalities. The fundamentals of self-assembly and the design of supramolecular structures have significant applications to new technologies in the energy, environment and health related areas. In the energy area, John leads the Consortium for the Molecular Engineering of Dispersant Systems (C-MEDS), funded by the Gulf of Mexico Research Initiative (GoMRI). He is working on developing a novel class of dispersants using porous nanostructures that stabilize the oil-water interface preventing oil slick formation and facilitating biodegradation. He is also working on technologies for carbon dioxide capture in novel high surface area structures. In the environmental area, John works on self-assembly principles to realize materials that are used in the remediation of toxic chlorinated solvents that have seeped into ground water. This has led to the formation of a start-up company to commercialize the technology. A major project that John is now working on is in the exploitation of lipid self-assembly for drug and vaccine delivery, particularly through novel transcutaneous routes. Vaccine development and needle free vaccine delivery is a grand challenge problem being

addressed by researchers at the Medical School and at the Uptown Campus at Tulane, John collaborates extensively with scientists at Tulane's Main Campus and at the Health Sciences Campus. His work with the health sciences has led to a new polymer drug delivery systems for the treatment of glaucoma. John's work involves the use of advanced experimental tools such as cryo electron microscopy and neutron scattering. He has helped implement a state of the art cryo electron microscopy facility at Tulane. Additional funding for his research is through the National Science Foundation and the Department of Energy.

Nancy Rabalais, Ph.D.
Louisiana State University/Coastal Waters Consortium (CWC)

Dr. Nancy Rabalais is an American marine ecologist who earned her B.S. in 1972, her M.S. in 1975 from Texas A&M University–Kingsville, and received her Ph.D. in Zoology from the University of Texas at Austin in 1983. Since 1985, Rabalais has studied the Gulf of Mexico's dead zone off the coast of Louisiana, the largest hypoxic zone in the United States. Along with two other researchers, she linked hypoxic zones in the Gulf with Mississippi River estuaries in 1985 through ocean mapping oxygen levels. This work was highlighted on the covers of *BioScience* in 1991 and *Nature* in 1994. She joined the Louisiana Universities Marine Consortium (LUMCON) in 1983 and, with funding from the National Oceanic and Atmospheric Administration (NOAA), identified a substantial hypoxic zone that had been affecting shrimpers. Rabalais has testified to Congress on the problem of nutrient pollution from agricultural and storm water runoff and was the president of the nonprofit Coastal and Estuarine Research Federation from 1997 to 1999. She was the executive director of LUMCON from 2005-2016, where she was also a professor. In 2016, she became a Professor/Shell Endowed Chair in Oceanography and Coastal Studies, Louisiana State University where she is still employed.

Rabalais leads annual research surveys to determine the size of the dead zone. She has chaired the Ocean Studies Board of the National Research Council and was the recipient of an NOAA Environmental Hero Award and Aldo Leopold Leadership Program Fellowship in 1999, the 17th Annual Heinz Award (with special focus on the environment) in 2011 and MacArthur Fellowship in 2012. Also in 2012, she and several colleagues started the Coastal Waters Consortium (CWC), which focused on the effects of the BP oil spill on the Gulf of Mexico's ecosystems and food webs within.

Rabalais has been published in the journals *Biogeosciences, BioScience, Nature,* and *Science*.
She is married to R. Eugene Turner, an LSU colleague whom she has published work with before, including their book *Coastal Hypoxia: Consequences for Living Resources and Ecosystems*. His work focuses inshore, while hers is in the waters of the Gulf. They have a daughter, Emily.

Natalia A. Sidorovskaia, Ph.D.
University of Louisiana at Lafayette/Littoral Acoustic Demonstration Center – Gulf Ecological Modeling and Monitoring" (LADC-GEMM)

Dr. Natalia A. Sidorovskaia is the Coca-Cola/Board of Regents Endowed Professor of Physics, the director of the multidisciplinary multi-institutional consortium "Littoral Acoustic Demonstration Center – Gulf Ecological Modeling and Monitoring" (LADC-GEMM), and the Chairperson of the Department of Physics at the University of Louisiana at Lafayette. She received an M.S. Degree (1990) in radiophysics from the Gorky (now Nizhny Novgorod) State University, Russia, an M.S. Degree (1996) in physics and a Ph.D. Degree (1997) in Engineering and Applied Science from the University of New Orleans. After a two-year career in industry with Landmark Graphics Corporation, she joined the Department of Physics at the University of Louisiana at Lafayette (UL Lafayette) in 2000. Her research interests include ocean acoustics and signal processing leading to the understanding of sound propagation and scattering in the ocean, marine mammal acoustic communication and interaction with environment, impact of humans and climate changes on oceanic ecosystems. She has been actively involved in studying Gulf of Mexico deep diving marine mammals by means of passive acoustic monitoring since 2001. Dr. Sidorovskaia is an active promoter of science in the Lafayette community and a founder of the UL Lafayette SMART (Science Meets ART) festival and College-wide Science Day. She is a Fellow of the Acoustical Society of America and   a member of Sigma Pi Sigma National Physics Honor Society. Dr. Sidorovskaia has been named a 2020-2022 ACE Fellow by the American Council on Education (ACE).